ORACLE METHOD[SM]

APPLICATION IMPLEMENTATION

METHOD HANDBOOK

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ORACLE

Application Implementation Method (AIM) Method Handbook
Release 3.0.0
Part No. A75149-01

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In memory of a great friend and colleague, Josee, who would not let us forget the silent constituents — the end users — who must live and work in the environments and systems we construct and implement.

Preface

The *Application Implementation Method Handbook* provides an overview of the various approaches, phases, processes, and tasks of the Application Implementation Method (AIM). AIM is Oracle's full life-cycle approach for implementing Oracle Applications.

This handbook contains the information needed by project managers, sponsors, and team members to understand the scope of an application implementation effort and to plan and execute AIM projects.

This handbook, and the Application Implementation Method itself, are part of Oracle Method[SM] — Oracle's integrated approach to solution delivery.

Audience

The *Application Implementation Method Handbook* is a high-level description of how AIM can be used to facilitate implementation projects. Project managers will use this handbook for project planning and scheduling. Team members can use this book to gain a broad understanding of AIM. It also provides a context for the detailed information in the Process and Task Reference manual.

How this Manual Is Organized

This handbook consists of an overview of AIM, chapters on each AIM phase, and several appendices.

Introduction: This chapter presents an overview of AIM and how to determine a project approach. It provides guidance in estimating resources and discusses how AIM incorporates Oracle's Project Management Method (PJM).

Phase Chapters: Each phase chapter consists of a phase overview and a section on the approach to completing that phase. The chapters provide the following information:

Phase Overview:

- **Objectives** — describes the objectives of the phase
- **Critical Success Factors** — lists the success factors of the phase
- **Overview Table** — lists the process, prerequisites, and key deliverables
- **Prerequisites** — lists task prerequisites and their sources
- **Processes** — lists and defines the processes used in the phase
- **Key Deliverables** — lists and defines the deliverables for the phase

Approach:

- **Tasks and Deliverables** – lists the tasks executed and the deliverables produced
- **Task Dependencies** – illustrates the dependencies between tasks
- **Risk Management** – provides assistance in reducing the risks associated with the phase
- **Tips and Techniques** – discusses helpful tips and techniques
- **Estimating** – illustrates the relative effort of tasks within the phase by role
- **Scheduling** – discusses the approach for scheduling the phase
- **Staffing** – provides suggestions for staffing the phase

Appendix A: Appendix A provides a work breakdown structure for the Classic approach.

Appendix B: Appendix B provides a description of the roles used in AIM.

Glossary: The Glossary contains definitions of terms, abbreviations, and acronyms used in AIM.

How to Use this Manual

The *Application Implementation Method Handbook* contains general information about using AIM for application implementation projects. Use this handbook in conjunction with the *Application Implementation Process and Task Reference*, which provides detailed information on processes and tasks. Together, the handbook and reference provide a complete guide for planning and executing application implementations.

Conventions Used in this Manual

Several notational conventions are used to make this handbook easy to read.

Capitalization

Names of tasks, deliverables, processes, and phases are given initial capitals. For example, Gather Business Volumes task, Business Volume Requirements deliverable, Business Requirements Definition process, and Design phase.

Abbreviations and Acronyms

Occasionally, it is necessary to use abbreviations and acronyms when adequate space is not available. The Glossary lists definitions of all acronyms and abbreviations.

Suggestions

Helpful suggestions appear throughout the handbook. They are highlighted with an illuminated light bulb. Here is an example of a suggestion:

Suggestion: Verify your backup and recovery plan with your hardware and software vendors.

Attention

Important information or considerations that save time or simplify tasks are marked with an attention graphic. Here is an example:

Attention: Since project team training occurs simultaneously with this task, some recommendations (or decisions) from training may be implemented in the mapping environment. In this case, these training inputs become predecessors to this task.

For More Information

Throughout the handbook, we alert you to additional information you may want to review. This may be a task section, appendix, or reference manual. Here is an example of a reference graphic:

Reference: Hickman, Linda and Longman, Cliff *Case*Method Business Interviewing.* Addison-Wesley. 1994
ISBN: 0-2-1-59372-6.

Web Site

Information available on the World Wide Web will be indicated by a Web symbol and an appropriate Web address. Here is an example:

Web Site: Pure Atria Corporation's Home Page on the World Wide Web is http://www.pure.com/

Optional Criteria

Many of the tasks in AIM have criteria that define when the task or some of the task steps should be executed. The optional criteria, where applicable, are located just below the task description in the Process and Task Reference. An example follows:

Δ

If your project includes either *programmatic data conversion* of legacy business objects, *manual data conversion* of legacy business objects, or both, you should perform this task.

Related Publications

Books in the AIM suite include:

- AIM *Method Handbook* (this book)
- AIM *Process and Task Reference - Volume 1*
- AIM *Process and Task Reference - Volume 2*
- AIM *Process and Task Reference - Volume 3*
- AIM *FastForward Add-In Handbook*

You may also refer to the following Project Management Method (PJM) suite of reference books:

- PJM *Method Handbook*
- PJM *Process and Task Reference*

Obtaining Additional AIM Advantage Licenses

Each key member of your project team should have a licensed copy of AIM Advantage installed on their workstation. Key members are those individuals who will be leading areas of the implementation project and generating key deliverables.

Oracle provides AIM Advantage licenses to select Oracle Applications Implementation Partners and Oracle Consulting for their project staff. However, to facilitate improved understanding of the implementation process as well as improved overall cross project team productivity, customers should also equip their key project team personnel with licensed copies of AIM Advantage.

Additional copies of AIM Advantage may be obtained from Oracle Direct Marketing or the telesales group in your country, or you can contact your local Oracle sales representative.

EMM Advantage and Oracle Application Upgrades

EasiPath Migration Method (EMM Advantage), Oracle's packaged methodology for application upgrades, is complementary to the Applications life-cycle of installation and subsequent upgrades. Produced by Oracle Corporation, EMM Advantage is available to help you structure and manage your Oracle Applications upgrade project.

EMM Advantage includes:

- EasiPath Migration Method (EMM)—a proven, structured approach used successfully worldwide by Oracle consultants
- Project Management Method (PJM)—a standardized Oracle approach to project management

The EMM Advantage toolkit, in combination with your skills, experience, and business knowledge, will help ensure a higher-quality

migration and lead you to business results faster. It is available from Oracle Direct Marketing or the telesales group in your country, or you can contact your local Oracle sales representative.

Your Comments are Welcome

Oracle Corporation values and appreciates your comments as an Oracle AIM practitioner and reader of the guide. As we write, revise, and evaluate our documentation, your comments are the most valuable input we receive. If you would like to contact us regarding comments on this or other AIM or Oracle Method manuals, please use the following email address:

email: aiminfo.us.oracle.com

Contents

CHAPTER

1

Introduction to AIM

This chapter discusses the overall content and structure of Oracle's Application Implementation Method (AIM).

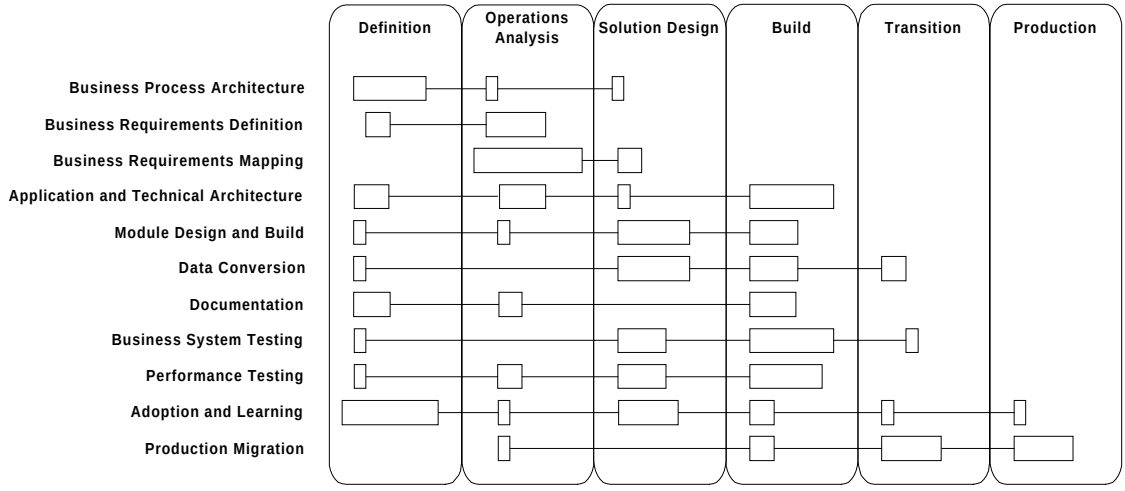

Figure 1-1 Application Implementation Overview

What Is AIM?

Oracle's Application Implementation Method (AIM) is a proven approach for implementing Oracle Applications.

Support for All Oracle Application Product Families

AIM provides direct, product specific support for all of Oracle's application product families including: Customer Relationship Management (CRM), Enterprise Resource Planning (ERP), Financial, Human Resources, and Strategic Procurement as well as interlocks to other methods and offerings to support warehousing, enterprise intelligence applications, reporting tools, and electronic commerce. Since AIM is updateable from the World-Wide-Web, support for new AIM offerings from Oracle and Oracle's business partners is often only a mouse-click away.

AIM is comprised of well-defined processes that can be managed in several ways to guide you through an application implementation project. AIM provides the tools needed to effectively and efficiently plan, conduct, and control project steps to successfully implement new business systems.

Support for All Aspects of the Project

AIM is very broad in its support of all of the activities within your implementation project including:

- planning
- requirements definition
- business process alignment and modeling
- customization
- interfaces and integration between systems
- data conversion
- organization change management including specific support for executive, management, and user groups

- application and technical architecture including network and server design
- reporting and information access systems
- security and access control

Focus on Meeting Requirements and Return On Investment Goals

AIM defines an organization's business needs at the beginning of the project and maintains their visibility throughout the implementation. It defines internal, external, and time-sensitive business events, and maps each event to the corresponding business and system processes. Using this method, the business community gains an accurate understanding of the business requirements to be met by the final system. Where appropriate, business process techniques are employed within AIM to assist the project team in identifying the need for business process changes and designing the changes.

Scaleable to Meet Specific Project Requirements

AIM was designed with scalability in mind. From the largest, multi-national, multi-site, multi-entity projects, through to the smallest, limited size, constrained scope projects — AIM provides the scalability that your project demands. AIM identifies each task as either a core task or an optional task. In addition, it supports the use of predefined approaches, such as FastForward, or allows you to tailor your own approach to match your organization's specific needs.

Updates are a Mouse-Click Away

AIM is unique since much of its content can be updated through the addition of add-in content, downloadable from the World-Wide-Web. This feature not only facilitates the availability of fresh, up-to-date content, but it also allows Oracle hardware, software, and implementation service partners to distribute content unique to their offerings within the AIM framework. AIM is flexible, scaleable, and extensible.

Designed For Quicker Implementations

AIM meets the demand for quicker, more efficient business system implementations. While traditional implementations make it difficult to realize business benefits quickly, the use of AIM's core and optional tasks automatically define the fastest route by focusing on those tasks that are most relevant to the implementation. By eliminating any unnecessary tasks from your project, you reduce the implementation time frame.

Scope

The scope of AIM is *enterprise-wide*. In this context, an *enterprise* is a group of departments, divisions, or even companies, that make up an entire business or agency. AIM provides specific implementation activities necessary to achieve a successful Oracle Applications implementation. The scope of AIM addresses the smallest and simplest implementation as well as the largest, most complex implementation. By distinguishing between core and optional tasks, the scope of AIM expands based on the requirements of the organization.

Oracle's Project Management Method (PJM) contains the project planning and management activities. PJM is fully integrated with AIM.

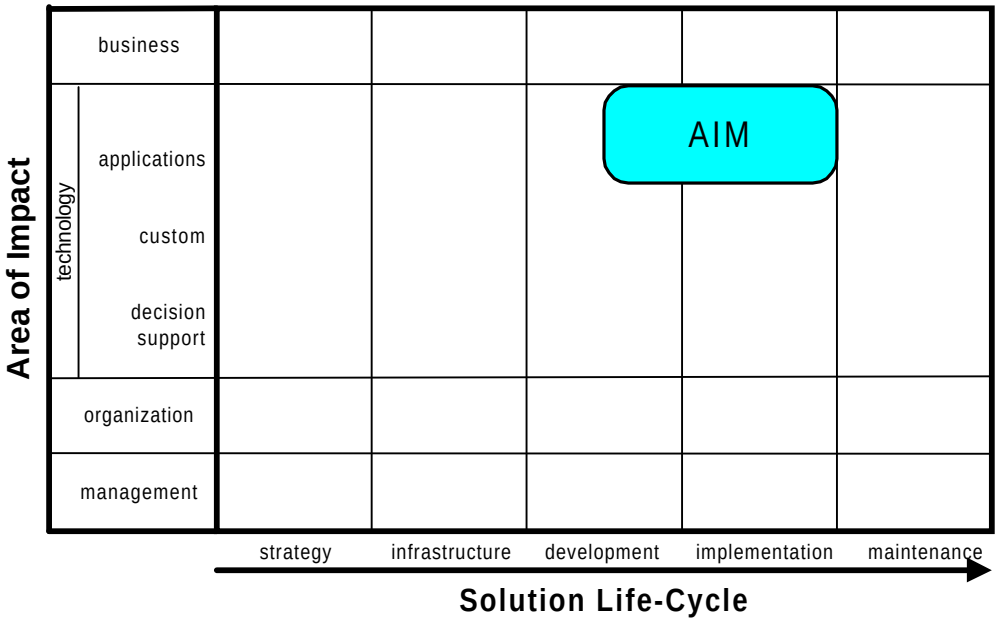

Figure 1-2 AIM Scope

Business Problems Addressed

AIM addresses numerous business problems that organizations currently experience such as:

- **inadequate current chart of accounts** — AIM provides instructions and guides you through the simple setup of your new chart of accounts.
- **use of old technology/processes** — AIM addresses the need to move up to web-based applications as well as new customer facing systems and processes and provides guidance for implementing these new technologies.
- **outgrown current system** — AIM provides directions on how to rapidly implement a new system that will expand as the organization expands.
- **old business processes** — AIM provides the ability to restructure current business processes to make them more aligned with leading practices.
- **resistance to change** — AIM addresses the fact that this may be an organization's first implementation and some users may be hesitant or anxious about the new system; specific tasks in AIM guide the organization through change management activities.
- **inability to adjust to organizational changes** — AIM accommodates setup of new organizational structures brought about by reorganizations and acquisitions.
- **inadequate management information** — AIM has specific tasks that guide the organization through the construction of application extensions in order to capture the right management information.

AIM Phases

AIM projects are conducted in phases. These phases provide quality and control checkpoints to coordinate project activities that have a common goal. During a project phase, your project team will simultaneously be executing tasks from several processes. The figure below illustrates the phases.

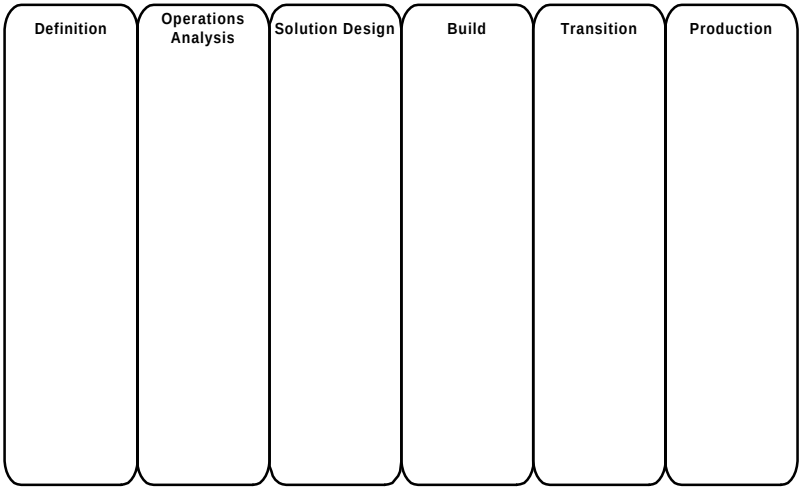

Figure 1-3 AIM Phases

Definition

During Definition, you plan the project, review the organization's business objectives, understand the business processes, and evaluate the feasibility of meeting those objectives under time, resource, and budget constraints. The emphasis is on building an achievable workplan and introducing guidelines on how the organization will work to achieve common objectives. Establishing scope early in the implementation gives the team a common reference point and an effective way to communicate. Strategies, objectives, and approaches are determined for each AIM process, providing the basis for the project plan.

To achieve an early understanding of current business operations and future processes, the team also performs baselining and process modeling during this phase. If business process change is applicable, you review existing business processes and create high-level future process designs during this phase.

The goal is to identify future business and system requirements, propose the future business model, and determine the current application and information technology architecture. The information gathered provides input to downstream activities in subsequent phases. The team reviews financial, operational, technical, and administrative processes and leads workshops with representatives from the organization's staff to verify that all stakeholders understand and agree on the detailed business requirements. All business requirements are associated with planned future business processes. Sharing an accurate understanding of these requirements is a critical success factor for the project.

If business process change is applicable, then the project team develops high-level process scenarios that are used to assess the level of fit between the idealized future processes for the organization and standard application functionality. Gaps are identified, and corresponding solutions developed. The analysis results in a high-level design for future business processes. This high-level design is developed into more detailed business process designs during the Operations Analysis phase.

During Definition, the executive management of the organization is engaged in several interactive sessions. The project team is organized and oriented. A learning plan is developed and project team members are skilled in their appropriate areas. In addition, the Communication Campaign (AP.080) for the project is begun.

Operations Analysis

During Operations Analysis, the project team develops the Business Requirements Scenarios (RD.050) based on deliverables from Definition that are used to assess the level of fit between the detailed business requirements and standard application functionality. Gaps are identified and new proposed solutions are developed. The analysis results in a proposal for conducting business operations under the envisioned application technical architecture. Proposed solutions for gaps evolve into detailed designs during the Solution Design phase.

A model for the application architecture is created and the technical architecture is designed. The technical architecture includes high-level platform, software, and communications components to support the future business system. The Application and Technical Architecture (TA) process documents are used to develop detailed designs during Solution Design.

To develop models of future business operations, you must verify your initial assumptions regarding proposed functionality for gaps. The new system may require only minor modifications to forms, reports, and programs. The team should explore workarounds to application gaps before considering custom modifications or new developments. If the new system requires custom development, the team prepares high-level design documents. These documents include general descriptions of the required features and a work estimate for each customization. The approach to be taken for the customizations and estimates are approved before detailed design begins during Solution Design.

The Performance Testing team creates models for testing the performance characteristics of the new system. These models usually focus on critical system processing associated with key business functions and transactions.

During this phase, work sessions are conducted for middle managers and first-line managers who are not on the project team, to assume their role in a successful implementation.

Finally, a Transition Strategy (PM.010) is developed for migrating the organization from the current system to the new production system.

Solution Design

The purpose of Solution Design is to develop the detailed designs for the new system to meet the future business requirements. During this phase, project team members create detailed Business Procedure Documentation (BP.090).

Supporting business requirements may require building application extensions to standard features — several alternative possibilities may have been defined during Operations Analysis. The project team carefully scrutinizes these possibilities and chooses the most cost effective alternatives.

To design effective business systems, you should make sure that planned user roles and job procedures are efficient. When designing new systems, consider organizational changes, process improvement, and reengineering initiatives to the extent that they are incorporated into the project scope. These initiatives often affect how application features should be utilized.

While new system designs are being finalized, the application and technical architecture begins to take form. The technical staff designs a technical architecture that can support the standard application

configuration and customizations, and considers the future system architecture needs of the company. The technical staff also designs performance testing programs and the environment for executing the performance tests.

Business process design is iterative. Tasks that span both the Operations Analysis and Solution Design phases may be performed as a unit by a design team.

Build

The coding and testing of all customizations and other custom software, including application extensions, data conversions, and interfaces, is done during the Build phase. Business system testing is performed to validate that the functionality meets business requirements.

If customizations, extensions, or conversions are not required, the Build phase is still important because it includes the business system test, which is commonly conducted as a formal conference room pilot (CRP) test. The business system test validates the configuration of the new system and is performed in an environment that closely resembles production.

As the new system is being created, you begin to develop custom application documentation and systems operating documentation. As the system is refined, the documentation is reviewed and revised.

Developers produce unit-tested and link-tested program modules. System and systems integration tests are performed and a working, tested business system is delivered at the end of the phase.

During Build, the Performance Testing team creates Performance Testing components and executes the performance tests. In addition, user learningware is developed and a user learning environment is set up.

Finally, during Build the production support infrastructure is designed and a Transition and Contingency Plan (PM.030) is developed.

Transition

During Transition, the project team deploys the new system into the organization. All the elements of the implementation must come together to transition successfully to actual production. The project team trains the users while the technical team configures the Production Environment and converts data.

During Transition, users perform an acceptance test of the new system. Transition is a demanding experience for the project team, and in particular, for the users who have to maintain exposure to two systems until a new production system is declared. Managing changes and buffering your organization from negative impacts must be top priority. Preparation and planning facilitate the transition process. Transition ends with the cut over to production, when users start performing their job duties using the new system.

If a phased deployment is being employed, Transition may consist of multiple deployments where subsets of the applications may be deployed to various geographical sites and / or business units at different times.

Production

Production begins immediately with the production cutover. It marks the last phase of the implementation and the beginning of the system support cycle. A series of refinements and performance measurement steps is included in this final phase. The information technology personnel work quickly to stabilize the new system and begin regular maintenance. They provide the ongoing support to the organization for the remaining life of the system. During Production, you compare actual results to project objectives and determine if improvements can be made. Controlled system refinement begins to minimize the impact to users. Finally, you start preliminary planning of the future business and technical direction of the company.

If multiple deployments exist, Production will occur at different times for the various geographical sites and business units.

AIM Processes

AIM tasks are organized into *processes.* Each process represents a related set of objectives, resource skill requirements, inputs, and deliverable outputs. A task can belong to only one process. Project team members are usually assigned to a process according to their specialization and background.

AIM has eleven processes as shown in the following figure. The extent to which overlap is permitted is a function of task prerequisites and the availability of project resources.

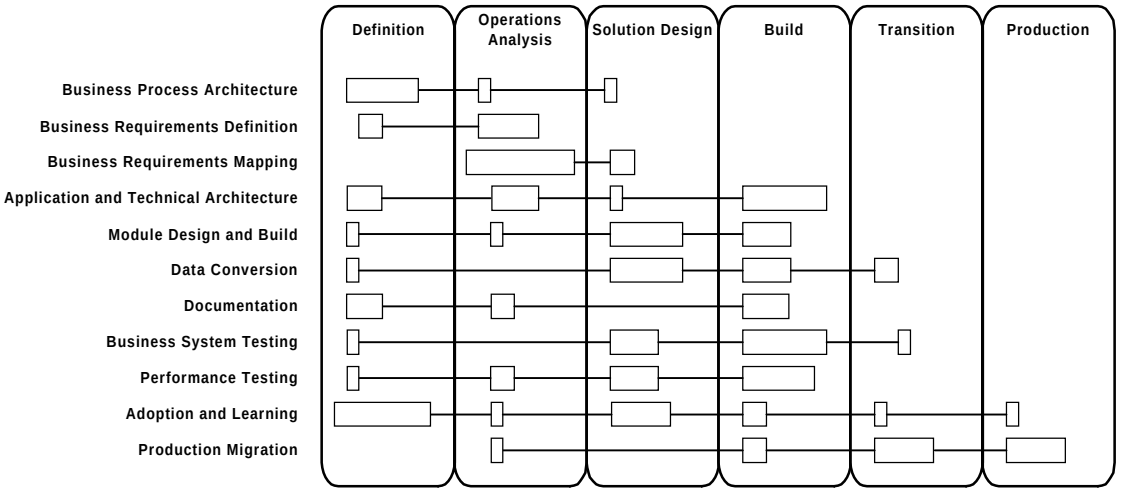

Figure 1-4 AIM Processes

This section provides a brief overview of the AIM processes:

- Business Process Architecture (BP)
- Business Requirements Definition (RD)
- Business Requirements Mapping (BR)
- Application and Technical Architecture (TA)
- Module Design and Build (MD)
- Data Conversion (CV)
- Documentation (DO)
- Business System Testing (TE)

- Performance Testing (PT)
- Adoption and Learning (AP)
- Production Migration (PM)

Business Process Architecture (BP)

Business Process Architecture addresses understanding of the organization's business processes and aligns them with the business requirements and applications to be implemented. If business process change is relevant to the project, use this process to determine the change required and to design the new or changed business processes. Scope the processes and other aspects of the business that are included in the AIM project. In addition, determine what business process data (such as performance data) needs to be gathered to determine how these processes currently perform. Assess the current business to determine the potential for making improvements.

The project team then reviews the business and process strategy of the organization to verify that it provides the information required for an understanding of the current business processes and how they may need to change. With the organization, review leading practices in their business and in relevant processes of other organizations to set a model for the vision of the future. Your team then translates that vision into High-Level Process Designs (BP.070). These designs are compared with the processes supported by the application, to determine, in a general way, what changes would be required, and to modify the designs to provide the optimal processes for the customer.

The result of the Business Process Architecture process is a set of optimized high-level designs that balance changes to the application with the changes to the organization. You input these designs to other processes of AIM to produce detailed process descriptions embodied in the Future Process Model (BP.080).

Business Requirements Definition (RD)

Business Requirements Definition defines the business needs that must be met by the implementation project. Document business processes by identifying business events and describing the steps that respond to these events, then organize processes into scenarios that reflect the business requirements. The project team conducts a Current Business Baseline (RD.020) to document current business requirements, then constructs future business processes and function models to portray future business requirements.

As part of Business Requirements Definition, the organization's financial and operating structure is identified, business transaction volumes are documented, and storage requirements are determined. Audit and control considerations for financial and system administration further define security and operating requirements.

Business Requirements Mapping (BR)

Business Requirements Mapping compares the future business requirements to standard application software functionality and identifies gaps that must be addressed to fully meet business needs. Mapping teams are assigned groups of future business processes, usually related by business function. Business Requirements Scenarios (RD.050) are then mapped to application functionality.

Methods for resolving gaps between requirements and functionality include:

- documenting workarounds
- creating alternative possibilities
- using application extensions
- changing the underlying business process

After business processes have been mapped to the application and gaps have been resolved, the project team documents how the business will operate using the new system.

Application and Technical Architecture (TA)

During Application and Technical Architecture, you design an information systems architecture that reflects your business vision. Using the business and information systems requirements, this process facilitates development of a plan for deploying and configuring:

- Oracle, third-party, and custom applications
- supporting application databases
- critical enterprise interfaces and data distribution mechanisms between applications, servers, and data centers
- computing platform, including servers and client desktop machines with browsers
- networks and the data communications infrastructure

A coherent and well-designed information systems architecture is a critical success factor for any implementation project. The information systems architecture design should be:

- derived from balanced input of business and technical requirements
- made consistent with the corporate business vision and provide the information technology framework to achieve it
- realistic about the capabilities and limitations of the technology on which it is based

The first bullet above is critical because the architecture is often considered to be purely technical in nature, with the resulting risk that the business requirements are treated as subservient to the technology. The business requirements and functional mapping drive a well-designed architecture to include:

- optimal configuration of the applications being implemented
- hardware and network infrastructure providing the applications processing
- tools and procedures needed to manage the complete system

The architecture team may need to consider the following types of complex issues:

- the best deployment strategy for the applications across one or more data centers, business organizations, and business functions
- the high-level configuration of the applications to support financial, administration, manufacturing, and distribution business units
- interface points between the applications and/or remote sites, including specifications, data flows, and mechanisms
- the deployment and capacity planning for the hardware and network infrastructure that will support the applications processing
- management tools and procedures that enable the system to continue to operate as intended
- the ability of the architecture to support future growth requirements

Relative to other processes, the Application and Technical Architecture process occurs early in an implementation project. While the formal process is active only during Definition, Operations Analysis, Solution Design, and Build, architecture deliverables are required and used throughout the entire implementation project. The Application and Technical Architecture process defines the framework for the technical aspects of the future system and the project that is defining and creating the new system.

Both the application and technical architecture designs become more detailed and concrete as they progress from Definition through Operations Analysis, Solution Design, and on to Build. It is important to consider both aspects of architecture throughout the process so that a top-to-bottom view of the future system architecture is created early. Any issues that affect the technical architecture can then be assessed in the context of the application architecture design, and vice versa.

Module Design and Build (MD)

Module Design and Build produces custom application extensions for gaps in functionality identified during Business Requirements Mapping (BR). Custom application extensions include program modules (forms, reports, alerts, and database triggers) that must be designed, built, and tested before they can be incorporated into the new system. Module Design and Build addresses the design and development of the custom modules — Business System Testing (TE) supports testing of the custom modules.

Working together, technical analysts and business analysts define the specific application extensions needed to support the requirements, and then estimate the work effort required to design and build the extensions. Technical analysts write functional and technical specifications for each module that together comprise the detailed design. Developers code new modules or modify existing modules based on the detailed design documents.

Data Conversion (CV)

Data Conversion defines the tasks and deliverables required to convert legacy data to the Oracle Applications tables. The converted data may be needed for system testing, training, and acceptance testing, as well as for production cutover. The first step of this process explicitly defines the business objects that are required for conversion and the legacy source systems that store these objects.

An overall strategy determines how the conversion requirements will be met. Both automated and manual methods should be considered as possibilities. AIM provides specific support for both manual and programmatic data conversions. The conversion process includes designing, building, and testing the required conversion programs, as well as the actual conversion of the legacy data.

Documentation (DO)

The amount and level of detail of documentation varies by project. The Documentation Requirements and Strategy (DO.010) defines the documentation requirements for the project and establishes which of the optional Documentation tasks are required. Implementation complexity and documentation requirements are closely correlated.

Producing prototypes for each document encourages early consensus on documentation design, format, and content.

Business System Testing (TE)

Early in the project life-cycle, Business System Testing focuses on linking test requirements back to business requirements and securing project resources needed for testing. It supports utilizing common test information, including data profiles, to promote testing coordination and to minimize duplication of test preparation and execution effort.

Business System Testing provides a formal integrated approach to testing. The primary deliverable is a high-quality application system, including packaged applications components and custom application extensions.

Performance Testing (PT)

Performance Testing enables you to define, build, and execute a performance test. It does not assume a particular scope for the performance test. You can use the same process to define a complex test on an entire system, or a simpler test on a component or subset of the system. You may also initiate the process more than once on a project with differing scope and objectives to test the performance of different aspects of your system. The specific goals of each process and the relative timing within a project may be different, but the method you use may be the same.

As a primary benefit, this process provides a powerful and direct means of assessing the performance quality of your system. This assessment enables you to determine whether performance is acceptable and to

propose tactical or strategic changes to address the performance quality shortfall. If the performance characteristics you measure are unacceptable, you can implement tuning to improve the performance quality, or propose a change in the system architecture to provide the improvement you desire. Performance Testing is closely related to Application and Technical Architecture (TA) — they are interdependent.

The Performance Testing team defines the scope of testing and relates it to point-in-time snapshots of the transactions expected in the real production system. Technical analysts create or set up transaction programs to simulate system processing within the scope of the test and populate a volume test database against which to execute the transactions. Once the system and database administrators have created the test environment, the test is executed by the project team and the final results are documented.

Adoption and Learning (AP)

Adoption and Learning establishes a measurement system that provides an evaluation of organizational performance to help make sure that expectations are met during implementation and after production cutover.

This process accelerates the implementation project team's ability to work together through team building and organization-specific application learning. This process also helps determine human performance support implications so that the organizational structures and job roles align to meet new performance expectations resulting from the technology change.

Finally, learningware is developed and a learning environment is created where project team members and users participate in learning events.

Production Migration (PM)

Production Migration moves the company, system, and people to the new enterprise system. Following production cutover, it monitors and refines the production system and plans for the future. The Production Migration process encompasses transition to production readiness, production cutover, and post-production support.

During Production Migration, the project team deploys the new system into the organization. This transition depends on Business Requirements Mapping (BR), Module Design and Build (MD), Data

Conversion (CV), Documentation (DO), Business System Testing (TE), and Adoption and Learning (AP) for fully-tested business systems, application extensions, conversion programs, documentation, and Adoption and Learning materials. Transition is complete when data has been converted and verified and users have started using the new system. When the system is stabilized, regular maintenance and system refinement begin. In addition, management begins preliminary planning of the company's future business and technical direction as it relates to the new systems.

Core and Optional Tasks

Application implementation projects range from simple to very large and complex. One way AIM addresses this range of complexity is by designating tasks, or even a part of a task (task step) as either core or optional.

The core tasks in AIM define the minimum set of steps necessary to implement Oracle Applications. You may also need to include several other tasks in your project depending on your specific circumstances. For example, if you are adopting a new user interface technology as part of your implementation, AIM includes a full set of technical architecture tasks to support the analysis, design, and deployment of the required platform, software, and networks. If your implementation requires interfaces to third-party or legacy systems, you can incorporate AIM tasks to help you examine, update, and test those interfaces to work with the new system.

A good test during project planning is to walk through the core tasks and assess whether they will be sufficient to meet the organization's needs. If not, begin considering optional tasks. This planning process should help create an efficient project approach. In the following diagram, core tasks in AIM are represented as black boxes and optional tasks as open boxes. Each box on the diagram has an increment value of ten. For example, the first box in the Business Process Architecture process is BP.010, the second box is BP.020, and so on.

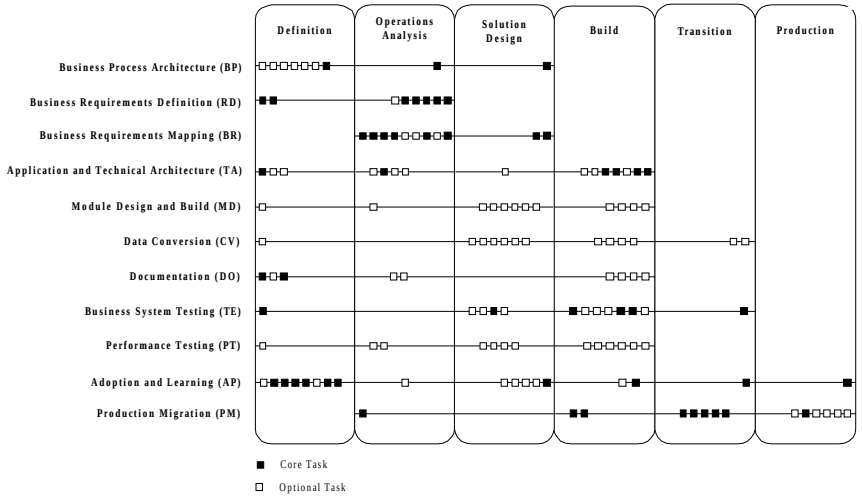

Figure 1-5 Core and Optional Tasks

Task Selection Guidelines

Determining which AIM tasks to include in the project plan is ultimately the responsibility of the project manager. To assist you in making your determinations, a number of optional task criteria that serve as indicators for inclusion of related optional tasks have been identified. In some cases, optional tasks may be indicated by more than one criterion. Use the guidelines below to determine which optional AIM tasks to include in your project.

Optional task criteria, and the optional tasks associated with them, are described below and are referred to throughout the AIM documentation using the following key words:

- Process Change
- Interfaces
- Customizations
- Programmatic Data Conversion
- Manual Data Conversion
- Complex Architecture Changes
- Performance Testing

- Complex Reporting
- Medium or High Complexity
- Large User Population
- Organizational Change Management Focus
- Project-Specific Documentation
- Other (individual criteria)

Process Change

If your project objectives include taking advantage of the application implementation to significantly restructure and improve business processes, you should include the following tasks:

- Define Business and Process Strategy (BP.010)
- Catalog and Analyze Potential Changes (BP.020)
- Determine Data Gathering Requirements (BP.030)
- Review Leading Practices (BP.050)
- Develop High-Level Process Vision (BP.060)
- Create Information Model (BR.060)
- Test Business Solutions (BR.080)
- Identify Business Process Impact on Organization (AP.100)
- Align Human Performance Support Systems (AP.110)
- Develop User Learningware (AP.150)

Interfaces

If your project includes interfaces to third-party or internally developed systems, or interfaces between Oracle Applications installed in separate environments, you should include the following tasks:

- Conduct Integration Fit Analysis (BR.050)
- Create Information Model (BR.060)
- Define Application Extension Strategy (MD.010)
- Define and Estimate Application Extensions (MD.020)
- Define Design Standards (MD.030)

- Define Build Standards (MD.040)
- Create Application Extensions Functional Design (MD.050)
- Design Database Extensions (MD.060)
- Create Application Extensions Technical Design (MD.070)
- Review Functional and Technical Designs (MD.080)
- Prepare Development Environment (MD.090)
- Create Database Extensions (MD.100)
- Create Application Extension Modules (MD.110)
- Create Installation Routines (MD.120)
- Publish User Reference Manual (DO.060)
- Publish Technical Reference Manual (DO.080)
- Develop Unit Test Script (TE.020)
- Develop Link Test Script (TE.030)
- Develop Systems Integration Test Script (TE.050)
- Perform Unit Test (TE.070)
- Perform Link Test (TE.080)
- Perform Installation Test (TE.090)
- Perform Systems Integration Test (TE.120)
- Develop User Learningware (AP.150)

Customizations

If your project includes custom programs or changes to standard screens, reports or processes that extend the functionality of the applications, including custom reports, database triggers, and complex descriptive flexfields, you should include the following tasks:

- Define Application Extension Strategy (MD.010)
- Define and Estimate Application Extensions (MD.020)
- Define Design Standards (MD.030)
- Define Build Standards (MD.040)
- Create Application Extensions Functional Design (MD 050)

- Design Database Extensions (MD.060)
- Create Application Extensions Technical Design (MD.070)
- Review Functional and Technical Designs (MD.080)
- Prepare Development Environment (MD.090)
- Create Database Extensions (MD.100)
- Create Application Extension Modules (MD.110)
- Create Installation Routines (MD.120)
- Publish User Reference Manual (DO.060)
- Publish Technical Reference Manual (DO.080)
- Develop Unit Test Script (TE.020)
- Develop Link Test Script (TE.030)
- Perform Unit Test (TE.070)
- Perform Link Test (TE.080)
- Perform Installation Test (TE.090)
- Develop User Learningware (AP.150)

Programmatic Data Conversion

If your project includes the population of production tables or custom database tables in the new Oracle Application system with data from legacy systems using custom conversion programs or automated conversion tools, you should include the following tasks:

- Define Data Conversion Requirements and Strategy (CV.010)
- Define Conversion Standards (CV.020)
- Prepare Conversion Environment (CV.030)
- Perform Conversion Data Mapping (CV.040)
- Design Conversion Programs (CV.060)
- Prepare Conversion Test Plans (CV.070)
- Develop Conversion Programs (CV.080)
- Perform Conversion Unit Tests (CV.090)
- Perform Conversion Business Object Tests (CV.100)

- Perform Conversion Validation Tests (CV.110)
- Install Conversion Programs (CV.120)
- Convert and Verify Data (CV.130)

Manual Data Conversion

If your project includes the population of production tables or custom database tables in the new Oracle Application system with data from legacy systems using manual data entry through the Application forms, you should include the following tasks:

- Define Data Conversion Requirements and Strategy (CV.010)
- Define Manual Conversion Procedures (CV.050)
- Convert and Verify Data (CV.130)

Attention: Manual data conversion is often used as a cost saving measure when the existing data is in a form that does not meet the requirements of the new system and the volumes of data are low.

Complex Architecture Changes

If your project involves replacement of the existing architecture including networks, operating systems, and server platforms, or includes specialized information security / access requirements, you should include the following tasks:

- Identify Current Technical Architecture (TA.020)
- Develop Preliminary Conceptual Architecture (TA.030)
- Revise Conceptual Architecture (TA.070)
- Define and Propose Architecture Subsystems (TA.100)

Performance Testing

If your project includes significant system performance risks due to the size or complexity of the implementation, include the following tasks:

- Define Performance Testing Strategy (PT.010)
- Identify Performance Test Scenarios (PT.020)
- Identify Performance Test Transaction Models (PT.030)

- Create Performance Test Scripts (PT.040)
- Design Performance Test Transaction Programs (PT.050)
- Design Performance Test Data (PT.060)
- Design Test Database Load Programs (PT.070)
- Create Performance Test Transaction Programs (PT.080)
- Create Test Database Load Programs (PT.090)
- Construct Performance Test Database (PT.100)
- Prepare Performance Test Environment (PT.110)
- Execute Performance Test (PT.120)
- Create Performance Test Report (PT.130)
- Measure System Performance (PM.090)

Attention: Examples may be user populations greater than 1,500 distributed users or a multi-site, multi-national implementation or use of a shared network resource where performance characteristics of the environment may be a concern.

Complex Reporting

If your project includes the implementation of a Business Intelligence System (BIS), Data Warehouse, or use of ad hoc reporting tools, such as Oracle Discoverer™, custom reports, or other complex reporting requirements, include the following tasks:

- Create Information Model (BR.060)
- Define Reporting and Information Access Strategy (TA.060)

Medium or High Complexity

If your project includes two or more complex characteristics, such as multi-site implementations, multi-organization features, national language support, globalization issues, or multiple interfaces to external systems, include the following tasks:

- Establish Process and Mapping Summary (RD.030)
- Test Business Solutions (BR.080)
- Identify Current Technical Architecture (TA.020)

- Develop Preliminary Conceptual Architecture (TA.030)
- Define Application Architecture (TA.040)
- Revise Conceptual Architecture (TA.070)
- Define Application Security Architecture (TA.080)
- Define Application and Database Server Architecture (TA.090)
- Define and Propose Architecture Subsystems (TA.100)
- Define Application Deployment Plan (TA.130)
- Publish System Management Guide (DO.090)

Large User Population

If your project includes deployment of the Applications to a large user population (typically 500 or more users, but possibly fewer in some environments), include the following tasks:

- Establish Process and Mapping Summary (RD.030)
- Define Executive Project Strategy (AP.010)
- Develop Managers' Readiness Plan (AP.090)

Organizational Change Management Focus

If your project includes an organizational change management focus, include the following tasks:

- Define Executive Project Strategy (AP.010)
- Develop Managers' Readiness Plan (AP.090)
- Align Human Performance Support Systems (AP.110)
- Develop User Learningware (AP.150)

Attention: An organizational change management focus offers a preemptive investment in understanding and addressing the organizational impact issues that may result from the implementation of the new system.

Large User Population Combined with Organizational Change Management Focus

If your project includes both deployment of the Applications to a large user population and an organizational change management focus, include the following tasks:

- Develop Business Unit Managers' Readiness Plan (AP.060)
- Align Information Technology Groups (AP.120)
- Conduct User Learning Needs Analysis (AP.130)

Project-Specific Documentation

If your project includes publishing project-specific documentation, include the following tasks:

- Define Documentation Standards and Procedures (DO.020)
- Prepare Documentation Environment (DO.040)
- Produce Documentation Prototypes and Templates (DO.050)
- Publish User Guide (DO.070)

Attention: In some cases the use of the standard documentation provided by Oracle may meet the needs of the organization.

Other

If your project requires the modeling of current business processes and practices to gain a better understanding of the current business baseline, include the following task:

- Develop Current Process Model (BP.040)

If your project includes Develop Preliminary Conceptual Architecture (TA.030), include the following task:

- Revise Conceptual Architecture (TA.070)

If your project includes post-production system enhancement objectives, include the following tasks:

- Refine Production System (PM.110)
- Propose Future Business Direction (PM.130)

If your project includes legacy system decommissioning objectives, include the following task:

- Decommission Former Systems (PM.120)

If your project includes post-production business process improvement objectives, include the following task:

- Propose Future Business Direction (PM.130)

If your project includes post-production system architecture enhancement or technology migration recommendation objectives, include the following task:

- Propose Future Technical Direction (PM.140)

Optional Task Steps

In addition to the designation of optional tasks, some AIM tasks include optional task steps. These optional task steps correspond to deliverable components that provide additional detail or supplemental information related to a specific project objective. Optional task steps are conditionally required when specified criteria are present.

Tasks with optional task steps, and the criteria that indicate that the optional task steps should be included when performing the task, are described below.

Process Change

If your project objectives include taking advantage of the application implementation to significantly restructure and improve business processes, you should include optional task steps in the following tasks:

- Develop Future Process Model (BP.080)
- Analyze High-Level Gaps (BR.010)
- Develop Project Team Learning Plan (AP.030)
- Develop Managers' Readiness Plan (AP.090)

Organizational Change Management Focus

If your project includes an organizational change management focus, include optional task steps in the following tasks:

- Conduct Initial Project Team Orientation (AP.020)
- Develop Project Team Learning Plan (AP.030)
- Conduct Project Team Learning Events (AP.050)
- Develop Project Readiness Roadmap (AP.070)
- Develop and Execute Communication Campaign (AP.080)
- Develop User Learning Plan (AP.140)
- Conduct User Learning Events (AP.170)

Large User Population Combined with Organizational Change Management Focus

If your project includes both deployment of the Applications to a large user population and an organizational change management focus, include the following task:

- Conduct Effectiveness Assessment (AP.180)

Planning Suggestions

If you are not sure whether you need any of the optional tasks, keep them in your workplan with work effort estimates of zero. You can then create filters in your project management tool to hide zero effort tasks in reports.

As your project progresses, you can reevaluate the need for the tasks you initially exclude. You may wish to perform some of them as checklist tasks by reviewing the handbook descriptions and template content to verify that you are not missing an important element.

Optional Task and Optional Task Step Notation

For easy identification throughout the AIM Process and Task Reference Manual, optional tasks and optional task steps in core tasks are annotated with the following triangle shaped symbol: Δ.

If an optional task criterion affects a task's Prerequisites, Task Steps, Approach and Technique, or Deliverable Guidelines, the criterion name is indicated in the left margin.

AIM Implementation Approaches

There are two project approaches to consider when implementing Oracle Applications. The diagram below illustrates how to determine the best project approach to use.

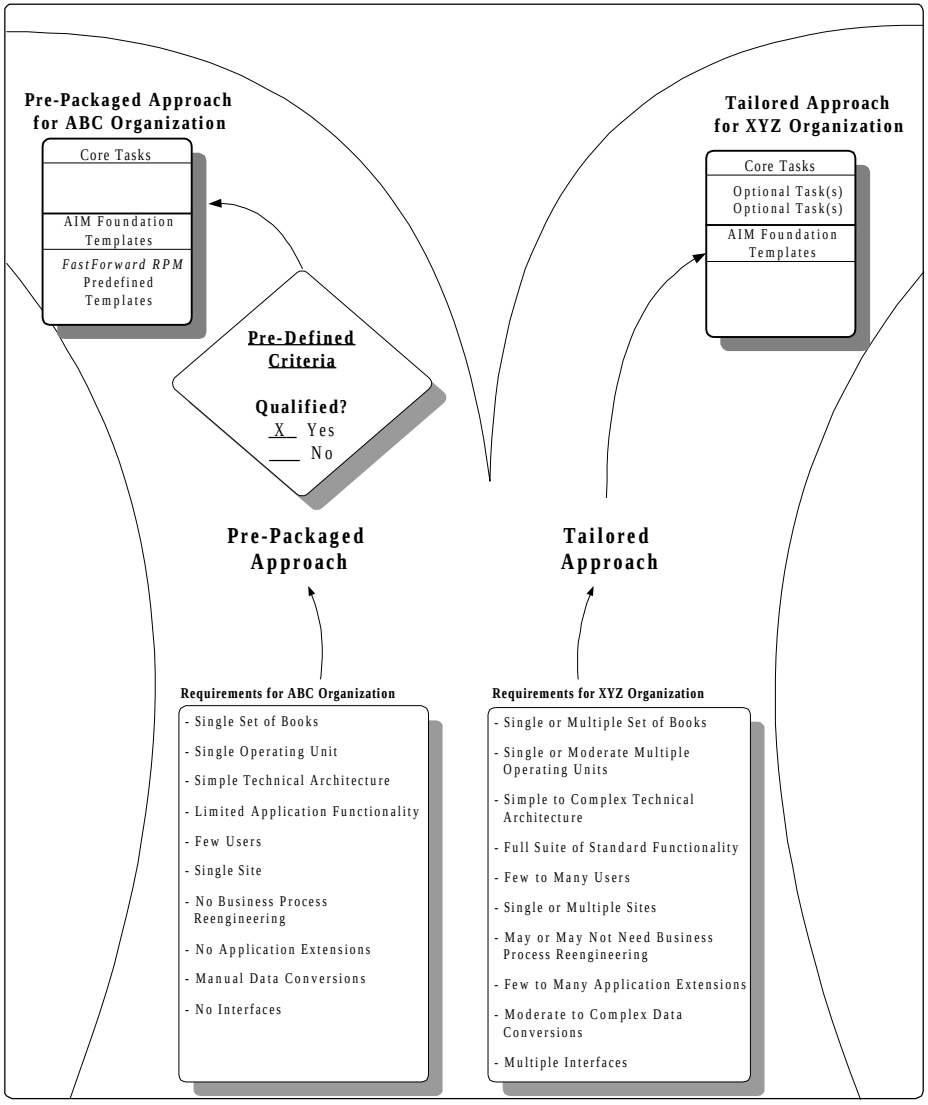

Figure 1-6 Project Approach Paths

Each implementation project must determine their approach for using the AIM method. The implementation approach you use depends on the specific requirements of your organization. AIM is flexible — it allows you to either use a pre-packaged approach or develop a tailored approach.

The previous diagram illustrates, by example, how ABC organization qualified to use a pre-packaged approach (such as Oracle's *FastForward Financials*^{RPM}). On the other hand, XYZ organization cannot meet the predefined criteria of a pre-packaged approach. Therefore, XYZ organization must tailor their own project approach to meet the specific implementation requirements of their organization.

Pre-Packaged Approach

A pre-packaged approach is a set of predefined activities using AIM tasks and deliverables. These pre-packaged approaches may be part of the FastForward or Oracle Point Solutions families of approaches. In the diagram above, the ABC organization qualifies to use the FastForward prepackaged approach based on the pre-packaged qualification criteria.

Pre-packaged approaches offer a set of predefined tasks and predefined templates. These predefined tasks are AIM foundation tasks that have been specifically selected to be part of the pre-packaged approach. Keep in mind many of the templates used by FastForward and other pre-packaged approaches have been pre-seeded with data that must be used by the implementation team.

Pre-packaged approaches come with a qualification worksheet to determine whether your project is a suitable candidate for the particular prepackaged approach. If your organization is not able to use a prepackaged approach, then you should create your own tailored approach.

Tailored Approach

A tailored approach allows an organization to have maximum flexibility and extensibility in implementing Oracle Applications. A tailored approach allows an organization to build a project approach that maps to their unique implementation requirements. For example, if you intend to build application extensions, you should review the Module

Design and Build (MD) tasks to determine those needed for the implementation.

The table below illustrates an example of these criteria using the FastForward RPM pre-packaged approach.

AIM Process	***FastForward RPM*** **Pre-Packaged Approach**	**Tailored Approach**
Business Process Architecture	No significant changes to business process that would impact the project.	Business process changes are anticipated.
Business Requirements Definition	Business processes documented, and requirements clearly defined and well understood.	Business requirements not well understood at commencement of project.
Business Requirements Mapping	No application extensions. Gaps between requirements and the standard application software will be resolved by changing business policies and procedures.	Minimal to substantial changes to the application software are required.
Application and Technical Architecture	Little change in technology; solid information technology skill set.	Major shifts in computing paradigm, tools, and architecture.
Application and Technical Architecture	Sound expertise regarding planned architecture.	Organization has minimal knowledge or experience in new architecture.
Module Design and Build	No application extensions.	Minimal to significant application extensions.
Data Conversion	Straightforward data conversion.	Moderate to Large conversion volumes and moderate to complex conversion processes and tools.
Documentation	Few or no changes to standard documentation.	Significant custom documentation required.

AIM Process	*FastForward RPM* Pre-Packaged Approach	Tailored Approach
Business System Testing	Small scope to the business system testing no customizations, no custom interfaces, and no data conversions. Few complex business processes. Few business process changes.	Substantial business system testing required for customization, and data conversion interfaces. Many complex business processes. Substantial business process changes.
Performance Testing	Sufficient hardware and network capacity clearly exists. No performance test required.	Some performance testing required.
Adoption and Learning	Standard training materials and classes used during implementation. Organization is receptive to change and can easily transition to the new system.	Requires custom developed materials and classes. Organization has previously experienced implementation failures and wants direction in managing organizational change.
Production Migration	Simple cutover to production.	Complex migration to production.

Table 1-1 *FastForward RPM* Pre-Packaged Approach Example

Tailored Approach Example — Business Process Change

All activities and components in AIM constitute the AIM foundation. As mentioned earlier, you can design your own implementation approach by selecting a subset of components from the AIM foundation. For example, the business process change approach focuses on tasks that are associated with Business Process Architecture (BP) activities. The remainder of this section focuses on what to consider when using a tailored approach with a business process change focus.

Deploying a Business Process Change Approach

If changing the organization's business processes are within the scope of the project, then design a tailored approach with a business process change implementation focus. Tasks in the Business Process

Architecture (BP) process of AIM support this approach, as well as a number of other tasks in other AIM processes.

When Is a Business Process Change Approach Applicable?

The following criteria will help you to decide if a Business Process Change focus is applicable to your project:

- The organization has agreed to implement Oracle's Customer Relationship Management (CRM) family of applications and reengineer the business processes outside in from the end-customer to systems perspective.
- There are specific business goals with respect to improving customer loyalty, wallet share, higher leverage of existing customers and margin improvement.
- The project involves business process change that will have a major impact on the business requirements.
- You cannot determine the business requirements to be met by the implementation without determining the future business processes.
- There are significant differences between the way the organization wants or needs to work in the future and the way it works currently.
- It is impossible to meet all of the organization's expectations without changing or customizing the applications, yet those changes will introduce significant risks either to the project or to the organization during maintenance of the resulting system.

If one or more of these criteria are applicable, you should consider applying a business process change focus to your AIM project.

Tailoring an AIM Project for the Business Process Change Focus

The table below summarizes the changes to an AIM foundation approach required when applying a business process change approach.

AIM Process	Modification Required for a Business Process Change Focus
Business Process Architecture	The Business Process Architecture process determines the process changes required to support the business vision and delivers the High-Level Process Designs (BP.070). The scope of processes considered is limited to the scope of Applications being implemented. The High-Level Process Designs drive the downstream processes of Business Requirements Definition (RD), Business Requirements Mapping (BR), Application and Technical Architecture (TA), Module Design and Build (MD) and Adoption and Learning (AP).
Business Requirements Definition	Existing business processes are modeled at a high-level, using the Oracle Business Models as a baseline. Performance data on current operations are collected to support this model.
Business Requirements Mapping	High-level future business process models are mapped to the Applications. Future business processes are modeled in detail. A gap analysis between the future process vision and the Application functionality is performed and gap resolution options are identified.
Application and Technical Architecture	Application and technical architectures are designed to support the future business processes being designed by the project.
Module Design and Build	Where appropriate, module designs are checked to confirm that they support the detailed future business processes being designed by the project.
Data Conversion	Not affected.
Documentation	Not affected.
Business System Testing	Not affected.
Performance Testing	Not affected.
Adoption and Learning	Business Process Architecture (BP) tasks are often prerequisites for Adoption and Learning (AP) tasks. Business process change activities affect many of the readiness and assessment tasks found in Adoption and Learning.
Production Migration	Not affected.

Table 1-2 Business Process Change Modifications to an AIM Project

Key Principles of a Business Process Change Approach to AIM

A project with a focus on business process change should be embody these key principles:

High-Level Sponsorship

Dealing with business process change is highly dependent on active sponsorship from senior staff in the organization. If possible, you should take on the role of main sponsor for the process analysis and changes that will result from the project. Main sponsorship activities include:

- agreeing to the scope and objectives of the project
- sponsoring key business process teams
- assisting in obtaining qualified staff from within the organization
- helping to gain agreement with other key stakeholders in the organization
- assisting and participating in staff communication programs required as part of the project
- assisting in obtaining buy-in to business process changes resulting from the project

Involvement of Stakeholders

Early in the project, the key stakeholders should be identified. These executives, business line managers, and process users have a keen interest in the results of the project or are impacted by the future process environment. You should encourage the organization to consult these interested parties and to take their views into account at the appropriate points during the project.

Awareness of Leading Practices

One of the key areas of a business process change focus is the improvements to the business processes. The project team needs to be aware of leading practices as a model of what can be accomplished through process improvement. These models can come from similar organizations in the industry, or from the same processes in different industries.

Keeping Visioning Distinct from Future Process Modeling

A business process focus has the visioning and future process design tasks being carried out as separate tasks. Visioning focuses on the objectives of the organization and should take into account the leading practices relevant to the business processes. Process modeling follows visioning and is the translation of the vision into specific process steps. The visioning task is undertaken first, to assist in creative and *out of the box* thinking, so that the future business process model does not simply reflect the organization's current processes or be limited to small-scale improvements that produce few real benefits.

Future Business Processes Modeling

Oracle's approach to business process change is based on a two-level approach to modeling future business processes: initially at the high-level and then at a more detailed level. The high-level processes are generic, while the detailed processes reflect the needs of individual business units, such as country organizations within a global enterprise. This approach significantly reduces the cost and time of the project.

Gap Analysis

Business process change in AIM provides a framework for analyzing the costs and benefits of change. This involves a comparison of the costs of changing the application with those of changing the organization's processes and structure. In common with other aspects of business process change, this gap analysis is carried out initially at a high level and then at the detailed level.

Importance of Change Management

One key assumption is that the results of process change or realignment enable significant improvement in business practices. The organization's processes and operating structure may also change. This may require a significant amount of adaptation by the organization's employees, including:

- roles and responsibilities
- processes and procedures
- communications
- retraining
- performance measurement and incentives

It is recommended that a preemptive organizational change management strategy be developed to offset any possible negative impacts of the desired process and organizational changes. This may involve the use of the optional tasks associated with a change management focus within the AIM Adoption and Learning process as well as the engagement of change management professionals during the course of the project.

Need for Metrics and Measurement

Significant improvement to business process performance is the key to successful business process change. Process metrics should be identified and measured. These are usually referred to as k*ey performance indicators* (KPIs) and provide a measure of the efficiency and effectiveness of the process. They can also be used to compare the organization's process performance with the best in class of its competitors. Once KPIs have been agreed upon for the process, they can be used to establish a baseline against which process improvements can be measured.

Relationship to Other Oracle Methods and Offerings

The following diagram illustrates how AIM is positioned relative to other Oracle Methods and offerings:

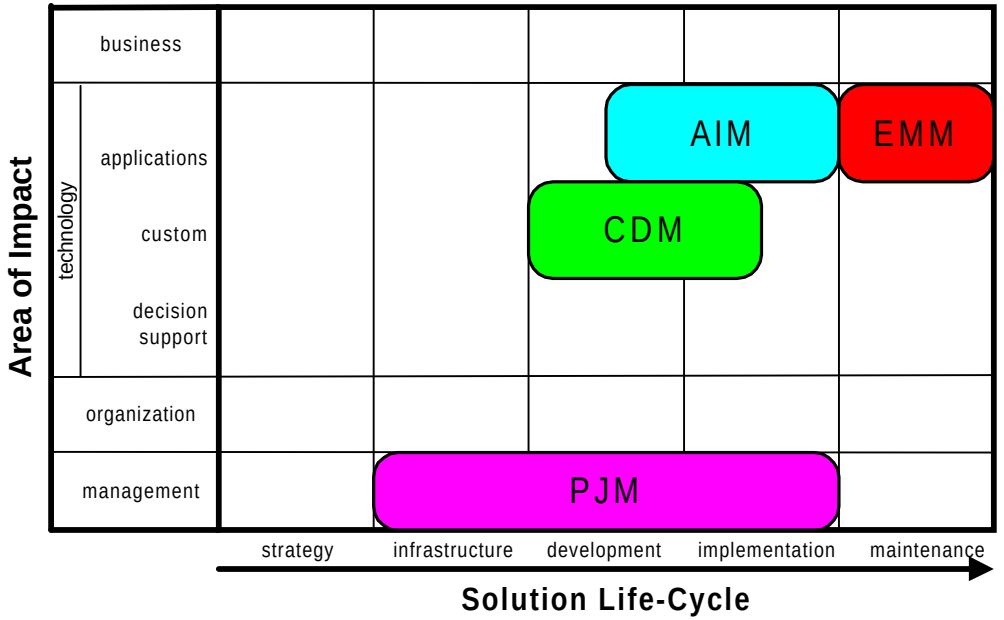

Figure 1-7 AIM Positioned Relative to Other Oracle Methods and Offerings

Interlocks with the following products and services are defined at the task level and in many cases, within the templates associated with the task.

Solution Value Assessment (SVA)

A Solution Value Assessment is an offering that can be leveraged to document the business case and the return that the executive management team can realistically expect from its investment in technology. The table below identifies the tasks that provide the linkage between AIM and a Solution Value Assessment.

Task ID	Task Name
BP.010	Define Business and Process Strategy
BP.070	Develop High-Level Process Designs
RD.040	Gather Business Volumes and Metrics
AP.010	Define Executive Project Strategy
AP.170	Conduct User Learning Events

Table 1-3 Tasks Providing Linkage to Solution Value Assessment

Oracle Support Assessment (OSA)

The Oracle Support Assessment is a comprehensive approach for assessing the current technical support infrastructure, identifying potential problems, and creating the optimum support program for the organizations. The table below identifies the tasks that provide the linkage between AIM and Oracle Support Assessment.

Task ID	Task Name
AP.010	Define Executive Project Strategy
AP.110	Align Human Performance Support Systems
AP.120	Align Information Technology Groups
PM.020	Design Production Support Infrastructure

Task ID	Task Name
PM.030	Develop Transition and Contingency Plan
PM.060	Implement Production Support Infrastructure

Table 1-4 Tasks Providing Linkage to Oracle Support Assessment

Attention: For more information on Oracle Support Assessments, contact Oracle World Wide Support.

Learning Needs Assessment (LNA)

A Learning Needs Assessment is a service that can be leveraged to determine the learning needs and to develop a tailored approach to skilling the individuals within your organization. The table below identifies the tasks that provide the linkage between AIM and Learning Needs Assessment.

Task ID	Task Name
AP.030	Develop Project Team Learning Plan
AP.070	Develop Project Readiness Roadmap
AP.100	Identify Business Process Impact on Organization
AP.110	Align Human Performance Support Systems
AP.120	Align Information Technology Groups
AP.130	Conduct User Learning Needs Analysis
AP.140	Develop User Learning Plan

Table 1-5 Tasks Providing Linkage to Learning Needs Assessment

Attention: For more information on Learning Needs Assessment, contact Oracle Customer Education.

Oracle Tutor™

Oracle Tutor is a software product that enables Oracle Applications users to document and track their business processes, determine workflow, and develop documentation and learning materials based on the procedures employed. It provides a repository of Oracle Applications content that can be dynamically customized to reflect a company's business processes and procedures. The result is a set of job-specific manuals and student guides that are easy to update and that can be made available online. The table below identifies the tasks that provide the linkage between AIM and Oracle Tutor.

Task ID	Task Name
BP.040	Develop Current Process Model
BP.080	Develop Future Process Model
BP.090	Document Business Procedures
DO.010	Define Documentation Requirements and Strategy
DO.020	Define Documentation Standards and Procedures
DO.050	Produce Documentation Prototypes and Templates
DO.060	Publish User Reference Manual
DO.070	Publish User Guide
AP.050	Conduct Project Team Learning Events
AP.110	Align Human Performance Support Systems
AP.120	Align Information Technology Groups
AP.140	Develop User Learning Plan
AP.150	Develop User Learningware

Table 1-6 Tasks Providing Linkage to Oracle Tutor

Enterprise Data Management System (EDMS)

Oracle's Enterprise Data Management System (EDMS) is a suite of tools to help build, manage, and control legacy data conversions and interfaces between the Oracle Applications and other applications within an overall system. The table below identifies the tasks that provide the linkage between AIM and EDMS.

Task ID	Task Name
CV.010	Define Data Conversion Requirements and Strategy
CV.040	Perform Conversion Data Mapping
CV.060	Design Conversion Programs
CV.080	Develop Conversion Programs

Table 1-7 Tasks Providing Linkage to EDMS

Oracle Business Models (OBM)

Oracle Business Models are an integrated suite of business process models that assist in the implementation of the Oracle Applications suite of enterprise business software for financials, manufacturing, supply chain, human resource, and customer relationship management. The table below identifies the tasks that provide the linkage between AIM and Oracle Business Models.

Task ID	Task Name
BP.010	Define Business and Process Strategy
BP.030	Determine Data Gathering Requirements
BP.040	Develop Current Process Model
BP.050	Review Leading Practices

Task ID	Task Name
BP.070	Develop High-Level Process Designs
BP.080	Develop Future Process Model
RD.020	Conduct Current Business Baseline
BR.010	Analyze High-Level Gaps
AP.030	Develop Project Team Learning Plan
AP.050	Conduct Project Team Learning Events
AP.060	Develop Business Unit Managers' Readiness Plan

Table 1-8 Tasks Providing Linkage to OBM

Approach Choice Criteria

When selecting the project approach for your implementation consider the following dimensions:

- **Scope** — project objectives, business functions, sites, and applications addressed
- **Cost/Time/Quality** — the balance between cost, implementation, speed, and quality in meeting requirements
- **Risk** — the potential of an adverse condition occurring that will impact the project or the organization
- **Track Record** — the approaches that have or have not worked in the past for this organization
- **Resources** — the resource constraints that affect the practicality of certain project approaches

Critical Success Factors

Critical success factors may affect the selection of a project approach. The following table shows typical critical success factors and their impact on the success of the implementation.

Critical Success Factor	Percent Impact	Internal/External to Project
Sufficient infrastructure	10	External
Clear understanding of business needs	15	External
Upper management support	20	External
Strong program / project management	20	Internal
Team strength	15	Internal

Critical Success Factor	Percent Impact	Internal/External to Project
Organizational readiness	10	External
Sufficient technical architecture	10	External

Table 1-9 Impact of Critical Success Factors

Sufficient Infrastructure

It is possible to attempt an application implementation where the demands on the information systems infrastructure are too great. Determine how far you can realistically stretch the infrastructure over a specific period of time.

Clear Understanding of Business Needs

Before starting a project, do not assume that the organization has a clear understanding of its needs. Even if there is a clear understanding of the perceived business problems to be addressed, there may be additional undocumented issues. Your team may need to work with the organization in a series of workshops to help determine their real needs and the root causes of their problems.

Upper Management Support

Upper Management Responsibilities

Upper management has several key responsibilities that are connected to project success which include:

- sponsoring the project and the business process change program resulting from the project
- clearly defining project scope
- resolving major issues in a timely manner
- allocating resources
- instilling a positive attitude throughout the organization
- establishing project priority

- managing the organizational changes associated with the project
- verifying that project management has critical information about major planned or potential events that could impact the project

Time/Budget/Quality Considerations

The project budget and schedule must be based on realistic estimates with appropriate contingencies. If real-time and budget constraints exist, project management must work closely with upper management to reach an appropriate balance. Frequently, time and budget constraints are imposed before the project scope is determined, or a detailed project plan is developed.

Strong Project Management

A strong project manager identifies problems, determines proposed solutions, and drives the solution process. An inexperienced or ineffective manager may be unable to identify problem areas that could escalate and negatively impact the project. If high-risk project approaches are selected, strong project management is essential to complete the project successfully.

The organization's willingness or ability to delegate responsibility and control to the project manager should also impact your approach selection. If complete responsibility and control are held by the project manager, communication with upper management may occur through exception reporting and issue management. Frequently, incomplete delegation of authority results in responsibility without control. In these cases, the project manager may not be able to perform effectively because he/she does not have the necessary level of decision making authority.

Team Strength

Capitalizing on individual and team strengths, while compensating for weaknesses, are critical factors affecting the project's success. Potential team factors include:

- a strong team with weak project management may succeed, but will run a greater risk than a weak team with strong project management, who will have more potential to become a strong, effective project team

- a group of strong individuals does not guarantee a strong team; teamwork is essential

Organizational Readiness

Application implementations cause change, and effective change management may mean the difference between project success and failure. Project managers should be aware of organizational factors impacted by the project. For example:

- Do various levels in the organization view the project as a desirable solution to current problems?
- Is the organization's staff prepared to accept the changes to processes and organization that may result from the project?
- Is there an organizational change management function in place to work with the project team in changing business processes and determining the necessary communication and reskilling strategies?
- Is the information systems department able to absorb new technology and support the project?
- What is the level of computer literacy? How many people will be using an automated system for the first time?
- How stable is the organization? Change may be difficult for the user community if it is also being driven by other initiatives.
- Are all levels of management ready? Authorizing a system implementation is different from managing the associated organizational changes.
- Did the user community participate in the system selection? Greater involvement may mean less resistance to subsequent changes.
- If the applications will be deployed at various sites, will business functions be performed differently at each location?
- What is the organization's strategy regarding centralized versus decentralized planning and control?
- What is the history of system implementation and has it created a positive mindset regarding future projects?

Level of Process/Requirements Analysis

The scope of the process analysis and requirements definition activity can vary greatly. For example, the objective may be to minimize customizations by altering the business processes to align with the applications. Or the objective may be to customize the applications to match the business processes because of an overall strategy of minimizing changes to business procedures.

If the organization intends to replace many business processes, there may be little need for the team to assess or understand current business processes. On the other hand, if the strategy is to integrate the new applications into current processes, it is critical that the team understands how the business is currently operating.

At a minimum, each current business process within the scope of the project must be identified. Substantial time and expense can be saved by minimizing current process analysis but there is a trade-off between cost, time, and risk.

Acceleration Techniques

In certain situations, you may be able to condense the project duration by using acceleration techniques.

Eliminate Checkpoints

The Project Management Method (PJM) imposes phase start and completion checkpoints that are valuable for project management and control, but may disrupt natural process/task overlap opportunities and project flow. In large, complex implementations, the formal phase signoffs may be needed for scope and risk management. Using the standard AIM tailored approach is still the best way to control a project and mitigate risk.

In smaller, less complex projects, there may be opportunities to expedite project activities with an acceptable degree of risk by collapsing tasks within a phase.

AIM processes are conducted with resources and time frames optimized to achieve the earliest possible go-live date. However, by accelerating implementation, you assume a greater risk that some

requirements may be missed, or that you may not achieve quality comparable to that of a tailored approach.

Before you decide to use a pre-packaged approach or an accelerated tailored approach, analyze the associated risks, and weigh the cost and benefits of an early implementation against potential problems after production.

Other considerations:

- If there is uncertainty regarding any aspect of the project, use the AIM foundation tailored approach to implement good checkpoint and risk management.
- By using multiple parallel business process definition / mapping, teams can speed up Definition and Operations Analysis. Mitigate risk for this technique by assigning a specific process team for cross-process integration. Use a project data repository, such as Oracle Designer, for custom developed solutions. The repository automatically cross-validates designs and enforces integrated solutions.
- If there are minimal large, complex customizations, begin work on them early because of the time frames required for designing, building, and testing major customizations. It may be possible to selectively overlap specific customizations. To further mitigate risk, define a formal subproject specifically for a given customization.

Consolidate Phases

Operations Analysis

Process teams formed within a business function to define requirements should continue into requirements mapping.

Business Requirements Scenarios (RD.050) created during Definition are mapped to the applications during Operations Analysis. The process teams create scenarios that represent how the process driven business requirements can be satisfied using the standard application features. The goal is to arrive at a new system that satisfies the business needs of the users, resolves current system problems, and optimizes process efficiency. The new system is a combination of several components: application setups, application supported process steps, manual processes or process steps, system features, reports, and background processes.

These prototype solutions are interactively developed by project team members, key users, and application consultants. The application consultants enable features, set system parameters, and guide process mapping to illustrate how the new system supports proposed scenarios. This process continues until a new system design is arrived at, or an application-process gap is identified.

This prototyping method expedites the requirements mapping process by capitalizing on the early knowledge transfer in both directions, from process teams to application consultant, and from application consultant to process teams. Internal resources can save time by relying more heavily on the consultant's participation and interpretation of requirements. Less reliance is placed on users' grasp of new system functionality and experimentation to arrive at the optimal new system design. Therefore, the project team and users can concentrate on business process design and leave the mechanics of application set up to the consultants.

A repetitive implementation *process task cycle* for business processes is performed multiple times for different subject areas. For example, the Current Business Baseline (RD.020), Future Process Model (BP.080), Business Requirements Scenarios (RD.050), and Business Requirements Mapping Forms (BR.030) occur for each business process. An example is shown in the following figure:

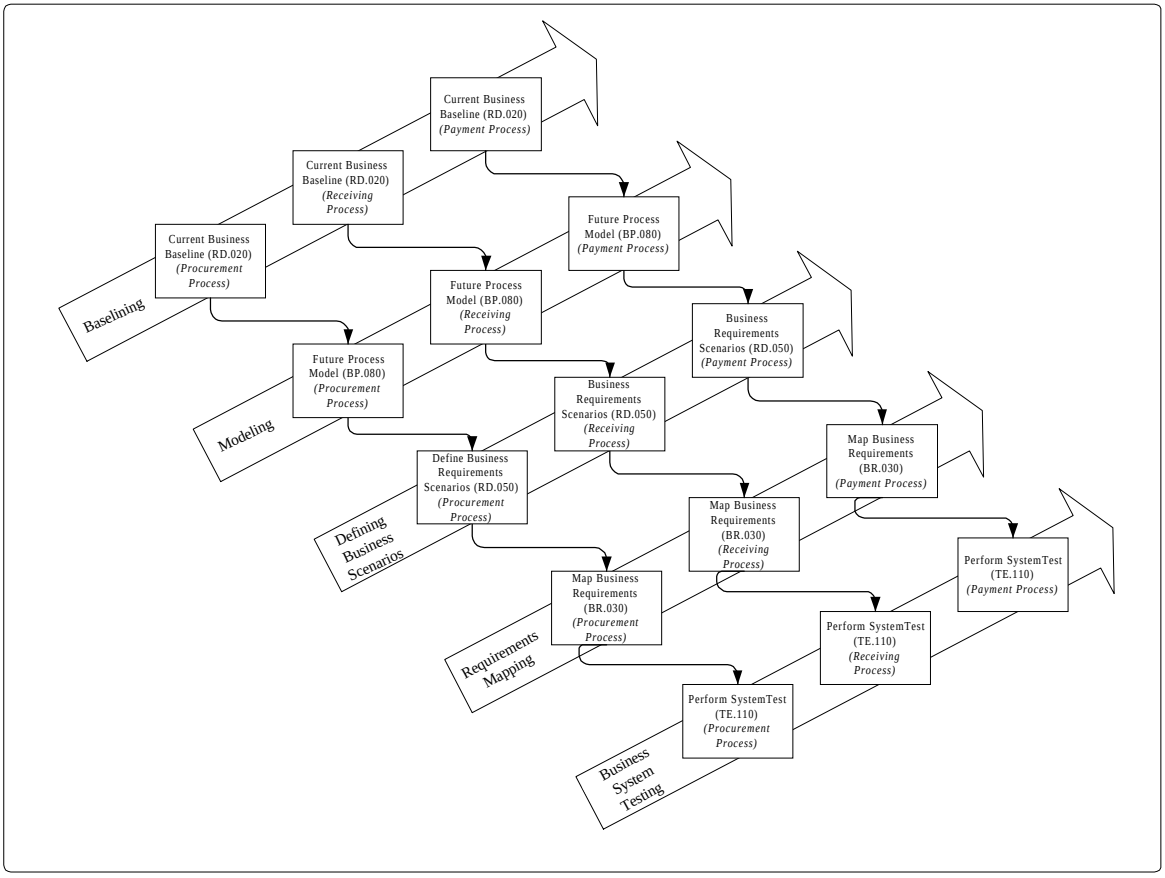

Figure 1-8 Repetitive Implementation Process Task Cycle Example

Operations Analysis and Solution Design

Collapse Operations Analysis and Solution Design into a single phase. Start creating design deliverables as the mapping progresses. This is a popular technique, but incurs greater risk because the Operations Analysis checkpoint is removed. The full vision of the future system does not emerge until Solution Design is nearing completion. This technique increases the risk of major design issues associated with non-integrated analysis and costly rework, as well as scope creep.

Use Multiple Tasks for Program Modules

The default Project Workplan for AIM includes a single task for Create Application Extension Modules (MD.110). In reality, this task is repeated for all the customizations, conversions, and interfaces required

by the project. When preparing a detailed project plan, add tasks for each individual program module to be built and tested. This gives you the flexibility to assign several developers to the construction tasks and perform resource leveling to derive the detailed schedule. There may also be opportunities for parallel development that can be identified using this technique.

Prioritize Customizations

Some customizations identified during Solution Design may not be critical for initial production cutover. By delaying these Build activities, you can move to Business System Testing (TE) and Production Migration (PM) more quickly. Development of minor application extensions can continue in parallel with other activities, but should be introduced after production.

Schedule Optimization

Work closely with the designers so that you can define inter-module dependencies in the project plan. You may also wish to assign priorities, so the auto-leveling feature of your project planning tool can generate an appropriate schedule. We recommend that you use resource-driven scheduling for program construction tasks to efficiently utilize multiple resources. Fixed-duration scheduling may be used for Business System Testing (TE), since additional resources may be brought in during this process.

Conduct Design and Development in Parallel

Since the primary predecessor for program construction is the detailed design document, the project plan may include Build activities in parallel with Solution Design activities. If development is accelerated in this way, some of the assumptions incorporated into earlier designs could change when later designs are developed. This requires that the earlier designs are revisited and related programs are updated or rewritten. This acceleration technique could also shorten the lead-time of Module Design and Build (MD).

Use Project Tracking

Careful attention to progress reporting, signoffs, and scope control are particularly important while managing Solution Design. Include frequent checkpoints and milestones to stay current on the status of the project.

Operations Analysis, Solution Design, and Build

Collapse the first three phases into a single super-phase. This is only suitable for small scale projects that are easy to control and that use alternative risk mitigation steps.

Execute Phases in Parallel

Solution Design and Build

Build often begins while Solution Design is in process. This technique offers economies in projects with numerous customizations, but there is a risk of non-integrated designs and scope creep.

Define a Tailored Approach — Task Consolidation/Elimination

In many cases, certain tasks are not needed for your project. Use the optional task criteria to guide you in the exercise of eliminating redundant tasks.

Warning: Make sure that you do not eliminate tasks and deliverables that will have a serious downstream impact on the project. Every task in AIM is related to another. If you remove a task, its deliverable will not be available for related subsequent tasks. Before eliminating the task, verify that the information contained in the deliverable is not required for your project.

In some cases, the size of a task or the nature of the resources required to execute a task may lead to an opportunity to consolidate the task with another. Examine the final task loading in terms of labor hours to complete the task, the resources required and the sequence of tasks. If you locate one or more additional tasks that are sequenced together, use the same resources and short in duration, you may have located a consolidation opportunity. This is different for each project.

Select a Pre-Packaged Approach

Oracle provides a number of FastForward and Point Solution pre-packaged approaches that may be suitable for the project. The FastForward pre-packaged approach uses a predefined set of tasks and pre-seeded deliverable templates. In addition, FastForward combines several tasks and deliverable components into one super task. FastForward pre-packaged approaches only fit *qualified* situations

because of the limited tasks that are performed and the stringent pre-configuration requirements.

Point Solution pre-packaged approaches provide a lower degree of pre-determination of application configuration with many of the common technical and analytic requirements provided up front. They also tend to address specific business improvement opportunities such as the enablement of strategic procurement or the implementation of an internet store. The use of a Point Solution would accelerate a specific objective as you would be utilizing a proven packaged approach to a specific requirement.

FastForward offerings tend to have broader coverage of a specific business area such as financials, human resources, or manufacturing and often are available as packages including implementation, education and support services and application program licenses.

Project Scale and Complexity

The AIM project complexity is determined by the project scope, organization factors, resources and logistics, technical factors, market factors, and the contract and project management. The degree of complexity is also a function of the number of applications being implemented, the number of customizations being built, the number of interfaces to be built, amount and integrity of data to be converted, and whether or not business process reengineering is required.

Generally, a large project scale means a more complex project. However, projects of smaller scale are also known to be challenging based on the complexity of the architecture. As project scale and complexity rise, a greater number of checkpoints should be built into the project plan to track the expanded effort and to estimate the effort required to complete the project.

General guidelines to assess project scale and complexity follow:

Factor	Smaller Scale Lower Complexity	Larger Scale Higher Complexity
Scope	Less than 250 workdays. Little or no customizations. Single site, single organization, single platform. Requirements clearly defined and well understood. Phased implementation of each application.	More than 1000 workdays. Extensive customizations. Multiple sites, multiple organizations, distributed, OLTP, mission critical. Very complex requirements; not well understood. Multiple applications going live simultaneously; very tight time schedules.
Organi-zation Factors	Realistic understanding of scope, cost, and schedule. Organization is well versed in new technology.	Unrealistic expectation of what is involved, particularly with respect to cost and schedule. Organization has little or no technical expertise and wants a hands-off approach.
Resources and Logistics	Qualified technical staff and project manager available. Organization will be providing complete development environment separate from the production system. Single site in close proximity Oracle offices.	No project manager familiar with the industry; few technical staff available. All development and testing have to be done on the production system.

Factor	Smaller Scale Lower Complexity	Larger Scale Higher Complexity
Technical Factors	Familiar with hardware platform. Standard application functionality. Average database size and transaction rates, no specific performance requirements.	Unfamiliar with hardware platform or multiple heterogeneous hardware platforms. Mostly non-standard functionality with many customized features / interfaces. Large database size, high transaction rates. Large amounts of data to convert, much of which is inaccurate or inconsistent.
Market Factors	Stable organization / market, system not critical to maintaining marketplace standing.	Dynamic market, unstable organization; implementation project critical to organization's success.
Contract and Project Manage-ment	Have worked with VAR / sub-contractor before. AIM Task plans are being used. Well-defined process / criteria for testing and signoff of deliverables. Well-defined change control process being used.	Have not worked with VAR / sub-contractor before. Organization uses its own implementation method that does not map well to AIM tasks. No testing criteria and signoff procedures for deliverables. Organization does not have effective change control.

Table 1-10 General Guidelines for Project Scale and Complexity

Project Duration

AIM projects range in project duration from one to six months for a smaller scale, lower complexity projects, and from six to eighteen months for a larger scale, higher complexity projects. Generally, if you perform optional tasks in AIM, the project takes longer than if you only perform core tasks.

Application Criticality

Enterprise Resource Planning (ERP) systems are often critical to the overall operations and success of an organization. If applications are implemented in phases, it is best to start by implementing a less critical application first, in order to learn the technology and gather experience in implementing Oracle Applications. Another successful technique is to consider implementing only one site first and adding additional sites in future phases. In some cases it may be necessary to implement all applications for all sites at the same time. However, this *big bang* approach inherently involves more risks.

Other Considerations

An enterprise in the midst of a major reengineering process represents a major risk to the overall application implementation project. An unclear business vision leads to unclear or loosely-defined business expectations for the new system. There is generally less risk when implementing only the standard features of the new system.

AIM Project Management

AIM uses Oracle's Project Management Method (PJM) to provide a framework in which projects can be planned, estimated, controlled, and tracked in a consistent manner. This consistency is required in today's business environment, where projects often implement packages, develop application extensions, and create a data warehouse in order to satisfy a business need.

There are two dimensions to PJM. The first concerns **what** work needs to be done to manage and support a project. This dimension is addressed by **processes** within PJM. The second is **when** those management and support tasks should be performed in the project life-cycle. This dimension is addressed by **life-cycle categories**.

PJM Processes

All PJM tasks are organized into five processes to help project managers understand *what* project management tasks need to be performed for a successful project. The PJM processes are:

- **Control and Reporting** — This process contains tasks that help you determine the scope and approach of the project, manage change, and control risks. It contains guides for you to control the Project Management Plan and to report progress status externally.
- **Work Management** — The Work Management process contains tasks that help you define, monitor, and direct all work performed on the project. You also maintain a financial view of the project in this process.
- **Resource Management** — This process helps you provide the project with the right level of staffing and skills, and the working environment to support the project.
- **Quality Management** — The Quality Management process directs you to implement quality measures to make sure that the project meets the organization's purpose and expectations throughout the project life-cycle.

- **Configuration Management** — This process contains tasks that help you store, organize, track, and control all items produced by and delivered to the project. The Configuration Management process also calls for you to provide a single location from which all project deliverables are released.

PJM Life-Cycle Categories

Each task within PJM is also assigned to a PJM life-cycle category. Each category is then integrated into a project plan that shows *when* the project management and support tasks should be performed. The PJM life-cycle categories are:

- **Project Planning** — Tasks in this category encompass the definition of the project with respect to scope, quality, time, and cost. Project Planning tasks also determine the appropriate organization of resources and responsibilities to conduct the project.
- **Phase Planning** — This category consists of tasks that update project plans and procedures for the phase.
- **Phase Control** — Tasks in this category execute concurrently with the phase execution, and perform project monitoring, directing, and reporting functions during the phase.
- **Phase Completion** — These tasks conclude and secure signoff of a phase.
- **Project Completion** — Tasks in this phase result in the satisfactory conclusion of the project and settlement of all outstanding issues prior to shutting down the project.

The following figure illustrates the relationship between PJM processes and life-cycle categories:

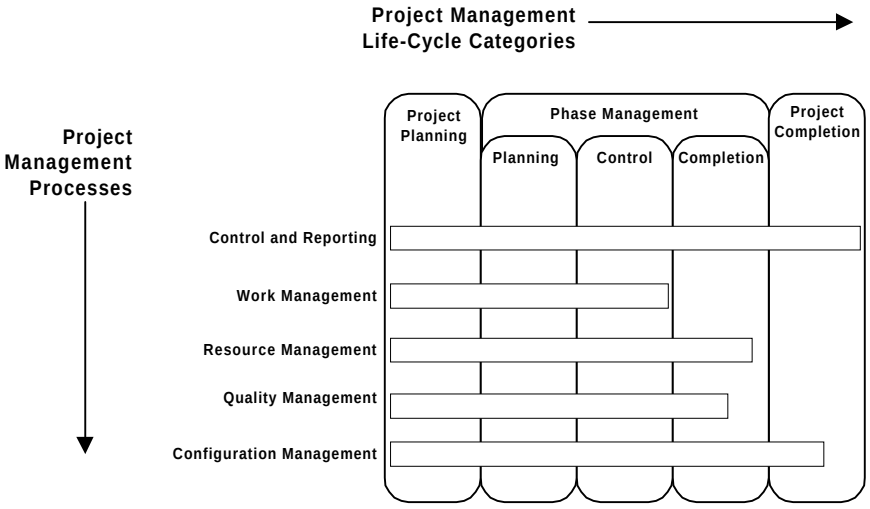

Figure 1-9 Project Management Life-Cycle

The next figure shows PJM and its relationship with AIM. PJM life-cycle categories are integrated into the project plan at the appropriate project and phase levels. Project Planning and Completion categories (former activities) are performed once at the beginning and end of a project, while Phase Planning, Control, and Completion are performed once for each phase of the project.

PJM defines dependencies so that project management tasks do not appear on the critical path. Below is a high-level representation of an integrated PJM and AIM approach:

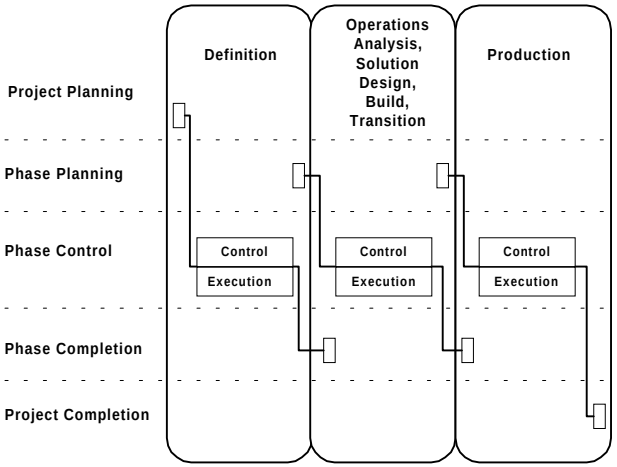

Figure 1-10 Managing an AIM Project

For more information on PJM, refer to the Oracle Method Project Management suite of reference books:

Reference: PJM *Method Handbook*.

Reference: PJM *Process and Task Reference*.

PJM Application in AIM

In order to streamline the work breakdown structure, the following Project Management Method tasks are consolidated. For guidelines on these tasks, refer to the indicated task IDs in the *PJM Process and Task Reference.*

The task **Review and Revise Project Plans (PL.SUM)** consolidates the following tasks:

CR.010: Establish Scope, Objectives and Approach [*revise*]

CR.020: Define Control and Reporting Strategies, Standards, and Procedures [*revise*]

CR.030: Establish Management Plans [*revise*]

WM.010: Define Work Management Strategies, Standards, and Procedures [*revise*]

WM.020: Establish Workplan [*revise*]

WM.030: Establish Finance Plan [*revise*]

RM.010: Define Resource Management Strategies, Standards, and Procedures [*revise*]

RM.020: Establish Staffing and Organization Plan [*revise*]

RM.025: Create Project Orientation Guide [*revise*]

RM.030: Implement Organization [*revise*]

RM.040: Establish Physical Resource Plan [*revise*]

RM.050: Establish Infrastructure [*revise*]

QM.010: Define Quality Management Strategies, Standards, and Procedures [*revise*]

CM.010: Define Configuration Management Strategies, Standards, and Procedures [*revise*]

The task **Phase Control (CT.SUM)** consolidates the following tasks:

CR.040: Issue/Risk Management

CR.050: Problem Management

CR.060: Change Control

CR.070: Status Monitoring and Reporting

WM.040: Workplan Control

WM.050: Financial Control

RM.060: Staff Control

RM.070: Physical Resource Control

QM.020: Quality Review

QM.030: Quality Audit

QM.040: Quality Measurement

QM.045: Support Healthcheck

CM.020: Document Control

CM.030: Configuration Control

CM.035: Knowledge Management

CM.040: Release Management

CM.050: Configuration Status Accounting

Method Tailoring

The Project Management deliverable templates provided and aligned with AIM are part of Oracle's overall Project Management Method (PJM). In many cases, project teams may have multiple project management approaches from which to choose. For example, the enterprise implementing the Oracle Applications may have an approach or a third-party application implementation partner may have their own as well.

Oracle suggests that the project manager review the project management approaches available and select those components that are most appropriate for the project. By reviewing the project workplan template provided, project managers will be able to quickly see how Oracle's PJM is integrated into the work effort.

Project Managers should also be aware of the subtle differences between the stand-alone version of Oracle's PJM and the integrated version of PJM with AIM. Because Oracle integrates PJM with other method offerings, such as Oracle's Custom Development Method (CDM), some of the templates have been modified to contain more of an application implementation focus. The differences manifested in AIM can best be observed in the deliverable template, Project Management Plan (PJM.CR.010) created with the PJM task, Establish Scope, Objectives, and Approach. This deliverable template is also used as the starting point for the Establish Management Plans (PJM.CR.030) task.

Multiple Deployment Site/Multi-Phase Considerations

Determine if the transition into production needs to occur for all organizations at the same time. If a phased implementation is planned, decide what applications are to be implemented in each phase. This combination of choices presents four scenarios:

- Deploy all applications for all organizations at the same time.
- Deploy all applications for different organizations at different times.
- Deploy subsets of the applications for all organizations at the same time.
- Deploy subsets of the applications for different organizations at different times.

Consider the following factors when deciding on a single-phase or multiple-phase deployment:

- Is the organization facing changes from other sectors? Allow time for an organization to absorb major changes before introducing new factors.
- Is the organizational culture amenable to integrating the new system into its operations? The risk is less if the organization is accustomed to using a common system with related policies and procedures. If business units have been operating independently, the organization must adapt to a cultural change, as well as to the new system.
- Can the project team adequately execute the project so that there is minimal risk in implementing all applications for all organizations at one time?
- Can two or more organizations all fit (from a sizing point of view) on the same servers?
- What is the company's experience with previous system implementations?
- What is the project team's experience with previous system implementations?
- Is the application a production that is controlled, or is it a beta release of the software?

To minimize risk, use the pilot implementation technique. Go live with a carefully selected subset of users who are well trained and able to deal with initial problems. Initial success at a pilot site often sets an attitude of success that carries over to the remaining sites.

Develop an interface between applications and the existing system so that transactions may be processed between both systems. This allows the remainder of the organization to use the current system in parallel with the pilot implementation. For example, journal entries could post to the new General Ledger, as well as to the existing General Ledger. This allows consolidated reporting from the current system until all regions are cut over.

Along with risk reduction, phased deployment adds complexity and cost to the project:

- The project duration is lengthened requiring the project team to remain intact for a longer period of time.
- The phase overlaps can create peak resource loading problems. You may be starting a new deployment at the end of a previous one. Production migration needs, startup demands, and support requirements are occurring in parallel.
- Peaks in computer resource utilization may occur during phase overlaps due to multiple application database instances being needed for training, data conversion, and production for the deployment just ending, as well as start up tasks for the next deployment.

AIM and User Methods

Sometimes an organization prefers to use its own supporting methods with AIM. AIM is adaptable and can be used in conjunction with a user's own supporting methods.

Most methods share certain common characteristics. For example, most methods break down a project into phases, processes, and tasks. From this perspective, it is possible to analyze the two methods and align (map) the similarities and differences at the phase, process, and task levels — this is referred to as *method interlock*.

With AIM's new core versus optional feature it is easy to identify all tasks that must be performed by an organization, regardless of whether they are using AIM alone or using AIM with a user method.

AIM Project Estimating

The preliminary application implementation project estimate is based on:

- What is the business objective?
- What is the vision for the project?
- How do Oracle Applications contribute to the vision?
- What is the scope of the project and how does it relate to the overall vision?
- Who will participate in the project (employees, consultants, or vendors)?
- What are the constraints affecting the project (timing, budget limitations, or organization changes)?
- Which applications will be implemented?
- Which sites will be involved?
- Will a phased-deployment be employed? If so, in what sequence will the applications be implemented?
- When will work commence?
- What experience does the organization have regarding the technology that will be used?

Before creating a detailed work plan, develop the project scope, suggested approach, and preliminary budget. Use an iterative process where different project scenarios are defined at a summary level and then estimated.

Generally accepted industry practices include using experience and results from similar projects to develop estimates for the different scenarios.

The final budget should be developed using a detailed bottom-up estimating process based on the detailed work plan. This project plan should include:

- Task Listing
- Resource Assignments

- Dependencies
- Deliverables

AIM includes a project workplan template in ABT Project Workbench and Microsoft Project. This template provides a starting point for developing the detailed work breakdown structure and contains all the AIM tasks with associated role type resource assignments, dependencies, and deliverable names.

When estimating an Oracle Application implementation project, the following six steps should be taken:

1. Determine optional tasks to include in your project.
2. Change the role type resource assignments to the physical resources that will be employed on the project.
3. Read the AIM Process and Task Reference and use your organization's guidelines to determine the task level estimates, making sure you adjust your estimates based on the skill levels of the project resources.
4. Allocate reasonable contingency for unforeseen issues that will occur.
5. Review your workplan with project stakeholders and modify it as required.
6. Obtain approval for your project workplan.

Use the approved workplan to baseline the project, then use it to track the progress of the work on a day-to-day basis.

CHAPTER

2 Definition

This chapter describes the Definition phase of AIM. The goal of the Definition phase is to determine the high-level business and information system requirements necessary to meet a set of defined business objectives. The Definition phase results in a clear definition of a project's functional scope.

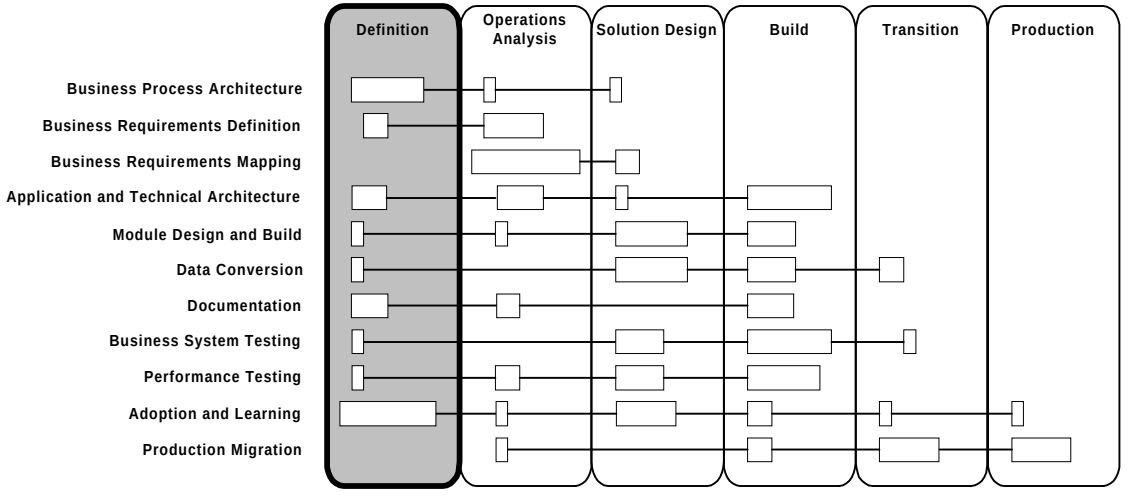

Figure 2-1 Context of AIM Definition Phase

Overview

This section provides an overview of the Definition phase.

Objectives

The objectives of the Definition phase follow:

- Obtain a clear understanding of the business processes, functions, and information required to meet the project's defined business objectives.
- Identify unifying vision and business objectives.
- Verify senior executives' buy-in to the project.
- Create a leadership pattern across the organization.
- Initiate a sponsorship network.
- Facilitate crucial informed project startup decisions.
- Design an effective infrastructure for delegation.
- Build consensus around project direction.
- Review the organization's existing processes and align them with the capabilities of the relevant Oracle Applications modules and other software.
- Develop the Preliminary Conceptual Architecture (TA.030).
- Determine the high-level architectural, technological, and configuration requirements to support the functional and information needs of the application system.
- Define the project scope clearly.
- Examine the existing business processes and information systems affected by the project's defined business objectives.
- Design improved high-level business processes.
- Obtain management approval to proceed with Operations Analysis.

Critical Success Factors

The critical success factors of the Definition phase are as follows:

- sponsorship of senior management that is clear and visible to the project stakeholders
- clear definition of the business objectives
- active participation by key management and knowledgeable users and technical representatives from the areas of the business affected by the project's objectives
- access to information related to the existing business processes and systems affected by the project

Prerequisites

Prerequisites for the Definition phase follow. You should use these prerequisites, if they exist, prior to beginning the project. Otherwise, you need to create them during this phase. Some of the prerequisites identified below are also deliverables produced within this phase. The reason they are included in this section is because they are used as input to other tasks within this phase.

Prerequisite	Source
Organizational Chart	Organization
Enterprise and BPR Strategy Studies (if available)	Organization
Existing Process Data	Organization
Tender Documents	Organization
Existing Reference Material	Organization
Architecture Designs and Technical Documents from Application Acquisition Process	Organization

Prerequisite	Source
Existing System Architecture or Technical Configuration Documents	Organization
Existing System Management Procedures Documents	Organization
Existing Systems Testing Strategy or Policy Documents	Organization
Existing Business Documentation Standards	Organization
Contractual and Business Agreement	Organization and Oracle
Current Business Reports	Organization and Oracle
Return on Investment (ROI) Analysis	Oracle
Project Management Plan	Project Management (PJM)
Control and Reporting Strategies, Standards, and Procedures	Project Management (PJM)
Work Management Strategies, Standards, and Procedures	Project Management (PJM)
Project Progress Report	Project Management (PJM)
Project Orientation Guide	Project Management (PJM)
Physical Resource Plan	Project Management (PJM)
Prepared Infrastructure	Project Management (PJM)
Quality Management Strategies, Standards, and Procedures	Project Management (PJM)
Business and Process Strategy	Business Process Architecture
Current Process Model	Business Process Architecture

Prerequisite	Source
Leading Practices Review	Business Process Architecture
High-Level Process Vision	Business Process Architecture
High-Level Process Designs	Business Process Architecture
Current Financial and Operating Structure	Business Requirements Definition
Current Business Baseline	Business Requirements Definition
Architecture Requirements and Strategy	Application and Technical Architecture
Preliminary Conceptual Architecture	Application and Technical Architecture
Application Extension Strategy	Module Design and Build
Data Conversion Requirements and Strategy	Data Conversion
Documentation Requirements and Strategy	Documentation
Testing Requirements and Strategy	Business System Testing
Performance Testing Strategy	Performance Testing
Executive Project Strategy	Adoption and Learning
Oriented Project Team	Adoption and Learning
Project Team Learning Plan	Adoption and Learning
Project Team Learning Environment	Adoption and Learning
Skilled Project Team	Adoption and Learning

Prerequisite	Source
Business Unit Managers' Readiness Plan	Adoption and Learning
Project Readiness Roadmap	Adoption and Learning

Table 2-1 Definition Phase Prerequisites

Processes

The processes used in this phase follow:

Business Process Architecture (BP)

Define a strategy for changing the organization's business processes and align them with the system to be implemented. Determine potential changes to the application and to the organization's processes. Review leading practices and relevant processes material to create a high-level vision of the future, including High-Level Process Designs (BP.070).

Business Requirements Definition (RD)

Gain a complete baseline understanding of current events and business processes.

Application and Technical Architecture (TA)

Identify the requirements that influence the architecture and define the strategy for satisfying those requirements. Create an initial integrated conceptual model of the application and technical architecture.

Module Design and Build (MD)

Define a strategy for extending and customizing the applications and developing custom interface software.

Data Conversion (CV)

Identify the data conversion requirements and define the strategy for converting the legacy data.

Documentation (DO)

Define a glossary of terms for the project. Specify the documentation requirements and determine the documentation standards and procedures.

Business System Testing (TE)

Define a Testing Requirements and Strategy (TE.010) that encompasses all tasks in the testing process. Include an overview of the testing approach, the type of test scripts to be developed, the testing to be performed, a schedule of testing resources and responsibilities, the testing tools and environments required, and a discussion of the problem management process.

Performance Testing (PT)

Define the strategy for the performance testing process, including testing scope, objectives, measurements to make, testing methods, and testing tools.

Adoption and Learning (AP)

Define the high-level project strategy and expectations at the executive level. Conduct the initial project team orientation. Develop the learning plan, prepare the learning environment, and conduct the learning events for the project team. Initiate a change leadership model and define business performance improvement strategy with business unit managers. Assess the organization's readiness for the project and develop a readiness roadmap. Plan and initiate the Communication Campaign (AP.080) for the project.

Key Deliverables

The key deliverables of this phase are as follows:

Deliverable	Description
High-Level Process Designs	A generic process design, relevant process descriptions, and generic technology design.
Current Business Baseline	An analysis of the current business processes and functions.
Preliminary Conceptual Architecture	Documents the conceptual architecture designs for the new system. It may contain several designs, if there is more than one possible conceptual architecture, but also indicates the conceptual architecture model that is preferred. If there is only one possible conceptual architecture model, it only describes one model.
Skilled Project Team	All members of the team who have participated in the learning events intended to give them the knowledge and skills they need to perform their roles on the team.
Project Readiness Roadmap	A plan for addressing the human and organizational factors that impact the success of the implementation. It includes a readiness strategy, implementation decisions, a communication strategy, and a learning strategy for users.

Deliverable	Description
Communication Campaign	Description and planning of two-way communication events, organized by audiences, to promote shared understanding and feedback for acceptance and support from targeted stakeholders.

Table 2-2 Definition Phase Key Deliverables

Attention: Key deliverables represent the culmination, end result, or major milestone of activities performed during a phase. They should not be confused with deliverables produced by core tasks. Core tasks produce the minimum set of deliverables needed for every project; key deliverables represent the end result and define the end of each phase. However, not every key deliverable is required for every project. For example, a Preliminary Conceptual Architecture (TA.030) may be prepared only when a project is of *medium or high complexity* or includes *complex architecture changes*.

Approach

This section describes the approach for the Definition phase.

Tasks and Deliverables

The table below lists the tasks executed and the deliverables produced during Definition.

ID	Task	Deliverable	Type*
Business Process Architecture			
BP.010	Define Business and Process Strategy	Business and Process Strategy	SI
BP.020	Catalog and Analyze Potential Changes	Change Catalog	SI
BP.030	Determine Data Gathering Requirements	Data Gathering Requirements	SI
BP.040	Develop Current Process Model	Current Process Model	MI
BP.050	Review Leading Practices	Leading Practices Review	MI
BP.060	Develop High-Level Process Vision	High-Level Process Vision	SI
BP.070	Develop High-Level Process Designs	High-Level Process Designs	MI
Business Requirements Definition			
RD.010	Identify Current Financial and Operating Structure	Current Financial and Operating Structure	SI
RD.020	Conduct Current Business Baseline	Current Business Baseline	MI
Application and Technical Architecture			
TA.010	Define Architecture Requirements and Strategy	Architecture Requirements and Strategy	SI
TA.020	Identify Current Technical Architecture	Current Technical Architecture Baseline	SI
TA.030	Develop Preliminary Conceptual Architecture	Preliminary Conceptual Architecture	IT
Module Design and Build			
MD.010	Define Application Extension Strategy	Application Extension Strategy	SI
Data Conversion			
CV.010	Define Data Conversion Requirements and Strategy	Data Conversion Requirements and Strategy	SI

ID	Task	Deliverable	Type*
Documentation			
DO.010	Define Documentation Requirements and Strategy	Documentation Requirements and Strategy	SI
DO.020	Define Documentation Standards and Procedures	Documentation Standards and Procedures	SI
DO.030	Prepare Glossary	Glossary	SI
Business System Testing			
TE.010	Define Testing Requirements and Strategy	Testing Requirements and Strategy	SI
Performance Testing			
PT.010	Define Performance Testing Strategy	Performance Testing Strategy	SI
Adoption and Learning			
AP.010	Define Executive Project Strategy	Executive Project Strategy	SI
AP.020	Conduct Initial Project Team Orientation	Oriented Project Team	SI
AP.030	Develop Project Team Learning Plan	Project Team Learning Plan	SI
AP.040	Prepare Project Team Learning Environment	Project Team Learning Environment	SI
AP.050	Conduct Project Team Learning Events	Skilled Project Team	MI
AP.060	Develop Business Unit Managers' Readiness Plan	Business Unit Managers' Readiness Plan	SI
AP.070	Develop Project Readiness Roadmap	Project Readiness Roadmap	SI
AP.080	Develop and Execute Communication Campaign	Communication Campaign	SI

*Type: SI=singly instantiated, MI=multiply instantiated, MO=multiply occurring, IT=iterated, O=ongoing. See Glossary.

Table 2-3 Definition Phase Tasks and Deliverables

Core Task Dependencies

The diagram below shows the dependencies between core tasks in Definition.

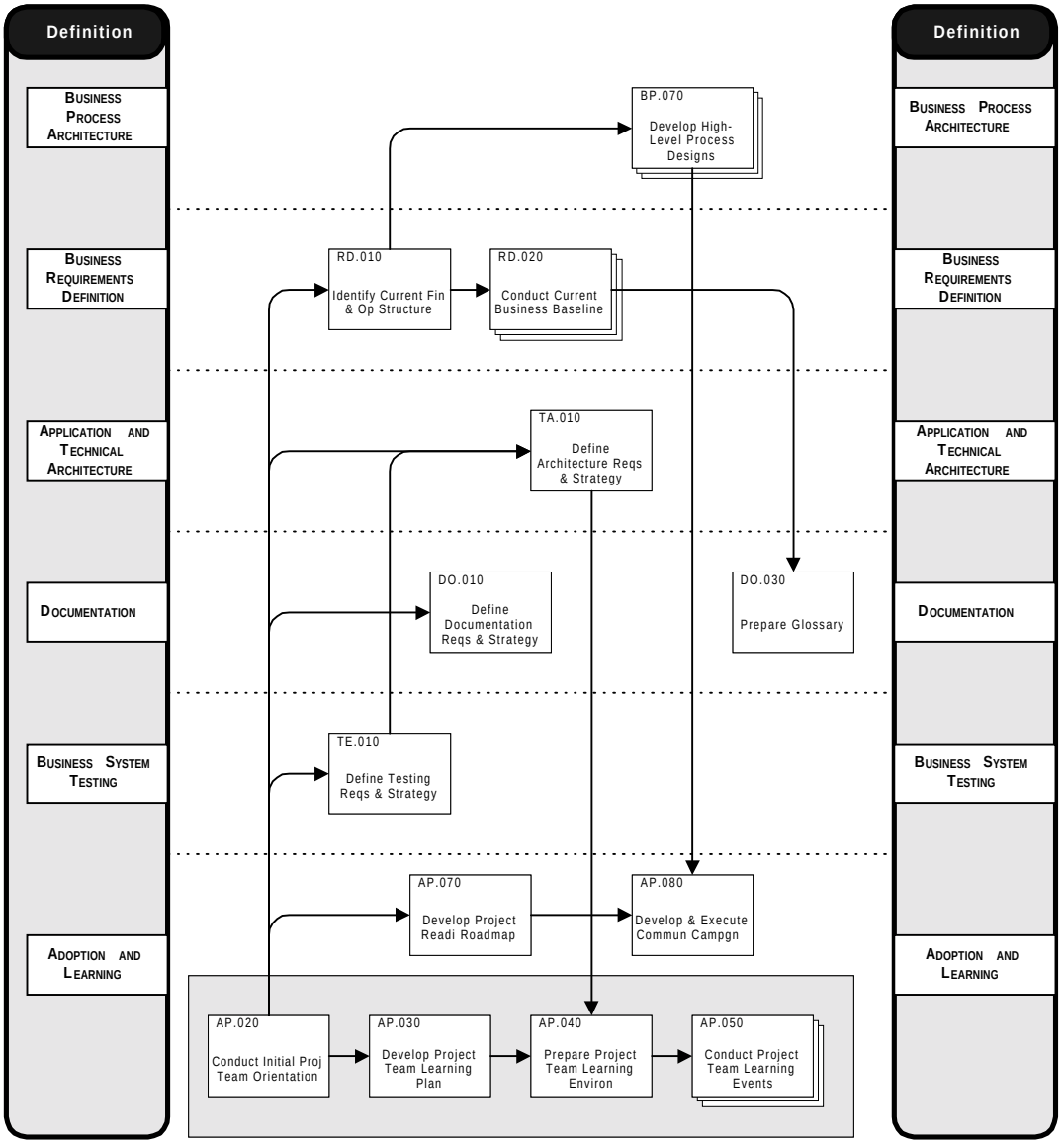

Figure 2-2 Definition Phase Core Task Dependencies

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Core and Optional Task Dependencies

The diagram below shows the dependencies between core and optional tasks in Definition.

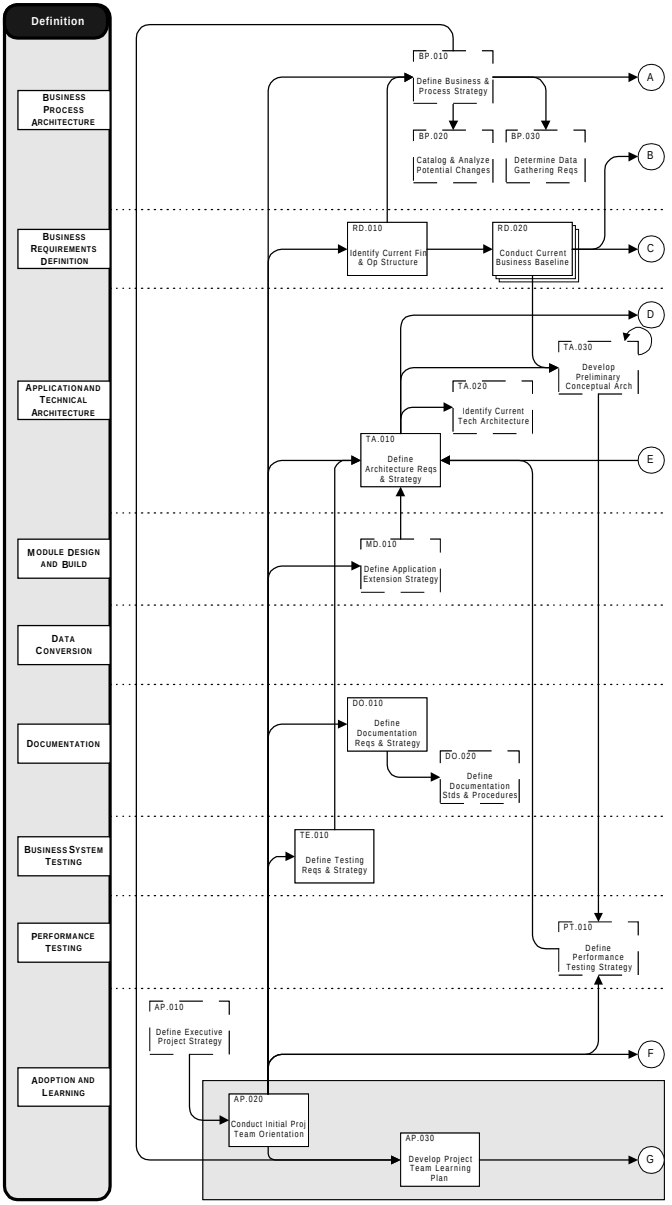

Figure 2-3 Definition Phase Core and Optional Task Dependencies

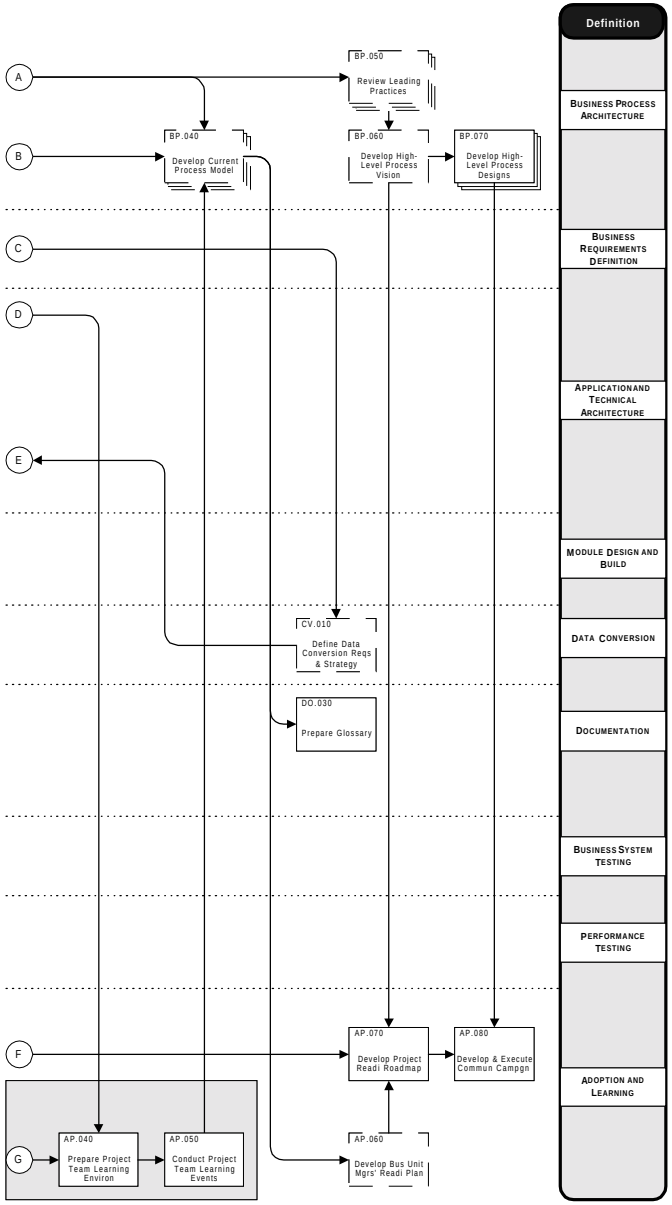

Figure 2-3 Definition Phase Core and Optional Task Dependencies (cont.)

Risk Management

Business Vision

The imperative for change must be clearly defined and understood by the organization as a whole. Belief in the purpose of the project is key to a successful implementation. Building a strong business case for the implementation is crucial for obtaining senior executive support and involvement, which in turn will foster commitment from all levels of the organization.

Risk	Mitigation
Management, users, or project team not committed to the magnitude of change.	Build the case for the change and complete a thorough impact analysis. Involve representatives of all stakeholder groups in the development of strategies to manage the impact. Define clearly stated objectives for the change and instill scope management procedures. Convince those representatives of the need for the change and use them as communication agents among their constituencies.
Organization's business strategy or the objectives of each relevant business process are not sufficiently well understood.	Confirm the organization's business strategy. If necessary, run workshops to document and analyze the organization's business processes.

Communication

Communication must remain a focus across the entire project and throughout the entire project organization from the steering committee to the user. Effective communication enables sharing of the business imperatives driving the change, a clear definition of the objectives, and the performance measures used to measure progress.

Risk	Mitigation
Unclear expectations.	Take the time to define clear objectives and performance measures, and attach a timeline for realization of benefits. Communicate regularly to manage expectations.
Lack of involvement or sign-off by senior management of key architecture strategies, plans, and issue resolutions.	Communicate conceptual architectures to senior management and organize a review (as appropriate).

Integration Management

Focus on integration issues between teams, business processes, organizations, and applications and identify and resolve integration issues through communication and definition of standards and procedures. Examples of areas that would include integration management are:

- business processes design
- systems testing strategies
- integration between functional and technical teams
- interfaces between Oracle Applications and third-party or legacy systems
- data cleanup and conversion strategies

Risk	Mitigation
Treatment of the architecture as a purely technical pursuit and inadequate consideration of business requirements as drivers for architecture (bottom-up approach).	Consider business requirements and functional mapping as well as technical requirements as drivers for the optimal configuration and deployment of the applications being implemented.
Insufficient data gathered on volumes and processing windows.	Have both functional and information processing management review and agree upon volume and processing windows.

Planning

Planning is critical for maintaining project focus and direction. Initially the overall project plan is developed and the implementation strategy defined. As each phase progresses, subsequent phases are planned in detail. Plans include the people, tools, strategies, and procedures for accomplishing the objectives of the phase.

Risk	Mitigation
Conversion requirements and strategy are not clearly defined, documented, or understood.	Address the conversion requirements and strategy early in the project life-cycle. Encourage stakeholders to develop the conversion strategy during the Definition phase.
Customization options, and the impact of each on future system maintenance costs, are not well understood by management or the project team.	Review various options for extending the functionality of the Applications, and the associated impacts on maintenance costs, with management and the project team during Definition. Develop an Application Extension Strategy (MD.010) that clearly defines management's customization guidelines and communicate it to the entire team.

Project Organization/Leadership

The executive leadership of the organization must actively and visibly support the implementation effort. One of the most crucial forms of support is the willingness to commit people who understand the organization and are leaders in their area of business to the project. Commitment of appropriate staff is just as important as commitment of funding. The project organization and staffing greatly determine the success of the project.

Risk	Mitigation
Lack of sponsorship for the project	Develop a sponsorship network for the project that is adapted to the organization's culture. Agree on the behaviors expected of sponsors at all levels.
The tendency to preserve old processes and not develop new ones.	Select key area team leaders who support the need for change, can facilitate change in their areas, and are knowledgeable about their areas and processes.
Knowledgeable user representatives are not available for workshops, meetings, and interviews, and are not involved in current and future process definition.	Agree on a list of suitable user representatives with appropriate management. Arrange a timetable of firm commitments and obtain management agreement. Assign a project sponsor role to a leader from the user community who can promote a high level of commitment from key users and will nurture support for project team members as they work outside their normal jobs and duties.
Incomplete definition of scope for the architecture work.	Create a project organization that enables input and consideration of business, functional, and technical requirements in architecture.

Quality Assurance

Quality assurance focuses on providing the infrastructure to support development of the key deliverables for the project. Producing high quality deliverables within the time and budget constraints of the project plan is key to reducing overall risk to the implementation. Areas of quality assurance include:

- adherence to the method
- establishing quality standards in the early planning process
- review of key deliverables
- establishing acceptance and signoff procedures

Risk	Mitigation
Imprecise definition of scope and objectives for performance testing, leading to false conclusions.	Verify that the scope and objectives for performance testing are made clear by senior management, and that they understand what performance testing can and cannot achieve or predict.
Lack of a structured method for performance testing, leading to measurements that are difficult to interpret relative to the target production system.	Use a structured method for performance testing to verify that the test results can be interpreted in the context of their meaning for the real production system.
Documentation standards and procedures poorly defined or incomplete.	Require documentation standards and procedures input and approval from key areas within the organization who will be using the final documentation.

Training Performance and Support

The skills required for a successful implementation must be considered and the project should be staffed with resources who have these skills to the extent possible. Training and performance support involves providing the learning events and information necessary to bring the knowledge and skills required for the project to the project team initially and to the entire organization as the project progresses. This

may occur through formal learning events (application training) or through information dissemination (leading practices information).

The main focus is the new business processes and the Oracle Applications functionality that supports the new processes, but also included are other learning and performance support needs of both the project team and the user population for successfully implementing and transitioning to the new system.

Risk	Mitigation
Project team is not sufficiently aware of leading practices.	Raise awareness of the best uses of Oracle technologies, through the Oracle Business Models (OBM) program.
Project team not adequately skilled in process modeling techniques.	Conduct process modeling sessions for team members; have them demonstrate required skills with a qualified instructor.
Lack of project team expertise in application deployment strategies or advanced technical architecture.	Screen project team candidates for prerequisite skills and experience. Provide training corresponding to the full extent of the need.

Tips and Techniques

This section discusses the primary techniques that may be helpful in conducting the Definition phase. It also includes advice and commentary on each process.

Business Process Architecture (BP)

If business process improvement is within the scope of the project, then the initial tasks in the Business Process Architecture process usually start early in the project, as they provide needed information about the organization's business strategy and business processes. During these early stages of the project, you work closely with executive management, either through workshops or through interviews. You identify potential modifications, either to the organization's processes or to the system to be implemented, and these are documented in a Change Catalog (BP.020) to be maintained until the end of this phase is

reached and all relevant decisions on the organization's high-level processes have been finalized. You review leading practices for the organization's industry and for the business processes covered by the project. These help the project team to develop a vision of the future in a series of workshops.

In workshops and design sessions, the project team works with the organization to create High-Level Process Designs (BP.070). These designs can be created using the process templates provided by Oracle Business Models.

Business Requirements Definition (RD)

Business Requirements Definition begins in Definition with the task of defining how the operating and financial structure of the business entity affects application and technical architecture definition and set up. Next, you construct the current business baseline in order to understand the events to which existing business processes currently respond.

Application and Technical Architecture (TA)

Architecture work performed during Definition complements Business Requirements Definition (RD) and helps to provide the technical framework for subsequent phases of the project. Substantive work on architecture needs to occur relatively early in an implementation project because it underpins the technical environment of all other project activities. At the completion of this phase, the architecture team should have defined the critical architecture requirements and strategy and should have as much information as needed about the existing technical architecture. They should also have identified a preferred conceptual architecture that incorporates the new systems being implemented.

The architecture team defines the scope of the project architecture work in this process. Issues and scope vary from project to project, so it is important to set detailed parameters for the work early in the project. An important part of the scope is to establish to what extent the project is defining the architecture and information systems strategy for the evolving business. If the project is replacing a subset of the existing systems, the architecture of the newly implemented systems needs to be consistent with the existing systems architecture and the information systems strategy for the business. If, however, the project is replacing most or all of the major existing systems in the business, the architecture of the newly implemented systems assumes an added importance in helping to define the future information systems strategy.

The existing technical architecture of a business may or may not be important for the implementation of a new system, depending on the scope of the implementation. If the existing legacy systems are to be completely or largely replaced and/or the project is a rapid implementation, gathering information about the existing systems may not be necessary. Conversely, an implementation that reuses the existing business technical infrastructure, or integrates with preserved existing systems, may require additional work to understand the technical components of the existing systems.

The system architect works closely with the information systems staff and business analysts to understand the business and technical requirements and define the high-level architecture. The Preliminary Conceptual Architecture (TA.030) forms the basis of the architecture working model for the project and covers both application and technical architecture. The Preliminary Conceptual Architecture should be in a format that both non-technical project managers and sponsors can understand. If there are multiple architectural options, this deliverable should present the options and their tradeoffs, and the review of the Preliminary Conceptual Architecture should include a decision regarding which option to use as a working architecture model.

In simple implementations with few architecture issues, you do not need to create a distinct conceptual architecture document and can simply incorporate the key decisions in the Architecture Requirements and Strategy (TA.010).

Module Design and Build (MD)

A worthwhile goal of any implementation is to use the Applications as they were designed; in other words, without customization. However, most projects include custom development, even if it is limited to interfaces and custom reports. Descriptive flexfields and alerts are also customizations, even though you can implement them without traditional coding.

The Application Extension Strategy (MD.010) outlines the customization philosophy, such as minimizing customization as much as possible. It also describes the development tools developers will use for each type of module.

An important part of the strategy is how much overlap is acceptable between phases. For example, some of the functional teams may complete their mapping earlier than others. Should designers begin writing design documents for required application extensions before other teams have completed their mapping? After the team approves

some design documents, should developers begin building custom modules before other designs are completed? Allowing some overlap can speed up the implementation; however, it increases the risk of rework since approaches arrived at later may affect earlier decisions.

Data Conversion (CV)

Definition provides the organization with a deliverable that defines the Data Conversion Requirements and Strategy (CV.010) for the project. After the organization's conversion requirements (both programmatic and manual conversion requirements) are defined, the strategy for the conversion effort can be prepared. If it is feasible to employ automated conversion tools, this information should be addressed in the strategy discussions of the deliverable. This strategy should provide a complete solution for meeting the organization's conversion requirements.

Documentation (DO)

The documentation process addresses the user, technical, and client staff needs regarding documentation requirements, standards, and procedures. Designate a key resource from each area as part of the committee that specifies documentation requirements, standards, and procedures. The documentation strategy should identify all sources of information required by the documentation team, as well as roles and responsibilities for reviewing the deliverables. After analyzing this information you should be able to determine your documentation strategy.

The Glossary (DO.030) documents the vocabulary of a project and should include unfamiliar or confusing terms. The business community, information systems department, and project team should participate in the selection of words for the Glossary and reach agreement on the definitions. The Glossary often includes terms that describe the new system functionality, or words whose meanings are changing from the old to the new system.

Business System Testing (TE)

During the Business System Testing process the testing requirements and strategies are developed. This is the time to review your testing requirements and consider the scope, objectives, and approach for testing customizations and interfaces.

The Testing Requirements and Strategy (TE.010) describes the high-level direction and guidelines for testing all components of the application system. This includes outlining the overall approach to the testing

process, coordinating the development and execution of test scripts, scheduling adequate and appropriate testing resources, configuring testing environments and tools, and problem management. The Testing Requirements and Strategy is a working document that can be referenced throughout all tasks in the Business System Testing process.

Performance Testing (PT)

The Performance Testing Strategy (PT.010) defines the high-level scope for this process, the requirements for testing, and the main tools and techniques that are to be used. You also document the complexity of the test and any specialized resources needed to perform the work.

Decide whether to use automated testing tools. Some automated load testing tools can provide the means to simulate complex processing environments with many simultaneous online transactions. However, these tools are generally costly and require special expertise and training. If this process will not employ an automated tool, then the team has to devise other methods for conducting the test.

The timing of when to initiate a performance test depends on the precise scope and goals of the project. If the test objective is to provide metrics to support architectural decisions (for example, the capacity needed for a database or applications server, or the performance viability of a multi-tiered hardware configuration), the test should be conducted early in the implementation project. If the test objective is to validate that the selected technical configuration supports the business processes throughout the project, then it may occur in the middle of a project. At the very end of a project, Performance Testing may help to tune the system. The same test programs can be reused throughout the project life-cycle.

Performance Testing usually requires a controlled test environment that may mean isolating the test from other project work, on separate test machines. This may also be advisable from the standpoint that a performance test may put an undue load on servers and networks and could severely impact other project processes in shared environments. During Definition, plan the test environment and identify hardware that is available to the test team. Ideally, the technical hardware and software environment should be identical to the production environment, but this may not be possible depending on project circumstances. If it is not, you should try to minimize the differences and establish the impact on the test results. If the test requires a volume test database, you also need to plan for significant disk capacity.

Adoption and Learning (AP)

In this phase, the activities targeted for executives consist of consulting and facilitated work sessions. These assist executives in effectively developing strategies for the successful execution of the organization-wide implementation and the management of implementation risks. The tasks include a well-planned sponsorship program and the formulation of realistic performance expectations for the implementation.

Other activities are intended to quickly orient the team to the project. The goal of these activities is to help the implementation team become a high-performance working group from the onset, reducing startup time and costs and establishing appropriate project management practices. Special attention is given to specify clear project and performance criteria against which the project and project team members are measured. At this time, the project team is introduced to key application features. Team members must have a good understanding of system capabilities, and these activities prepare them for mapping tasks.

As you prepare for these activities, collect insights from key stakeholders and administer a readiness survey to assess the organization's ability to embark on this project. As a result of the findings, you co-develop, with key stakeholders, the recommendations for strategies around organizational readiness, communication and learning requirements for users. Finally, in light of the findings and the communication strategy, initiate a Communication Campaign (AP.080) to involve stakeholders from the onset, by communicating the vision for the project, its importance, and how it ties to the corporate strategy.

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The table below indicates the typical percentage of effort required by each task by role.

Definition		Phase Effort	Adult Learning Specialist	Application Specialist	Assessment Specialist	Business Analyst	Business Line Manager
ID	Task	%	ALS	AS	ASSP	BA	BLM
Business Process Improvement	*24%*						
A.BP.010	Define Business and Process Strategy	0%				80	0
A.BP.020	Catalog and Analyze Potential Changes	0%		40		60	
A.BP.030	Determine Data Gathering Requirements	0%				100	
A.BP.040	Develop Current Process Model	0%				100	0
A.BP.050	Review Leading Practices	0%		20		40	0
A.BP.060	Develop High-Level Process Vision	0%				70	0
A.BP.070	Develop High-Level Process Designs	24%					0
Business Requirements Definition	*3%*						
A.RD.010	Identify Current Financial and Operating Structure	1%				100	0
A.RD.020	Conduct Current Business Baseline	2%		0		100	0
Application and Technical Architecture	*13%*						
A.TA.010	Define Architecture Requirements and Strategy	3%				10	
A.TA.020	Identify Current Technical Architecture	2%				20	
A.TA.030	Develop Preliminary Conceptual Architecture	8%				20	
Module Design and Build	*1%*						
A.MD.010	Define Application Extension Strategy	1%				25	
Data Conversion	*2%*						
A.CV.010	Define Data Conversion Requirements and Strategy	2%		30			
Documentation	*1%*						
A.DO.010	Define Documentation Requirements and Strategy	1%				30	0
A.DO.020	Define Documentation Standards and Procedures	0%					0
A.DO.030	Prepare Glossary	0%				15	
Business System Testing	*0%*						
A.TE.010	Define Testing Requirements and Strategy	0%				30	
Performance Testing	*0%*						
A.PT.010	Define Performance Testing Strategy	0%					
Adoption and Learning	*27%*						
A.AP.010	Define Executive Project Strategy	0%		5		25	
A.AP.020	Conduct Initial Project Team Orientation	8%		20		15	
A.AP.020	Conduct Initial Project Team Orientation			0			
A.AP.030	Develop Project Team Learning Plan	2%					
A.AP.030	Develop Project Team Learning Plan						
A.AP.040	Prepare Project Team Learning Environment	3%		20			
A.AP.050	Conduct Project Team Learning Events	5%					
A.AP.050	Conduct Project Team Learning Events						
A.AP.060	Develop Business Unit Managers' Readiness Plan	0%				20	0
A.AP.070	Develop Project Readiness Roadmap	4%					0
A.AP.070	Develop Project Readiness Roadmap		20		45		0
A.AP.080	Develop and Execute Communication Campaign	4%					
A.AP.080	Develop and Execute Communication Campaign						
Project Management	*30%*						
PJM	Manage Phase	25%					
CONT	Contingency	5%					
	100%						

- FastForward Task
- Core Tasks
- Optional Component of a Task
- Role % Adjusted for FastForward

Table 2-4 Definition Phase Estimating

Client Executive	Client Project Manager	Client Staff Member	Communication Specialist	Config Mgmt Specialist	Database Administrator	Database Designer	Developer	Facilitator	Human Performance Technologist	IS Manager	Key User	Network Administrator	Org Dev Specialist	Process Modeler	Project Manager	Project Sponsor	Project Support Specialist	Quality Auditor	Quality Manager	Steering Committee Member	Subject Matter Specialist	System Administrator	System Architect	Technical Analyst	Technical Writer	Tester	Tool Specialist	Trainer	User	Unassigned (Client Tasks)	Task Summary
CE	CPM	CSM	CS	CMS	DBA	DD	DV	FC	HSP	ISM	KU	NA	ODS	PMD	PM	PS	PSS	QA	QM	SCM	SMS	SAD	SA	TAN	TW	TS	TLS	TR	US	UNAS	
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		0	30												5					0											100
		0													100	0															100
		0	100												0																100

Table 2-4 Definition Phase Estimating (cont.)

Scheduling Suggestions

During Definition, you define strategies for many different aspects of the project. Although the project plan defines specific dependencies between the strategy tasks, there is a significant amount of communication between the teams developing the strategies; therefore, much of the work can occur in parallel.

Organize the project team along major business processes and use the instantiation technique to establish separate Business Requirements Definition (RD) tasks for each process and schedule them to be executed in parallel. If you plan to overlap project phases, you can schedule each process stream to continue into Operations Analysis.

Scheduling suggestions for each process in Definition follow:

Project Management (PJM)

During Definition, spend sufficient time developing a sound project plan with associated resource and cost forecasts. It is not unusual to spend several person weeks developing a good plan for moderate to large projects. Remember that initial planning for all phases of the project is performed during the Definition phase.

The critical path is a sequence of critical tasks throughout the project. If one of those tasks takes one day longer than planned, the end date of the project will be one day later. Tasks not on the critical path have *slack*; they can be completed later than planned without affecting the end date for the project.

Keep in mind that the critical path may change during the project. For example, adding disk space to the development computer for the Build phase may have been initially excluded from the critical path because you were informed that it could be performed easily and quickly; two weeks before the Build phase is scheduled to start, you are told it will take one month to obtain the new disk drives. Acquiring and installing the disk drives is now on the critical path.

Warning: Avoid planning with too much detail. It is tempting to define tasks at a very detailed level during planning. However, you may discover that tracking progress at this level is so time consuming that you abandon tracking altogether.

Warning: Be particularly cautious about the need to implement applications in phases and/or at multiple sites.

Frequently, a decision is made to phase deployment of the applications for good reasons, such as to minimize project risk, manage cultural change, or spread costs over a longer period of time. Implementations may be separated into two or more deployments where a subset of applications might be implemented at a subset of different locations at different times.

Such phasing adds complexity to the project management process and may make use of a program management approach appropriate. Program management is an approach where a top-level project management function is used to manage the overall efforts of the individual projects.

Business Process Architecture (BP)

Standard templates can be used to map the application's functions and features to standard business processes. The project team can examine the high-level processes appropriate for the application and then make business-focused decisions either to change the current processes to suit the application or to customize the application.

Business Requirements Definition (RD)

The need for thorough fact gathering and analysis regarding current business processes depends on how much business change is expected. At a minimum, you need to identify all business processes and functions that will be affected by the implementation and develop a sufficient understanding of those processes and functions to determine how they need to change in order to fulfill the organization's high-level process vision.

Application and Technical Architecture (TA)

Carefully consider the timing of this work. Too often the need for additional hardware, systems software, and data administration time is identified *after* the project budget has been finalized.

Consider the impact of a multi-phased deployment on the scheduling of this process. For example, you may elect to go live with the new applications at different times at each site. In this case, your technical architecture may need to grow over time to support the phased deployments.

Module Design and Build (MD)

Module Design and Build scheduling depends on several factors that can be determined during Definition, for example:

- When will you need the development environment?
- When will you begin to bring developers onto the team?
- What is your approach to establishing test data so your developers can test their custom software?
- What kinds of technical design, coding, testing, and documentation standards do you need, and when must they be ready?
- Will you deploy the applications in multiple phases? If so, over what period of time will you need development resources? Will you be doing all custom software development up front, or will you do customization, interface, or conversion custom development for each deployment phase?

Seek an optimally-sized development group. Development activity seems to be more sensitive to the size of the group than other activities. Avoid too large of a group, which can introduce inefficiencies due to incremental communication and administrative time requirements as the number of people increases.

Data Conversion (CV)

The Data Conversion tasks for subsequent phases can be performed in Definition if the existing systems data is well understood and no significant issues arise. The benefit of an early execution of Data Conversion is the support for module and module integration testing in Module Design and Build (MD).

Documentation (DO)

Determine what documentation needs to be produced. For example:

- Will a user manual be produced? If so, what will it contain?
- What kind of technical documentation will be produced?
- If multiple deployments will occur for different business units, will user documentation be different for each deployment? Will all business units use the applications in the same way? Will some business units create their own application extensions that are not shared by the other business units?

The scope of the user and technical documentation to be produced and the techniques used to create this material can have a major impact on the project schedule. More resources are required as the size and complexity of documentation increases.

Business System Testing (TE)

Determine what the requirements for Business System Testing are and what your testing strategy will be. For example:

- Will you be performing unit and link testing? If so, how many application extensions or interfaces will be tested?
- How extensive will your system testing be? How many processes will be tested and how many iterations will be performed?
- Will you be performing systems integration testing? If so, how many interfaces will be tested?
- If multiple deployments will occur for different business units, will business system testing need to be performed separately by each business unit? Will all business units share the same applications configuration, application extensions, and interfaces?

Performance Testing (PT)

Assess the risk of encountering performance problems early in the project. If there is significant risk, incorporate Performance Testing in the project plan. You can always add Performance Testing to the scope of the project at a later time, but it is better to plan for it early, even if you later decide you do not need it. Consider the following questions:

- What will the system load be?
- What technical architecture will be provided?
- What are the system's performance requirements (for example, response time, report creation, and delivery time)?

Adoption and Learning (AP)

If your project includes the creation of an Executive Project Strategy (AP.010), you need to consider the impact of this requirement on the limited availability of the organization's executive staff. Sessions should be clear, concise, and well-planned. In addition, you should consider combining multiple tasks, such as Define the Business and Process Strategy (BP.010), where appropriate.

Procrastination regarding project team learning activities, such as curriculum development, site scheduling, and instructor identification is common. This may result in schedule slippage later in the project or a decision to accept lesser quality than initially planned.

Accurately assess your project team learning requirements and determine the appropriate approach. Curriculum development is expensive but may be the most effective method of introducing a heavily customized system. Standard Oracle education and custom developed learning events have considerations that can end up on the critical path. Examples of these are as follows:

- When will standard Oracle classes be taught?
- How soon can custom learning events be developed?

Staffing

The diagram below illustrates the roles that are needed to staff each process during Definition. In some cases, the same person should be used to staff the same logical role found in different processes (shared role). In other cases, different people can be used to staff the same role in different processes (unique role).

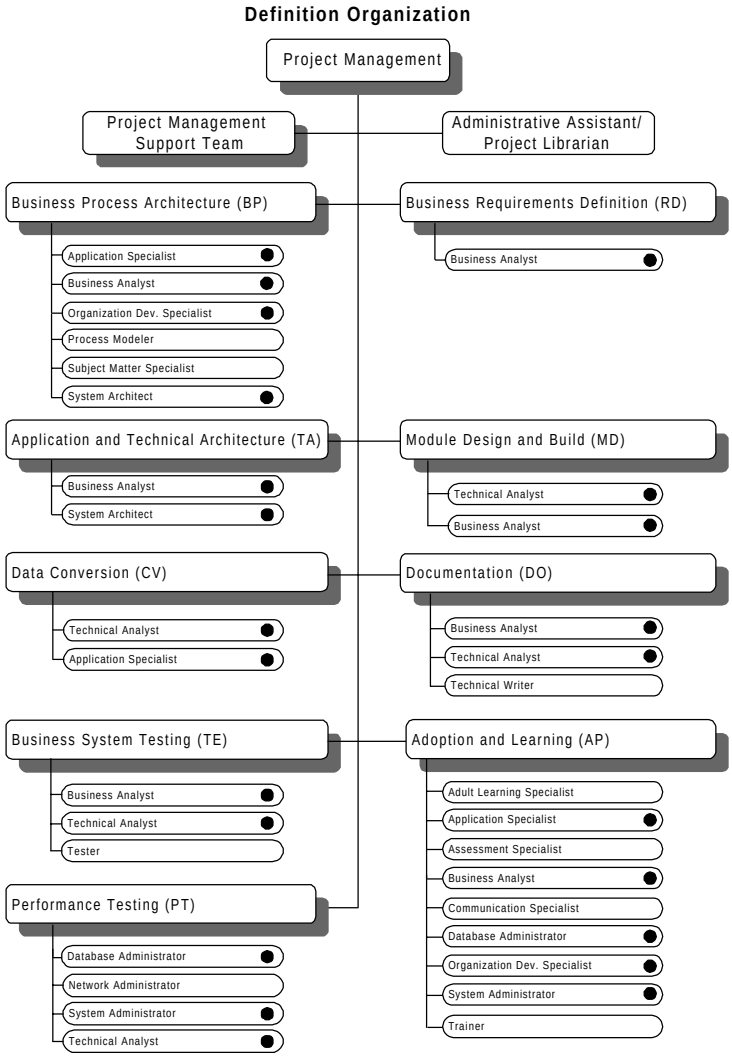

Figure 2-4 Definition Phase Staffing

Staffing Suggestions

This section provides advice and comments on project organization for the Definition phase.

Project Management (PJM)

One of the most important decisions for an application implementation is the kind of project management team that will be established. A full-time project manager should be provided for all but the smallest application implementation projects. In addition, if your project is employing the services of a third-party integrator, it is imperative that a project manager be provided from both organizations. This is a critical requirement so that the needs of both organizations are taken into account.

Multiple site projects require a higher level of project administration and control to coordinate the tasks and to leverage common deliverables between projects. In a multiple site project, you need to position site coordinators as part of your project management team. These people also help make sure that there is consistency in the delivery and presentations of work, use of techniques and approach, use of standards and guidelines, and interpretation of enterprise-wide strategies.

Another important role that coordinators perform is facilitating the technical strategies between related sites. This role calls for a more formal exchange of technical information and status review. These site coordinators also distribute software and documentation to multiple data centers.

Business Process Architecture (BP)

A key staffing requirement is recruiting business analysts with good interpersonal skills, and a working knowledge of business process change and application functionality to lead the project team through leading practices review, work sessions, and visioning.

Business Requirements Definition (RD)

This process needs business analysts with good interpersonal skills and knowledge of the business to examine and document the main activities that keep the organization operating today.

Application and Technical Architecture (TA)

This process must be staffed by an experienced system architect. A multi-phased deployment approach may complicate the technical architecture by introducing time phased requirements. In this case, be sure your system architect has experience with this approach.

External consulting resources can be a cost-effective solution. Consultants can have a large impact in a short time. They can transfer important knowledge to local staff allowing you to produce more accurate sizing estimates and make better architectural decisions.

Make sure that your information systems staff can free up enough time from their regular jobs to participate in the architecture design process.

Module Design and Build (MD)

The key activity for this process concerns design and planning for establishing the development environment. Confirm that someone skilled in development management is available for this task.

A phased deployment approach may significantly affect the timing of staffing needs for Module Design and Build. For example, if you are deploying to different sites at different times, you may need to develop custom software associated with various deployments. This could significantly affect the timing of your staffing needs.

Data Conversion (CV)

This process requires individuals skilled in analysis, programming, testing, performance tuning, and transition. During this phase, you need someone who can perform high-level analysis tasks to identify data conversion needs.

Automated data conversion tools, such as Oracle's Enterprise Data Management System (EDMS) or Smart Corporation's SmartDB Workbench™ can significantly improve productivity. Using these tools may require lead time for evaluation, acquisition, and installation. If you use such a tool, you may need staff with related expertise.

If you deploy in multiple phases, you need to perform data conversions at different times. This affects the timing of your staffing needs.

Documentation (DO)

Since this phase includes preparing the documentation strategy, you need staff that can advise you on various documentation approaches. The staff gathers documentation requirements and determines if new documentation is required or if existing documentation is to be updated. The staff also assists users in defining documentation standards and procedures.

A multi-phased deployment approach may require Documentation tasks to be performed for each deployment. If various business units do business in different ways, some user documentation may need to change for each deployment. This would affect the timing of related staffing requirements.

Business System Testing (TE)

In this phase, you define your testing requirements and develop the testing strategy. The main focus is to determine the number and complexity of application extensions and interfaces. The staff assists the users in defining their testing requirements that define the scope of Business System Testing.

A multi-phased deployment approach may require Business System Testing tasks to be performed for each deployment. If various business units have their own application extensions and interfaces, the staffing requirements would expand as the number of tests to be performed increases. This would affect the timing of related staffing requirements.

Performance Testing (PT)

Specialists are required to effectively plan and execute Performance Testing. You must determine the need for specialists and the appropriate staffing level.

If you deploy in multiple phases, you may need a phased Performance Testing approach. Make sure that the maximum load your system will experience after all deployments can be handled by the planned configuration. This consideration could affect the timing of staffing needs.

Adoption and Learning (AP)

If your project includes the development of an Executive Project Strategy (AP.010), you need to schedule the time of the executives involved. Likewise, if your project develops a Business Unit Managers'

Readiness Plan (AP.060), you need to plan and schedule the time of the business unit managers.

Decisions about project team orientation and learning requirements are made in this phase; therefore, you need staff that can advise you on approaches. For example, you might decide to:

- develop custom learning activities
- use standard Oracle Education classes
- use Oracle instructors at your site
- use internal people as learning agents with a separate class to "train-the- trainers"
- skill information technology analysts to support the new applications
- conduct separate learning events for each deployment in a multi-phased project

Decisions related to these issues impacts the staffing requirements for skilling the project team.

In addition, key members of the steering committee, project team, and stakeholder leadership are required to help develop the Project Readiness Roadmap (AP.060) and the messages contained within the Communication Campaign (AP.080).

Quality Criteria

Use the following criteria to check the quality and completeness of the core and optional tasks within the Definition phase.

Core Tasks

- ❑ Has a clear understanding of the business processes, functions, and information required to meet the project's defined business objectives been obtained?
- ❑ Has the organization's senior management bought into the High-Level Process Vision (BP.060)?
- ❑ Has the scope of the project been approved by the organization's senior management?
- ❑ Have the High-Level Process Designs (BP.070) been approved by the organization's senior management?
- ❑ Have the architecture requirements been clearly identified?
- ❑ Is the strategy for addressing architecture requirements understood and agreed upon by the information technology manager and project sponsor?
- ❑ Have management and the project team agreed on the strategy outlined for all aspects of the project?

Optional Tasks

- ❑ Has the Business and Process Strategy (BP.010) been approved by the organization's senior management?
- ❑ Has the Executive Project Strategy (AP.010) been approved by the organization's senior management?
- ❑ Have relevant leading practices been identified?

CHAPTER

3 Operations Analysis

This chapter describes the Operations Analysis phase of AIM. The goal of the Operations Analysis phase is to determine the high-level business and information system requirements necessary to meet a set of defined business objectives. The Operations Analysis phase results in a clear definition of a project's functional scope.

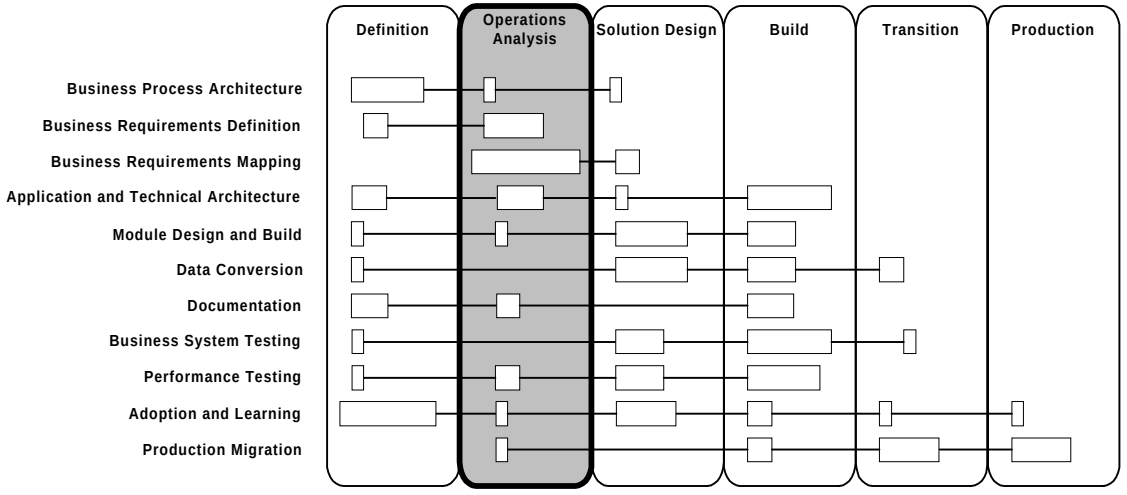

Figure 3-1 Context of AIM Operations Analysis Phase

Overview

This section provides an overview of the Operations Analysis phase.

Objectives

The objectives of the Operations Analysis phase follow:

- Produce accurate information, function, and process models for the business areas being addressed.
- Define the detailed function, data, and operational requirements that the new application system must support.
- Design business processes in detail, covering the variants of the high-level processes developed in Definition.
- Map business requirements to application capabilities and propose solutions to gaps.
- Demonstrate that the proposed business process design is feasible for the organization.
- Define a technical architecture of hardware and software in which the application system must perform.
- Refine the technical architecture of hardware and software.
- Propose a transition strategy for moving from the current system to the new application system.
- Identify audit and control reporting and application integration requirements.
- Develop performance testing models and scenarios.

Critical Success Factors

The critical success factors of the Operations Analysis phase are as follows:

- active participation by team management and knowledgeable user and technical representatives from the area of the business affected by the project
- thorough knowledge of the standard functionality of the applications being implemented and detailed knowledge of the business processes that the applications support
- clear definition of the business objectives to be addressed by the project
- access to information related to the existing business processes and systems affected by the project

Prerequisites

Prerequisites for the Operations Analysis phase follow. You should use these prerequisites, if they exist, prior to beginning the project. Otherwise, you need to create them during this phase. Some of the prerequisites identified below are also deliverables produced within this phase. The reason they are included in this section is because they are used as input to other tasks within this phase.

Prerequisite	Source
Existing Reference Material	Organization
Business Process Reengineering Studies	Organization
Future Business Strategy	Organization
Current Business Contingency Plan and Procedures	Organization
Current System Reports	Organization

Prerequisite	Source
High-Level Existing System Data Model	Organization
Business Requirements Scenarios	Sales Cycle
Return on Investment (ROI) Analysis	Oracle
Application Reference Manuals and Documentation	Oracle
Application Product Reference and Implementation Manuals	Oracle
Project Management Plan	Project Management (PJM)
Physical Resource Plan	Project Management (PJM)
Prepared Infrastructure	Project Management (PJM)
Business and Process Strategy	Business Process Architecture
Change Catalog	Business Process Architecture
Data Gathering Requirements	Business Process Architecture
Current Process Model	Business Process Architecture
High-Level Process Vision	Business Process Architecture
High-Level Process Designs	Business Process Architecture
Future Process Model	Business Process Architecture
Current Financial and Operating Structure	Business Requirements Definition

Prerequisite	Source
Current Business Baseline	Business Requirements Definition
Process and Mapping Summary	Business Requirements Definition
Business Volumes and Metrics	Business Requirements Definition
Business Requirements Scenarios	Business Requirements Definition
Audit and Control Requirements	Business Requirements Definition
Business Availability Requirements	Business Requirements Definition
Master Report Tracking List	Business Requirements Definition
High-Level Gap Analysis	Business Requirements Mapping
Configured Mapping Environment	Business Requirements Mapping
Mapped Business Requirements	Business Requirements Mapping
Mapped Business Data	Business Requirements Mapping
Integration Fit Analysis	Business Requirements Mapping
Information Model	Business Requirements Mapping
Master Report Tracking List	Business Requirements Mapping

Prerequisite	Source
Business Mapping Test Results	Business Requirements Mapping
Confirmed Business Solutions	Business Requirements Mapping
Architecture Requirements and Strategy	Application and Technical Architecture
Current Technical Architecture Baseline	Application and Technical Architecture
Preliminary Conceptual Architecture	Application and Technical Architecture
Application Architecture	Application and Technical Architecture
System Availability Strategy	Application and Technical Architecture
Reporting and Information Access Strategy	Application and Technical Architecture
Conceptual Architecture	Application and Technical Architecture
Application Extension Strategy	Module Design and Build
Documentation Requirements and Strategy	Documentation
Documentation Standards and Procedures	Documentation
Glossary	Documentation
Documentation Environment	Documentation
Performance Testing Strategy	Performance Testing
Performance Test Scenarios	Performance Testing

Prerequisite	Source
Executive Project Strategy	Adoption and Learning
Oriented Project Team	Adoption and Learning
Skilled Project Team	Adoption and Learning
Business Unit Managers' Readiness Plan	Adoption and Learning
Project Readiness Roadmap	Adoption and Learning
Communication Campaign	Adoption and Learning

Table 3-1 Operations Analysis Phase Prerequisites

Processes

The processes used in this phase follow:

Business Process Architecture (BP)

Develop detailed future business process models.

Business Requirements Definition (RD)

Create detailed Business Requirements Scenarios (RD.050) that depict sequenced elementary business functions for mapping process steps to the new system. Determine business requirements for system availability. Define audit and control requirements for financial and system administration purposes. Define reporting requirements for all functions.

Business Requirements Mapping (BR)

Map high-level and detailed business requirements to application functionality. Design business processes in detail, covering the variants of the generic processes developed. Prove the viability and feasibility of proposed business processes and their integration. Map information flow and access needs by each organization.

Application and Technical Architecture (TA)

Develop strategies to meet the reporting needs and system availability requirements of the business. Determine the details of deploying the new application across data centers within the scope of the new architecture. Refine the Preliminary Conceptual Architecture (TA.030) and identify any subsystems that need to be developed or integrated.

Module Design and Build (MD)

Summarize the business needs that Oracle Application features cannot meet and propose application extensions to meet those business needs. In addition, estimate the effort required to complete them.

Documentation (DO)

Create the Documentation Environment (DO.040) and produce the prototypes and templates.

Performance Testing (PT)

Identify the test models to be used to simulate the system or system components that are within the scope of the test.

Adoption and Learning (AP)

Conduct work sessions for middle and first-line managers who are not on the project team so they can assume their role in the implementation.

Production Migration (PM)

Prepare a Transition Strategy (PM.010) for migrating the company, systems, and people into the new enterprise system.

Key Deliverables

The key deliverables of this phase are as follows:

Deliverable	Description
Future Process Model	Process flow diagrams of the events and business processes that the applications and the associated functions of the business area will support.
Business Requirements Scenarios	A set of formal statements of the detailed business requirements for each business process, the source of these requirements, how these requirements will be satisfied (either by the application, manual process steps, workarounds, or by other applications), and what prototyping steps must be taken to prove the designs.
Mapped Business Requirements	Detailed business requirements written in business language and associated with business processes; analysis and comparison of the current system for a business requirement to the proposed system; details for the type and nature of the solution in a descriptive format.
Mapped Business Data	Verification that the underlying target application modules, business objects, and attributes will support business processes.
Confirmed Business Solutions	Agreement by management that the proposed integrated business system covers the business objectives.

Deliverable	Description
Conceptual Architecture	A refinement of the preliminary conceptual architecture developed earlier, following reviews by key members of the project team and the further gathering of information during the progressing project.
Application Extension Definition and Estimates	This document summarizes the business need that Oracle Application features cannot meet and proposes application extensions to meet that business need.

Table 3-2 Operations Analysis Phase Key Deliverables

Attention: Key deliverables represent the culmination, end result, or major milestone of activities performed during a phase. They should not be confused with deliverables produced by core tasks. Core tasks produce the minimum set of deliverables needed for every project; key deliverables represent the end result and define the end of each phase. However, not every key deliverable is required for every project. For example, Application Extension Definition and Estimates (MD.020) is only created when a project includes *customizations* to standard functionality or *interfaces* with external systems.

Approach

This section describes the approach for the Operations Analysis phase.

Tasks and Deliverables

The table below lists the tasks executed and the deliverables produced during Operations Analysis.

ID	Task	Deliverable	Type*
Business Process Architecture			
BP.080	Develop Future Process Model	Future Process Model	MI
Business Requirements Definition			
RD.030	Establish Process and Mapping Summary	Process and Mapping Summary	SI
RD.040	Gather Business Volumes and Metrics	Business Volumes and Metrics	SI
RD.050	Gather Business Requirements	Business Requirements Scenarios	MI
RD.060	Determine Audit and Control Requirements	Audit and Control Requirements	SI
RD.070	Identify Business Availability Requirements	Business Availability Requirements	SI
RD.080	Identify Reporting and Information Access Requirements	Master Report Tracking List	MI
Business Requirements Mapping			
BR.010	Analyze High-Level Gaps	High-Level Gap Analysis	SI
BR.020	Prepare Mapping Environment	Configuration Mapping Environment	SI
BR.030	Map Business Requirements	Mapped Business Requirements	MI
BR.040	Map Business Data	Mapped Business Data	MI
BR.050	Conduct Integration Fit Analysis	Integration Fit Analysis	SI
BR.060	Create Information Model	Information Model	SI
BR.070	Conduct Reporting Fit Analysis	Master Report Tracking List	MI
BR.080	Test Business Solutions	Business Mapping Test Results	MI
BR.090	Confirm Integrated Business Solutions	Confirmed Business Solutions	SI

ID	Task	Deliverable	Type*
Application and Technical Architecture			
TA.040	Define Application Architecture	Application Architecture	SI
TA.050	Define System Availability Strategy	System Availability Strategy	SI
TA.060	Define Reporting and Information Access Strategy	Reporting and Information Access Strategy	SI
TA.070	Revise Conceptual Architecture	Conceptual Architecture	SI
Module Design and Build			
MD.020	Define and Estimate Application Extensions	Application Extension Definition and Estimates	MI, IT
Documentation			
DO.040	Prepare Documentation Environment	Documentation Environment	SI
DO.050	Produce Documentation Prototypes and Templates	Documentation Prototypes and Templates	MI
Performance Testing			
PT.020	Identify Performance Test Scenarios	Performance Test Scenarios	MI
PT.030	Identify Performance Test Transaction Models	Performance Test Transaction Models	MI
Adoption and Learning			
AP.090	Develop Managers' Readiness Plan	Managers' Readiness Plan	SI
Production Migration			
PM.010	Define Transition Strategy	Transition Strategy	SI

*Type: SI=singly instantiated, MI=multiply instantiated, MO=multiply occurring, IT=iterated, O=ongoing. See Glossary.

Table 3-3 Operations Analysis Phase Tasks and Deliverables

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Core Task Dependencies

The diagram below shows the dependencies between core tasks in Operations Analysis.

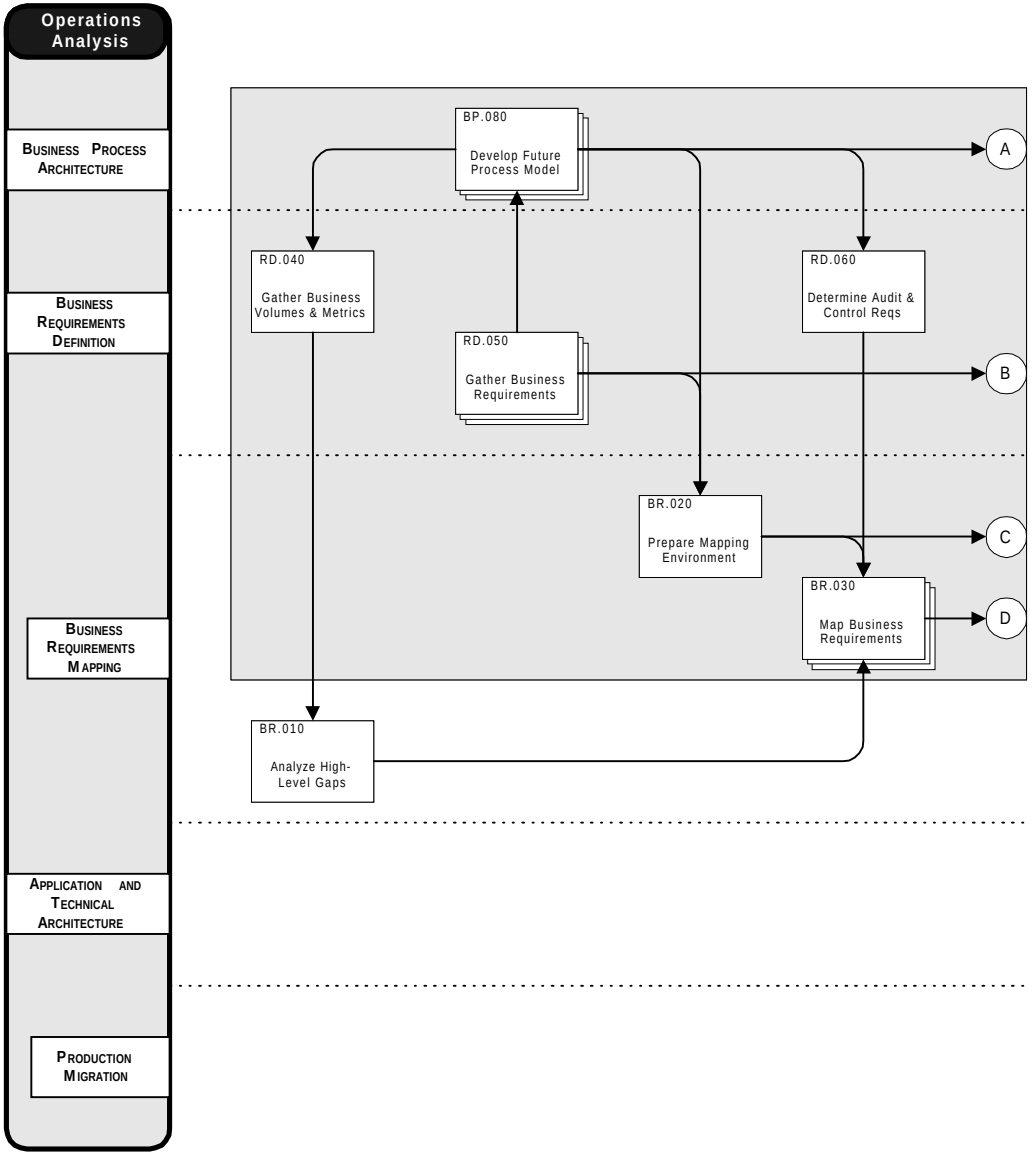

Figure 3-2 Operations Analysis Phase Core Task Dependencies

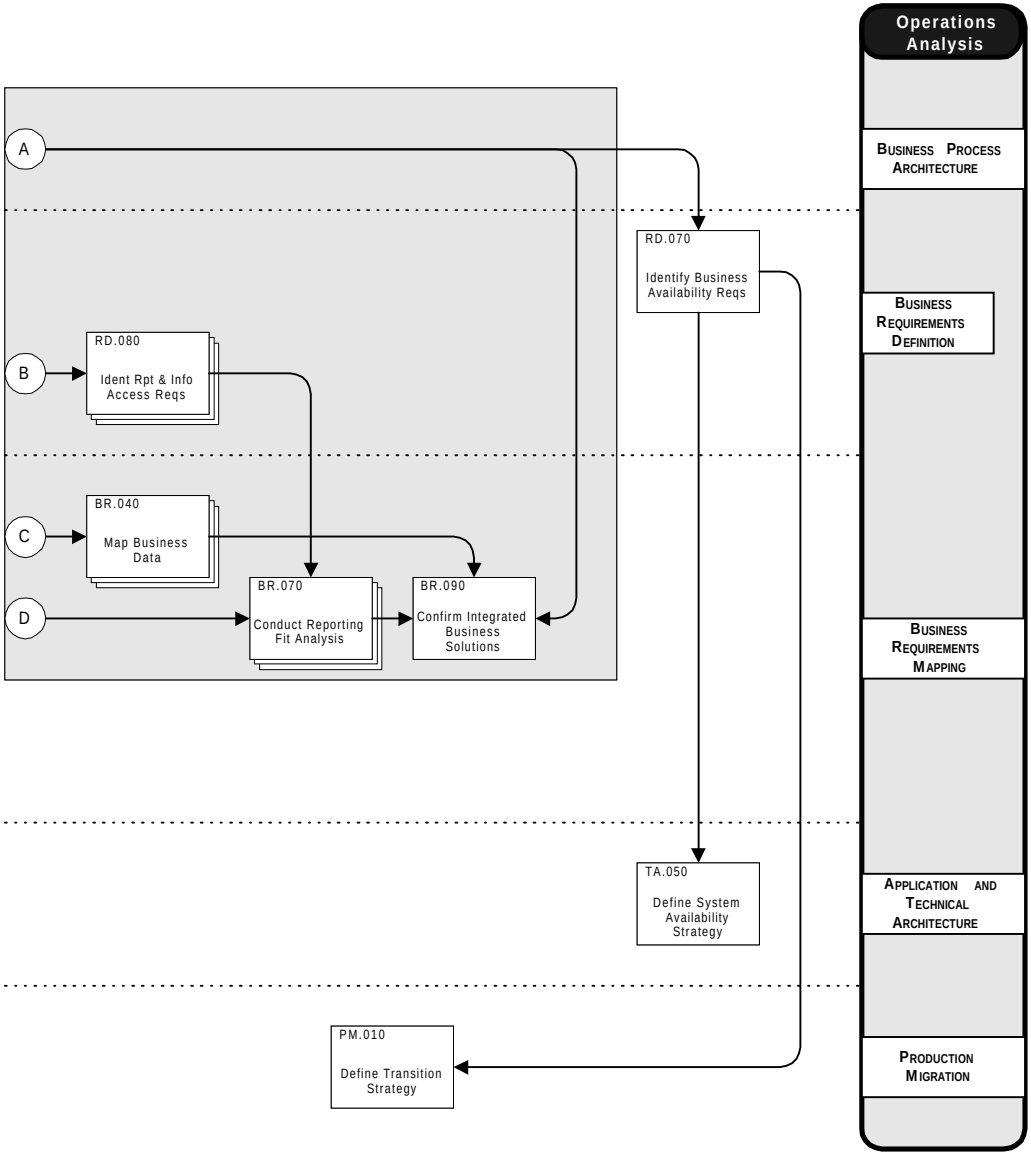

Figure 3-2 Operations Analysis Phase Core Task Dependencies (cont.)

Core and Optional Task Dependencies

The diagram below shows the dependencies between core and optional tasks in Operations Analysis.

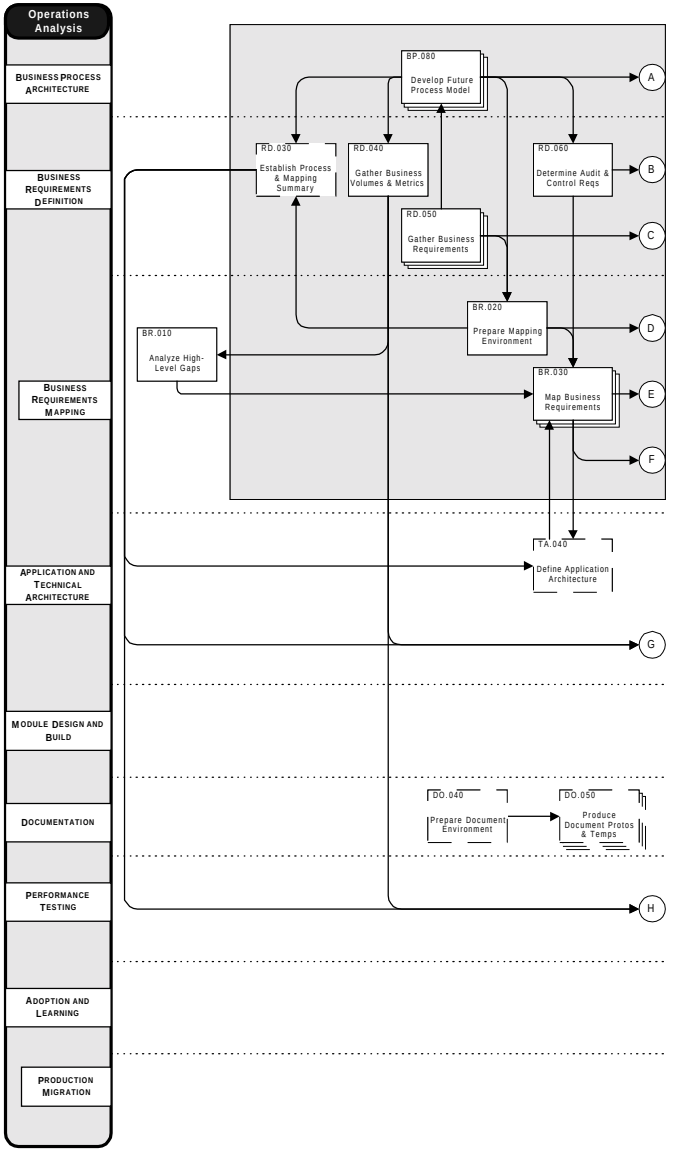

Figure 3-3 Operations Analysis Phase Core and Optional Task Dependencies

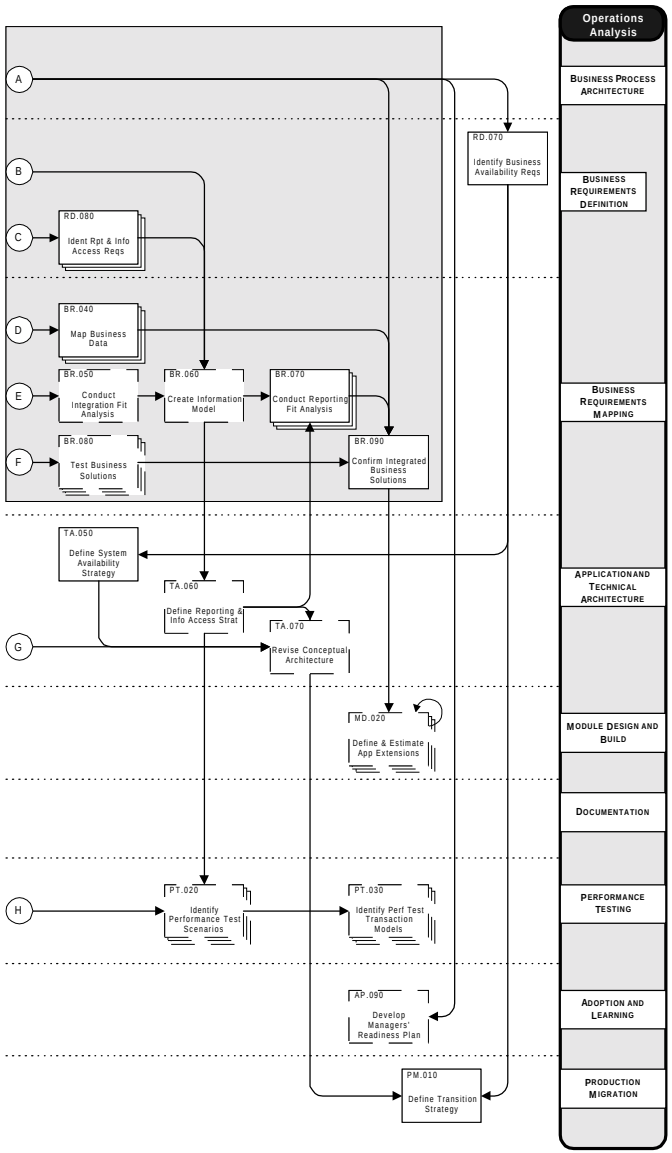

Figure 3-3 Operations Analysis Phase Core and Optional Task Dependencies (cont.)

Risk Management

The areas of risk and mitigation for Operations Analysis include the following:

Business Vision

The imperative for change must be clearly defined and understood by the organization as a whole. Belief in the purpose of the project is key to a successful implementation. Building a strong business case for the implementation is crucial to obtaining senior executive support and involvement, which in turn fosters commitment from all levels of the organization.

Risk	Mitigation
Insufficient consideration given to resolving gaps with alternative approaches that do not involve custom code development.	Encourage consideration of alternatives that do not require custom code development, such as altering business processes to match system functionality, workarounds, use of configurable extension features, and innovative use of standard functionality. Perform cost/benefit analysis for all alternatives.

Communication

Communication must remain a focus across the entire project and throughout the entire project organization from the steering committee to the user. Effective communication enables sharing of the business imperatives driving the change, a clear definition of the objectives, and the performance measures used to measure progress.

Risk	Mitigation
Erroneous statement of required system availability.	Obtain agreement from the user community about the level of system outage that can be tolerated by the business.

Risk	Mitigation
Limited access to information about business areas, their processes, and information generation and use.	Conduct frequent checkpoints that include a management review to verify that teams engaged in analysis activities are not being blocked from gathering information.
Insufficient communication to the wider project team of the chosen conceptual architecture model to all team members.	Communicate the conceptual architecture model to the broader project team so that everyone is properly informed.

Integration Management

Focus on integration issues between teams, business processes, organizations, and applications and identify and resolve integration issues through communication and definition of standards and procedures. Examples of areas that would include integration management are:

- business processes design
- systems testing strategies
- integration between functional and technical teams
- interfaces between Oracle Applications and third-party or legacy systems
- data cleanup and conversion strategies

Risk	Mitigation
Process model does not tightly couple all integrated processes.	Have representatives from each process team review the process models from other teams.
Inadequate integration of processes across design and mapping teams.	Create an integration team that monitors process designs. As they are in process, look for inter-team integration issues.

Risk	Mitigation
Lack of visibility of major architecture issues occurring in different areas or teams.	Assemble architecture team representation in channels or forums to discuss major cross-functional or business issues.
Transaction models for performance testing built without allowing for future business growth, peak periods, or detailed workflow patterns.	Communicate the conceptual architecture model to the wider project team so that everyone is properly informed.

Planning

Planning is critical to maintaining project focus and direction. Initially the overall project plan is developed and the implementation strategy defined. As each phase progresses, subsequent phases are planned in detail and plans include the people, tools, strategies and procedures for accomplishing the objectives of the phase.

Risk	Mitigation
Not initiating development of complex, bi-directional system interfaces early enough in the project.	Allow adequate investment of resources and time in developing a sound project plan and follow it to confirm that tasks are begun early enough in the project life cycle.

Project Organization/Leadership

The executive leadership of the organization must actively and visibly support the implementation effort. One of the most crucial forms of support is the willingness to commit people who understand the organization and are leaders in their area of business to the project. Commitment of appropriate staff is just as important as commitment of funding. The project organization and staffing greatly determine the success of the project.

Risk	Mitigation
Inconsistency of team composition and expertise across process design, mapping, narrative writing, and approval activities.	Assign process design and mapping teams to groups of business processes or areas and keep them together across all analysis and design tasks.

Quality Assurance

Quality assurance focuses on providing the infrastructure to support development of the key deliverables for the project. Producing high quality deliverables within the time and budget constraints of the project plan is key to reducing overall risk to the implementation. Areas of quality assurance include:

- adherence to the method
- establishing quality standards in the early planning process
- review of key deliverables
- establishing acceptance and sign-off procedures

Risk	Mitigation
Missed or incomplete processes and unidentified events.	Have functional management review the integrated process model and event catalog for completeness.
Poor or nonexistent business volume metrics and inability to relate the performance test results in a meaningful way to the production system.	Survey and establish business volume metrics in advance of conducting performance testing.

Risk	Mitigation
Poorly designed documentation prototypes and templates.	Include all key project areas in the design and approval of the documentation prototypes and templates.

Tips and Techniques

This section discusses the primary techniques that may be helpful in conducting the Operations Analysis phase. It also includes advice and commentary on each process.

Business Process Architecture (BP)

The examination of current requirements in Definition expands into Operations Analysis to create a vision of how future processes and requirement scenarios respond to those events, as well as any additional ones anticipated by the organization's future business strategy. Model the future processes with both process models and function models to help maintain sufficient breadth and depth of process definition.

Business Requirements Definition (RD)

Gather and formalize business volumes and use them to determine storage and performance requirements. Format detailed business requirements into scenarios containing elementary business functions. These include sequenced process steps that need to be supported by a combination of application functions, manual process steps, other interfaced or integrated applications, workarounds, or custom modules.

Along with the business requirements identified, gather and formalize the business availability requirements that dictate system availability needs. This will be considered during the technical architecture process.

The flow of information that results from business processes and transactions is portrayed both within and across organizations. The type of information access required for operating, reporting, and consolidation for each organization is also identified (for example, some organizations are creators of information while others are consumers of information). These tasks help formalize the understanding and control of information access and timing requirements.

Business Requirements Mapping (BR)

Good team organization is the most important factor affecting the quality of this process. Mapping teams should address the same business areas and business processes as process design teams. Ideally, the same teams should work on process modeling and design, business requirements identification, and mapping of requirements to application capabilities.

Key users should participate in mapping sessions. Perform mapping close to the business process in order to have access to agents and key users and to allow users to witness process execution. As decisions are made and agreements reached, document them in Business Requirements Scenarios (RD.050) so that the final product reflects the proposed business process design.

Confirm that changes to detailed business processes are carried into the higher-level process designs produced during the Definition phase. Using gap analysis, the team resolves differences between these designs and the processes that the applications support, to produce an optimal solution for the organization. Normally, this solution represents a balance between disruptive change to the organization's operations and costly and risky modifications to the applications. As part of the process of optimization, it may be necessary to iterate several times between updating new process designs and gap analysis.

Follow the *Rule of 3-2-1*. This means that roughly three hours of research are usually required for two hours of process design and one hour of formal entry (capturing the Business Requirements Scenario using a template or other tool). Talk with users and review real process outputs; avoid mapping exclusively in a conference room.

Maintain a meticulous record of process prototyping. This makes acceptance of business solutions easier. Obtain an informal agreement before the formal signoff, if possible.

Application and Technical Architecture (TA)

The information used to refine and extend the detail of the Conceptual Architecture (TA.070) comes from Application and Technical Architecture (TA), Business Requirements Definition (RD), and Business Requirements Mapping (BR). As the business mapping proceeds, the mapping team makes decisions about how the new applications will be configured to run the business, and it is important that the architecture team has visibility to these decisions and any identified mapping gaps. Gaps that correspond to major architecture components having a

pervasive impact on the overall system become the responsibility of the architecture team.

Module Design and Build (MD)

One of the key deliverables is the Application Extension Definition and Estimates (MD.020), which describes required custom extensions with work estimates to design, build, and test all components. This is an important decision-making document for upper management since it allows them to evaluate the full cost of the implementation. If the time and cost to implement the required extensions are greater than the perceived benefit, management may ask the project team to reevaluate some of the gaps and propose alternate solutions. You may decide to delay some of the optional extensions until after production cutover.

The detailed work estimates in the Application Extension Definition and Estimates (MD.020) are an important input to the project manager for planning the detailed tasks in the Solution Design and Build phases. They also specify the need for the technical resources you must secure for the project.

Documentation (DO)

The appropriate Documentation Environment (DO.040) includes the hardware, software, and utilities that accommodate the previously specified documentation procedures and adequately support the technical needs of the writing staff. The Documentation Environment could be comprised of a stand-alone laptop with a word processing application or it could include more sophisticated environments with state-of-the-art authoring and publishing tools and documentation change control systems distributed over a network environment. Those assisting in the environment proposal should have a thorough knowledge of the documentation procedures, hardware, software, and utilities being considered.

Create a prototype for each custom document that contains a table of contents and a sample chapter. The prototype can be easily reviewed for document design, format, and suggested content and changes can be made early in the project. Prototypes present a clear visual indicator of the final product and serve as the model for template development. Prototypes are created for user review and approval before formal documentation begins. Documentation prototypes are usually required for:

- User Reference Manual
- User Guide

- Technical Reference Manual
- Systems Management Guide

Templates provide a baseline for the writing staff. They standardize the style of each document and may eliminate formatting inconsistencies. This allows the writer to concentrate on content and simplifies the editing process that occurs later.

Performance Testing (PT)

During this phase, the Performance Testing team constructs test models that meet the technical needs and are financially feasible to implement. The team constructs the models relative to predicted or actual production system snapshots, and use input from the business analysts to understand the way the business will run on the new system. In this way, the team can interpret the test results properly in the context of real production situations.

Typically, the models selected reflect situations of the highest processing load on the system or on some critical component of the system. The Performance Testing process depends on Business Requirements Definition (RD) and Business Requirements Mapping (BR) to obtain information of sufficient detail and quality so that the Performance Testing team can construct accurate models. In systems that support many tightly integrated business functions, the processing environment may be complex and have a large number of detailed transaction flows. In such cases, approximations are inevitable in the definition of a test model.

Adoption and Learning (AP)

During Operations Analysis, the middle and front-line managers who are not on the project team are educated on the goals and strategies for the project and the roles they will play to help make the project successful. The Managers' Readiness Plan (AP.090) should be focused on obtaining acceptance and commitment from the middle and front-line managers, as these individuals will be responsible for communicating information about the systems implementation to their teams.

Production Migration (PM)

One of the key deliverables is the Transition Strategy (PM.010), which outlines the approach for migrating the people, company, and business systems to production. It includes estimated transition resource

requirements, high-level transition and implementation contingency plans, and a transition support strategy.

The components of the Transition Strategy (PM.010) are an important input to the project manager for planning the detailed tasks in the Transition phase and for updating the project workplan. They also identify the need for specific resources needed during the transition process.

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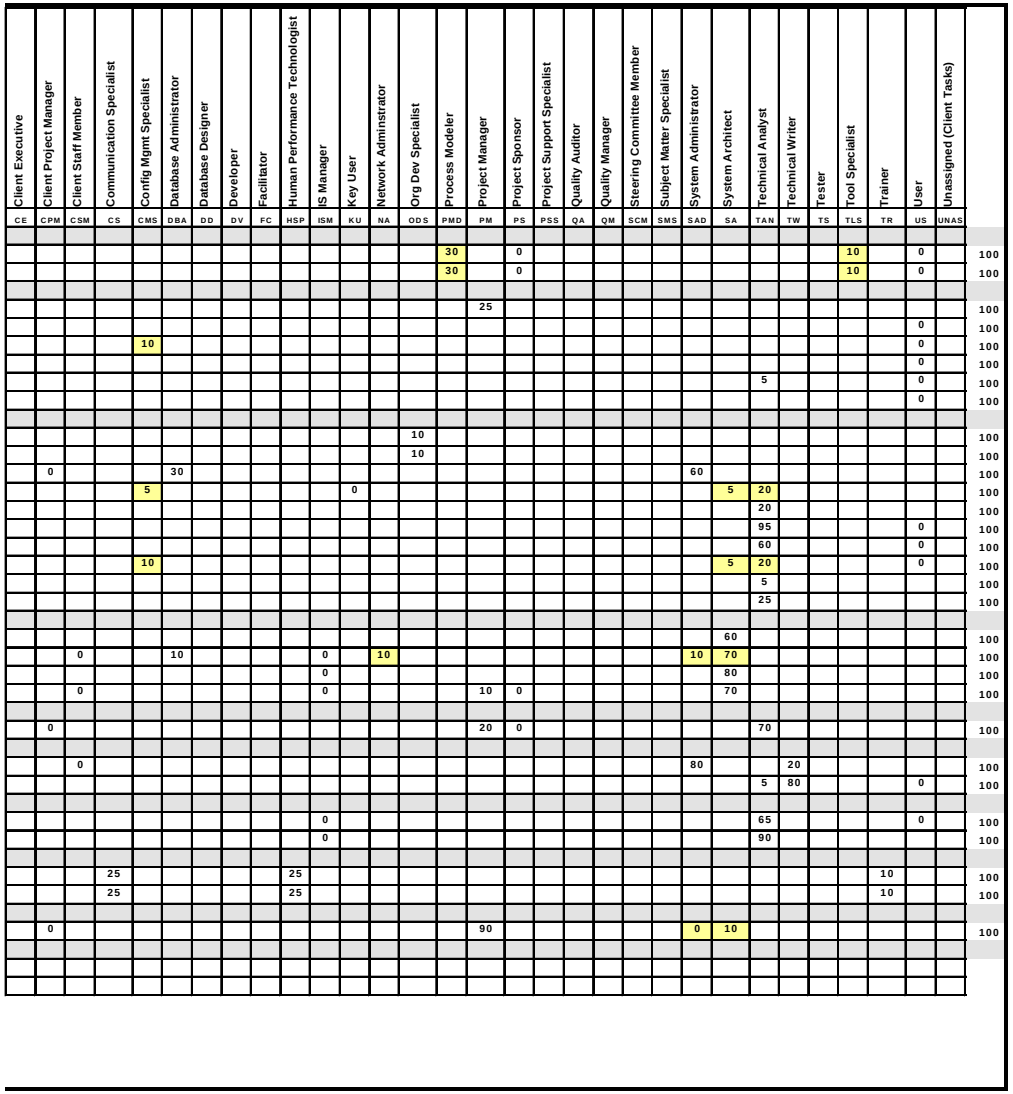
The table below indicates the typical percentage of effort required by each task by role.

Operations Analysis		Phase Effort	Adult Learning Specialist	Application Specialist	Assessment Specialist	Business Analyst	Business Line Manager
ID	Task		ALS	AS	ASSP	BA	BLM
Business Process Architecture	*39%*						
B.BP.080	Develop Future Process Model	39%		20		40	0
B.BP.080	Develop Future Process Model			20		40	0
Business Requirements Definition	*11%*						
B.RD.030	Establish Process and Mapping Summary	1%				75	0
B.RD.040	Gather Business Volumes and Metrics	1%				100	0
B.RD.050	Gather Business Requirements	6%		30		60	
B.RD.060	Determine Audit and Control Requirements	1%				100	0
B.RD.070	Identify Business Availability Requirements	2%				95	0
B.RD.080	Identify Reporting and Information Access Requirements	0%				100	0
Business Requirements Mapping	*23%*						
B.BR.010	Analyze High-Level Gaps	2%		50		40	
B.BR.010	Analyze High-Level Gaps			30		60	
B.BR.020	Prepare Mapping Environment	1%				10	
B.BR.030	Map Business Requirements	4%		25		45	0
B.BR.040	Map Business Data	2%		30		50	0
B.BR.050	Conduct Integration Fit Analysis	0%				5	
B.BR.060	Create Information Model	6%				40	0
B.BR.070	Conduct Reporting Fit Analysis	0%		20		45	
B.BR.080	Test Business Solutions	6%		30		65	0
B.BR.090	Confirm Integrated Business Solutions	0%		25		50	0
Application and Technical Architecture	*4%*						
B.TA.040	Define Application Architecture	1%				40	
B.TA.050	Define System Availability Strategy	1%					
B.TA.060	Define Reporting and Information Access Strategy	0%				20	0
B.TA.070	Revise Conceptual Architecture	1%				20	
Module Design and Build	*1%*						
B.MD.020	Define and Estimate Application Extensions	1%				10	0
Documentation	*0%*						
B.DO.040	Prepare Documentation Environment	0%					
B.DO.050	Produce Documentation Prototypes and Templates	0%				15	
Performance Testing	*0%*						
B.PT.020	Identify Performance Test Scenarios	0%				35	
B.PT.030	Identify Performance Test Transaction Models	0%				10	
Adoption and Learning	*0%*						
B.AP.090	Develop Managers' Readiness Plan	0%		20		20	0
B.AP.090	Develop Managers' Readiness Plan			20		20	0
Production Migration	*1%*						
B.PM.010	Define Transition Strategy	1%					
Project Management	*22%*						
PJM	Manage Phase	13%					
CONT	Contingency	9%					
	100%						

- FastForward Task
- Core Tasks
- Optional Component of a Task
- Role % Adjusted for FastForward

Table 3-4 Operations Analysis Phase Estimating



Client Executive	Client Project Manager	Client Staff Member	Communication Specialist	Config Mgmt Specialist	Database Administrator	Database Designer	Developer	Facilitator	Human Performance Technologist	IS Manager	Key User	Network Adminstrator	Org Dev Specialist	Process Modeler	Project Manager	Project Sponsor	Project Support Specialist	Quality Auditor	Quality Manager	Steering Committee Member	Subject Matter Specialist	System Administrator	System Architect	Technical Analyst	Technical Writer	Tester	Tool Specialist	Trainer	User	Unassigned (Client Tasks)	
CE	CPM	CSM	CS	CMS	DBA	DD	DV	FC	HSP	ISM	KU	NA	ODS	PMD	PM	PS	PSS	QA	QM	SCM	SMS	SAD	SA	TAN	TW	TS	TLS	TR	US	UNAS	
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			25						25																			10			100
	0														90							0	10								100

Table 3-4 Operations Analysis Phase Estimating (cont.)

Scheduling Suggestions

The primary focus of the Operations Analysis phase is defining the detailed business requirements and mapping them to applications functionality. These activities can consume a great deal of time and it is easy for project teams to become so focused on analysis that they exceed task estimates. Establish clear milestones and target dates for all tasks and make sure all project team members understand the expectations. You may wish to time box some activities.

Since many of the tasks in this phase are iterative, you may revisit and re-execute portions of tasks as you refine your analysis. Keep this in mind when scheduling and setting target dates. A good rule of thumb is to set the initial target completion date at 75 percent of the total scheduled duration and reserve the rest for future refinement.

Scheduling suggestions for each process in Operations Analysis follow:

Project Management (PJM)

In Operations Analysis, the last portion of Business Requirements Definition (RD) is completed and the majority of Business Requirements Mapping (BR) tasks occur. Managing the overlap between these processes can significantly affect your schedule.

Leverage analysis time with key users since user availability may be a critical resource constraint. If you have skilled analysts and knowledgeable users, several objectives associated with various processes can be achieved in one work session. To help maintain quality, formal acceptance of the deliverables from these key tasks must occur.

Operations Analysis requires a considerable time commitment from user management and staff. Time must be allocated from day-to-day work to provide information about the business areas' objectives, requirements, and work practices, and to attend reviews. The project manager should set expectations about the level of user participation needed by explicitly scheduling these reviews and consultations in the workplan.

Consider the impact of a multi-phase deployment. If applications are to be deployed in phases, there may be additional requirements, gaps, and solutions needed at each site.

Business Process Architecture (BP)

An organization may want to implement the applications as quickly as possible with minimal customizations and, if necessary, change the way they do business to match the application's functionality. In other cases, the approach is to minimize operational changes by appropriately customizing the applications.

Business Requirements Definition (RD)

At the beginning of Operations Analysis, assess the completeness and accuracy of your team's work. Inaccuracies occurring early in the project can have large scheduling impacts later on.

Business Requirements Mapping (BR)

Schedule slippage for this process is often caused by:

- unrealistic test data in the mapping instance
- inadequate knowledge of Oracle Applications functionality
- inadequate time commitment by key users
- neglecting to adequately assess the impact of a multi-phased / multi-site deployment approach

At this point, the Oracle demo system is usually being used to run mapping scenarios. Depending on your business processes, the demo data may not be sufficient to exercise the Oracle Applications according to your scenarios. Consider augmenting the demo data.

Application and Technical Architecture (TA)

Coordinate the detailed scheduling of this process with the Business Requirements Definition (RD) and Business Requirements Mapping (BR) teams.

Module Design and Build (MD)

Carefully maximize overlap between the beginning of this process and the end of Business Requirements Mapping (BR). If there are obvious gaps requiring custom software development, getting an early start could shorten your schedule. Starting Module Design and Build activities prematurely however, could increase the likelihood of rework with a commensurate slip in schedule and added cost.

If different business units will be in production on legacy systems and new applications, you may need to build temporary bridges between them to support consolidated query and reporting. Consider using Oracle's application programming interfaces (APIs) to facilitate bridging.

Documentation (DO)

In this phase, the Documentation Environment (DO.040) is set up and the prototypes and templates are created. Schedule the necessary technical staff to set up a Documentation Environment first. Then schedule staff that can generate prototypes and templates. If possible, use a prototyping approach that leverages documentation standards developed from an earlier project.

A multi-phased deployment approach may have time consuming impacts on documentation that should be addressed.

Performance Testing (PT)

The Performance Testing team should work very closely with other teams to leverage the results of business requirements mapping and technical architecture design. Consider scheduling regular debriefing sessions so that teams can share key findings and issues with one another.

Adoption and Learning (AP)

The middle managers should be assembled first. After the agenda for the readiness session has been presented, the point should be made that middle managers will in turn be facilitating readiness meetings similar to the one in which they are participating, to their first-line managers. The content of the managers' readiness sessions evolves over time as the project progresses through the Solution Design and Build phases. Through the Communication Campaign (AP.080), managers are kept apprised of project changes that need to be reflected in the readiness sessions.

The readiness meetings with first-line managers should be led by a middle manager. The first-line managers then have the responsibility of communicating project information to their teams. First-line managers may want to devote a team meeting to explaining the business reasons for the change and the link with the objectives for the project, describing the impacts to the processes they use and the individuals in their group.

Production Migration (PM)

The most important consideration during Production Migration is whether a multiple deployment approach will be used, since Production Migration must occur for each deployment.

Staffing

The diagram below illustrates the roles that are needed to staff each process during Operations Analysis. In some cases, the same person should be used to staff the same logical role found in different processes (shared role). In other cases, different people can be used to staff the same role in different processes (unique role).

Operations Analysis Organization

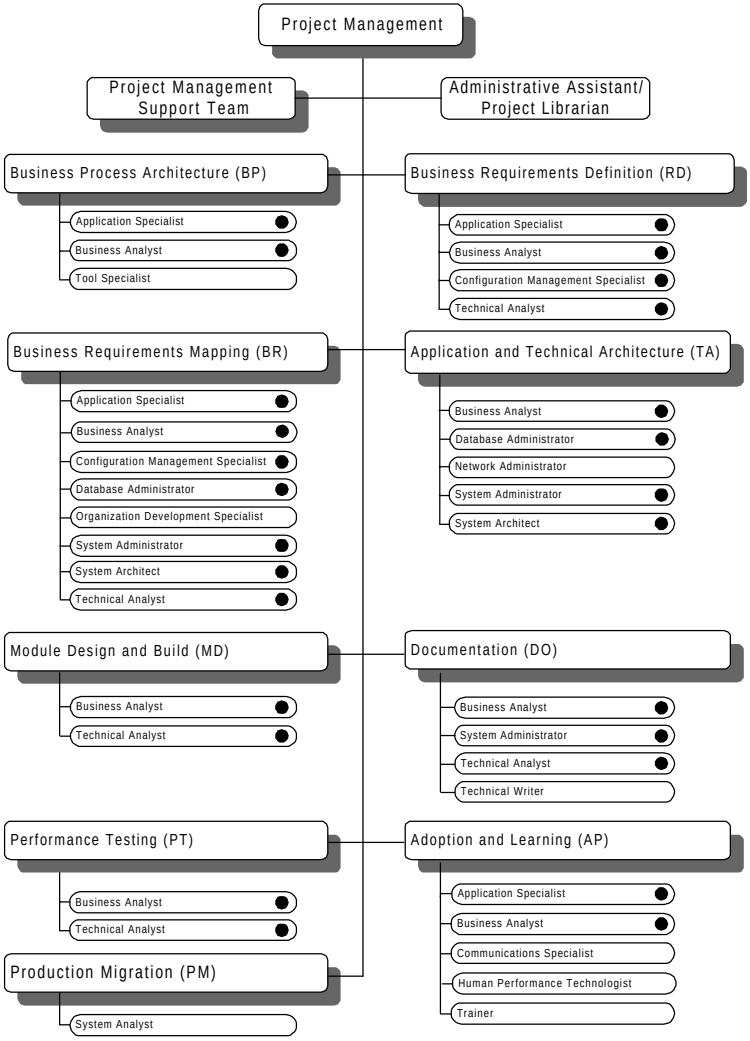

Figure 3-4 Operations Analysis Staffing

Staffing Suggestions

This section provides advice and comments on project organization for the Operations Analysis phase.

Project Management (PJM)

The most important staffing related factors in Operations Analysis are:

- having the right mix of skills due to the diversity of processes occurring simultaneously
- fostering a sense of ownership of key decisions by appropriate managers
- obtaining sufficient senior management, information systems, and user commitment to help ensure accurate and timely results
- verifying that staff follow a systematic plan with appropriate guidelines, standards, and milestones
- dealing effectively with a mixed project team if you are using people from various organizations (such as multiple consulting firms, hardware/software vendors, or employees)

User and information systems membership in the core project team is an effective tool in fostering a sense of ownership in the new system. Consideration should be given to full-time participation by key user and information technology staff. Management personnel who realize the importance of the application implementation and the fact that its success is based on their involvement better understand your request for full-time staff.

Business Process Architecture (BP)

A detailed understanding of the organization's business processes is required, along with the ability to relate the high-level process vision to detailed future process models.

Business Requirements Definition (RD)

Substantial efficiencies can be gained by using key people throughout Business Requirements Definition and Business Requirements Mapping (BR).

The main difference, from a staffing point of view, between these two processes is that a critical mass of knowledge must exist regarding how the standard Oracle Applications function during Business Requirements Mapping (BR). This is where final decisions are made

regarding what aspect of the standard applications suffices and where customizations and/or workarounds are needed. Ideally, thorough applications knowledge will exist throughout the entire project.

Business Requirements Mapping (BR)

Sufficient expertise must exist regarding standard application functionality to accurately map requirements to the applications, identify gaps, and define customizations and/or workarounds. In addition, detailed understanding of the organization's business processes is required, along with the ability to relate these to application functionality. Maximize continuity between the Business Requirements Definition (RD) and Business Requirements Mapping by retaining key personnel.

Application and Technical Architecture (TA)

This process must be staffed by an experienced system architect who is knowledgeable in hardware, network, and operating system considerations.

Module Design and Build (MD)

Module Design and Build work can begin when a gap is identified. In some cases, team members may be assigned too late to take advantage of the process overlap opportunities between mapping and design. As a result, benefits to the project schedule are not recognized.

Documentation (DO)

During Operations Analysis, the Documentation Environment (DO.040) must be prepared to meet the needs of the people assigned to developing documentation. Be sure to involve the writers in determining their environment requirements.

Performance Testing (PT)

The fundamental approach to Performance Testing, and the design of the mechanisms to be used, is defined during Operations Analysis. If the work in this phase is accomplished well, it may be possible to use less skilled staff to carry out the remainder of the Performance Testing plan. Verify that the technical architecture supports the forecasted load by confirming that sufficient expertise is applied to this process.

Adoption and Learning (AP)

During Operations Analysis, the middle and first-line managers who are not on the project team are apprised of the strategy and goals for the project. These individuals are then responsible for spreading the word within their own groups. For this reason, the middle and front-line managers selected for these events should have the responsibility over the affected areas of the business, as well as the span of control over the individual parts of the organization to make these events as efficient as possible.

Production Migration (PM)

During Operations Analysis, the Transition Strategy (PM.010) is prepared. This document is critical for a successful move to production. Be sure that the individuals selected to define the strategy have a sufficient understanding of the transition requirements.

Quality Criteria

Use the following criteria to check the quality and completeness of the core and optional tasks within the Operations Analysis phase.

Core Tasks

- ❑ Has the Future Process Model (BP.080) been approved by the organization's senior management?
- ❑ Have all business requirements been identified and documented?
- ❑ Have solutions to close gaps to business requirements been approved by the organization's senior management?
- ❑ Has the technical architecture of hardware and software in which the system must perform been identified?
- ❑ Has the Transition Strategy (PM.010) been approved by the organization's senior management?

Optional

- ❑ Have all application extensions been defined and estimated?
- ❑ Do the Performance Test Scenarios (PT.020) and Performance Test Transaction Models (PT.030) address the full scope outlined in the Performance Testing Strategy (PT.010) and are they decomposed to the appropriate level of detail?
- ❑ Is the final Conceptual Architecture (TA.070) understood and agreed upon by the IS manager and project sponsor?

CHAPTER

4 Solution Design

This chapter describes the Solution Design phase of AIM. The goal of Solution Design is to use the requirements created during Operations Analysis and finalize the system design and proposed applications setups.

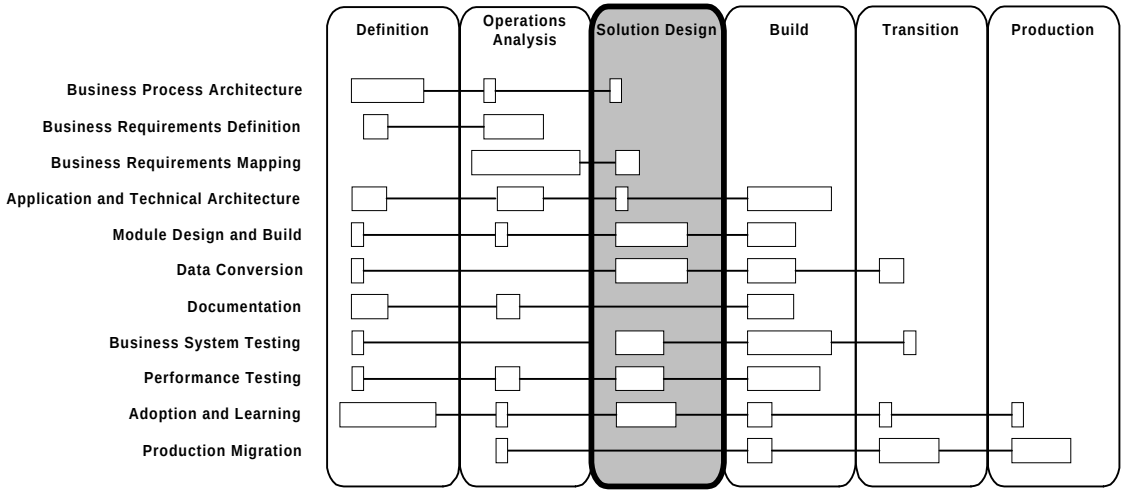

Figure 4-1 Context of AIM Solution Design Phase

Overview

This section provides an overview of Solution Design.

Objectives

The objectives of Solution Design are as follows:

- Produce a design that meets functional requirements within business, technical, and financial constraints.
- Document the design specifications in a way that facilitates and supports future maintenance of the system.
- Define proposed application setups and test plans.
- Create job-level designs that support proposed business processes.
- Design the security architecture of the new system.
- Develop functional and technical designs for custom extensions, interfaces, conversion programs, and database extensions.
- Develop unit, link, system, and system integration test scripts.
- Design performance test scripts, test transaction programs, and test data load programs.
- Analyze user learning needs and develop the User Learning Plan (AP.140).

Critical Success Factors

The critical success factors of Solution Design are as follows:

- clearly documented application setups and security profiles
- a system test script based on the new business processes
- a User Learning Plan (AP.140) that takes into consideration the user's learning needs

- active participation by key management and knowledgeable user and technical representatives from areas of the business affected by the project
- adequate knowledge of the capabilities and features of the application and available technology
- designs that are traceable to business requirements
- designs that remain within scopes
- allocation of sufficient time resources
- well-managed change control system
- a good framework for transition and contingency planning

Prerequisites

Prerequisites for Solution Design follow. You should review these prerequisites, if they exist, prior to beginning this phase. Otherwise, you may need to create them during Solution Design. Some of the prerequisites identified below are also deliverables produced within this phase. The reason they are included in this section is because they are used as input to other tasks within this phase.

Prerequisite	Source
Detailed Existing System Data Model	Organization
Existing Reference Material	Organization
Legacy Data Cleanup	Organization
Organization-Specific Internal Standards	Organization
Oracle Designer Repository	Oracle

Prerequisite	Source
Oracle Applications Documentation Library: Oracle Applications Open Interface Manuals, Application Reference Manuals and Documentation, Oracle Applications Object Library Reference Manual, Oracle Applications User Interface Standards, and Oracle Applications Coding Standards	Oracle
Oracle Technical Reference Manuals	Oracle
Project Management Plan	Project Management
Quality Management Strategies, Standards, and Procedures	Project Management
Change Catalog	Business Process Architecture
Current Process Model	Business Process Architecture
Future Process Model	Business Process Architecture
Business Procedure Documentation	Business Process Architecture
Current Financial and Operating Structure	Business Requirements Definition
Process and Mapping Summary	Business Requirements Definition
Business Volumes and Metrics	Business Requirements Definition
Business Requirements Scenarios	Business Requirements Definition
Audit and Control Requirements	Business Requirements Definition
Master Report Tracking List	Business Requirements Definition

Prerequisite	Source
Mapped Business Requirements	Business Requirements Mapping
Mapped Business Data	Business Requirements Mapping
Integration Fit Analysis	Business Requirements Mapping
Information Model	Business Requirements Mapping
Confirmed Business Solutions	Business Requirements Mapping
Application Setup Documents	Business Requirements Mapping
Architecture Requirements and Strategy	Application and Technical Architecture
Application Architecture	Application and Technical Architecture
System Availability Strategy	Application and Technical Architecture
Conceptual Architecture	Application and Technical Architecture
Application Security Architecture	Application and Technical Architecture
Application Extension Strategy	Module Design and Build
Application Extension Definition and Estimates	Module Design and Build
Design Standards	Module Design and Build
Build Standards	Module Design and Build

Prerequisite	Source
Application Extensions Functional Design	Module Design and Build
Database Extensions Design	Module Design and Build
Application Extensions Technical Design	Module Design and Build
Data Conversion Requirements and Strategy	Data Conversion
Conversion Standards	Data Conversion
Conversion Environment	Data Conversion
Conversion Data Mapping	Data Conversion
Conversion Program Designs	Data Conversion
Glossary	Documentation
Documentation Standards and Procedures	Documentation
Documentation Environment	Documentation
User Reference Manual	Documentation
User Guide	Documentation
Testing Requirements and Strategy	Business System Testing
Link Test Script	Business System Testing
System Test Script	Business System Testing
Performance Testing Strategy	Performance Testing
Performance Test Scenarios	Performance Testing
Performance Test Transaction Models	Performance Testing

Prerequisite	Source
Performance Test Scripts	Performance Testing
Performance Test Data Design	Performance Testing
Executive Project Strategy	Adoption and Learning
Business Unit Managers' Readiness Plan	Adoption and Learning
Project Readiness Roadmap	Adoption and Learning
Managers' Readiness Plan	Adoption and Learning
Business Process Organizational Impact	Adoption and Learning
Human Performance Support Systems	Adoption and Learning
User Learning Needs Analysis	Adoption and Learning

Table 4-1 Solution Design Phase Prerequisites

Processes

The processes used in this phase follow:

Business Process Architecture (BP)

Develop the Business Procedure Documentation (BP.090) that can serve as input into the creation of learning materials and user documentation.

Business Requirements Mapping (BR)

Finalize application setups, security profiles, parameters, and user security structures.

Application and Technical Architecture (TA)

Design the application and database configuration to support the security requirements.

Module Design and Build (MD)

Define standards for designing and building application extensions. Design application extensions to address functionality gaps identified during Business Requirements Mapping (BR).

Data Conversion (CV)

Define the conversion standards to be used throughout the Data Conversion process. Prepare the Conversion Environment (CV.030) to support the design and build activities of conversion. Map the data elements from the legacy environment to the new system. Define the plan to convert the business objects requiring manual conversion. Design and document the conversion programs. Outline the testing plans for the unit, business object, and validation testing for conversion.

Business System Testing (TE)

Develop the detailed test scripts for each type of testing, including unit, link, system, and systems integration testing. Test scripts can include test checklists, test specifications or steps, test data profiles, and test sequences.

Performance Testing (PT)

Develop scripts that detail the steps to be executed in the performance tests. Design the performance test database and identify how it will be populated. Design any special database loading programs needed.

Design the test transaction programs needed to execute the test model and scripts.

Adoption and Learning (AP)

Document the organizational change brought about by the new system. Define the human performance support systems requirements and execute the approach to support the performance of users in their new roles. Transition the information technology groups to the requirements for the new system. Gather insights on the learning needs for all audiences of users. Develop the learning plan to re-skill the users for their new roles.

Key Deliverables

The key deliverables of this phase are as follows:

Deliverable	Description
Application Setup Documents	Definition of detailed setup parameters that has been proven to support the system.
Approved Designs	Provides management approval of the functional and technical designs for the application extensions reviewed and indicates management's agreement to proceed with development.
Conversion Data Mapping	The mapping of the legacy system files and data elements to the target application tables and columns.
Conversion Program Designs	The designs that detail the program logic and rules coded in the conversion programs.
System Test Script	Develop the System Test Script (TE.040) to test the target applications' support of business processes including any application extensions.

Deliverable	Description
Systems Integration Test Script	Develop the Systems Integration Test Script (TE.050) to test the integration of interfaces between the target application system and third-party and legacy systems.
User Learning Plan	Describes a customized approach for reskilling those employees whose knowledge, skills, and aptitudes need to change so the full benefit of the new technology can be realized.

Table 4-2 Solution Design Phase Key Deliverables

Attention: Key deliverables represent the culmination, end result, or major milestone of activities performed during a phase. They should not be confused with deliverables produced by core tasks. Core tasks produce the minimum set of deliverables needed for every project; key deliverables represent the end result and define the end of each phase. However, not every key deliverable is required for every project. For example, Conversion Program Designs (CV.060) are only created when a project includes *programmatic data conversion* of legacy business objects.

Approach

This section describes the approach for Solution Design.

Tasks and Deliverables

The table below lists the tasks executed and the deliverables produced during Solution Design.

ID	Task	Deliverable	Type*
Business Process Architecture			
BP.090	Document Business Procedures	Business Procedure Documentation	MI
Business Requirements Mapping			
BR.100	Define Application Setups	Application Setup Documents	MI
BR.110	Design Security Profiles	Security Profiles	SI
Application and Technical Architecture			
TA.080	Define Application Security Architecture	Application Security Architecture	SI
Module Design and Build			
MD.030	Define Design Standards	Design Standards	SI
MD.040	Define Build Standards	Build Standards	SI
MD.050	Create Application Extensions Functional Design	Application Extensions Functional Design	MI, IT
MD.060	Design Database Extensions	Database Extensions Design	SI
MD.070	Create Application Extensions Technical Design	Application Extensions Technical Design	MI, IT
MD.080	Review Functional and Technical Designs	Approved Designs	SI
Data Conversion			
CV.020	Define Conversion Standards	Conversion Standards	SI
CV.030	Prepare Conversion Environment	Conversion Environment	SI
CV.040	Perform Conversion Data Mapping	Conversion Data Mapping	MI
CV.050	Define Manual Conversion Procedures	Manual Conversion Procedures	MI
CV.060	Design Conversion Programs	Conversion Program Design	MI
CV.070	Prepare Conversion Test Plans	Conversion Test Plans	MI

ID	Task	Deliverable	Type*
Business System Testing			
TE.020	Develop Unit Test Script	Unit Test Script	MI
TE.030	Develop Link Test Script	Link Test Script	MI
TE.040	Develop System Test Script	System Test Script	MI
TE.050	Develop Systems Integration Test Script	Systems Integration Test Script	MI
Performance Testing			
PT.040	Create Performance Test Scripts	Performance Test Scripts	MI
PT.050	Design Performance Test Transaction Programs	Performance Test Transaction Program Designs	MI
PT.060	Design Performance Test Data	Performance Test Data Design	SI
PT.070	Design Test Database Load Programs	Performance Test Database Load Program Designs	MI
Adoption and Learning			
AP.100	Identify Business Process Impact on Organization	Business Process Organizational Impact	SI
AP.110	Align Human Performance Support Systems	Human Performance Support Systems	MI, IT
AP.120	Align Information Technology Groups	Aligned Information Technology Groups	MI
AP.130	Conduct User Learning Needs Analysis	User Learning Needs Analysis	SI
AP.140	Develop User Learning Plan	User Learning Plan	SI

*Type: SI=singly instantiated, MI=multiply instantiated, MO=multiply occurring, IT=iterated, O=ongoing. See Glossary.

Table 4-3 Solution Design Phase Tasks and Deliverables

Core Task Dependencies

The diagram below shows the dependencies between core tasks in Solution Design.

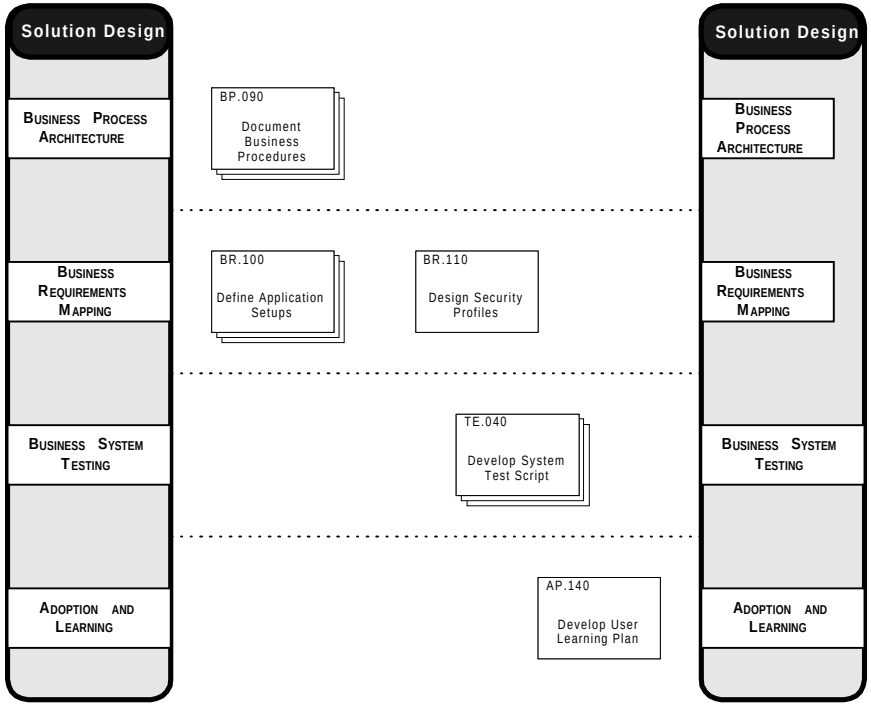

Figure 4-2 Solution Design Phase Core Task Dependencies

Core and Optional Task Dependencies

The diagram below shows the dependencies between core and optional tasks in Solution Design.

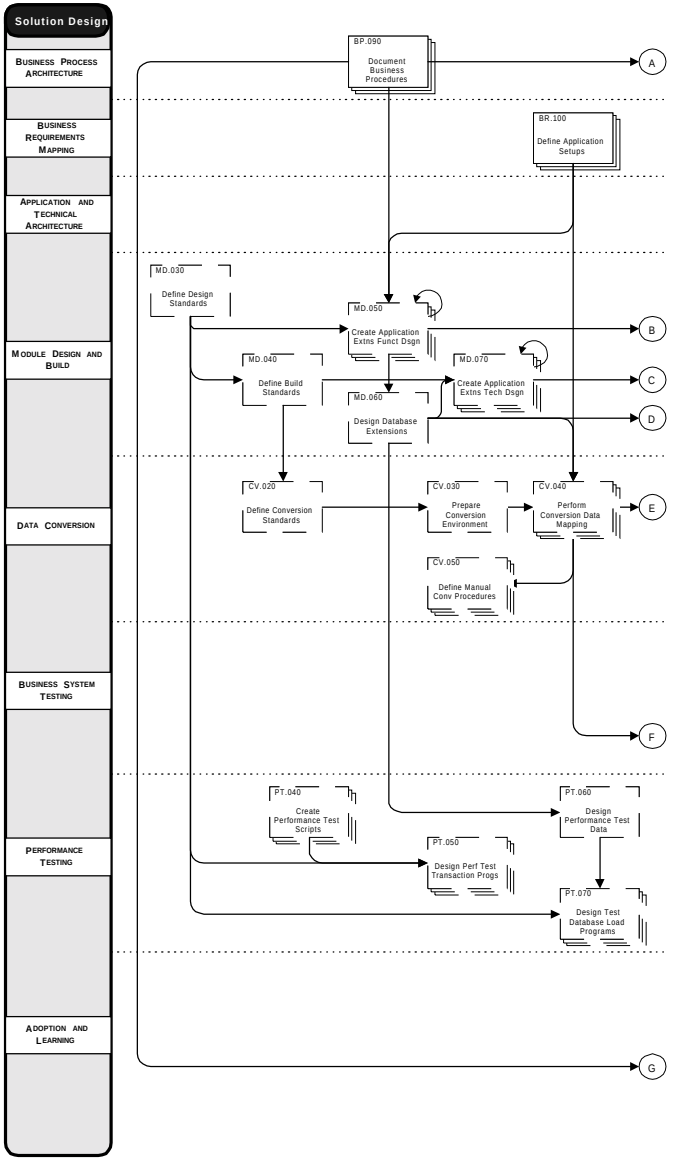

Figure 4-3 Solution Design Phase Core and Optional Task Dependencies

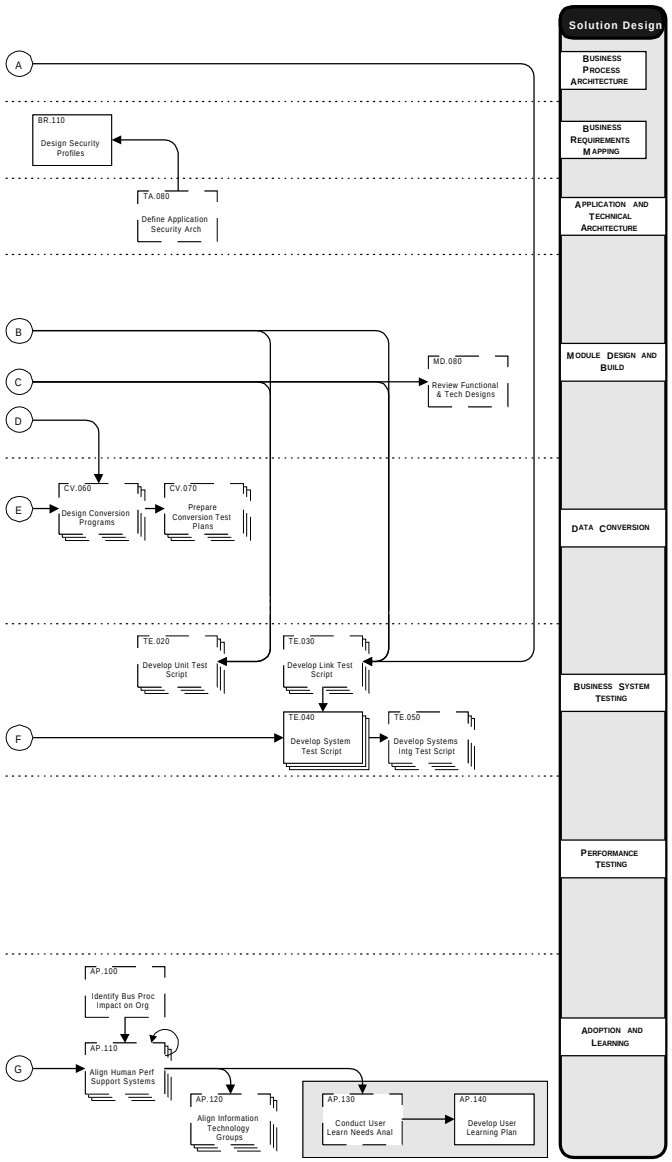

Figure 4-3 Solution Design Phase Core and Optional Task Dependencies (cont.)

Risk Management

The areas of risk and mitigation for Solution Design include the following:

Integration Management

Focus on integration issues between teams, business processes, organizations, and applications and identify and resolve integration issues through communication and definition of standards and procedures. Examples of areas that would include integration management are:

- business processes design
- systems testing strategies
- integration between functional and technical teams
- interfaces between Oracle Applications and third-party or legacy systems
- data cleanup and conversion strategies

Risk	Mitigation
Lack of appreciation of the dependency of performance testing on good quality applications setup data and converted data.	Have a member of the performance testing team review the work and deliverables relating to application setup and conversion.
Inadequate reflection of business requirements in test scripts.	Involve team members who were responsible for analyzing business processes and developing business requirements in test script development.

Planning

Planning is critical to maintaining project focus and direction. Initially the overall project plan is developed and the implementation strategy defined. As each phase progresses, subsequent phases are planned in detail. Plans include the people, tools, strategies, and procedures for accomplishing the objectives of the phase.

Risk	Mitigation
Underestimating time needed to build and debug automated performance test tool programs as well as the test database.	Realistically assess development time for a volume test database and/or automated testing tool transaction programs, and discuss development metrics with the testing tool vendor.
Insufficient development of conversion standards.	Start development of standards in Operations Analysis using the template for Prepare Conversion Standards (CV.020).

Quality Assurance

Quality assurance focuses on providing the infrastructure to support development of the key deliverables for the project. Producing high quality deliverables within the time and budget constraints of the project plan is key to reducing overall risk to the implementation. Areas of quality assurance include:

- adherence to the method
- establishing quality standards in the early planning process
- review of key deliverables
- establishing acceptance and sign-off procedures

Risk	Mitigation
Disruption to design activities due to frequent changes in requirements design and assumptions, and weak control over design libraries.	Implement a configuration management subsystem for controlling project deliverables. Establish a review and signoff process for each design.

Risk	Mitigation
Lack of clear standards and procedures for database and application design.	Verify that appropriate solution design standards are followed. Conduct reviews of solution design before approving.
Inaccurate or incomplete application setup data.	Link solution designs and setup data definitions to Definition and Operations Analysis deliverables.
Conversion data mapping is incomplete due to application configuration issues not being resolved and data defaults not selected.	Resolve the application setup unresolved issues that impact the conversion data mapping and decide on required data defaults.
Incorrect data conversion rules in conversion program design document.	Prepare the project team on establishing data conversion rules. Define all conversion rules that impact the conversion code in the Conversion Program Designs (CV.060) deliverable.
Inaccurate or incomplete linking between mapping solutions and test plans.	Verify that test scripts, including test specifications and data profiles, build on the mapping scenarios that were developed during Business Requirements Definition (RD).

Training and Performance Support

The skills required for a successful implementation must be considered and the project should be staffed with resources who have these skills to the extent possible. Training and performance support involves providing the learning events and information necessary to bring the knowledge and skills required for the project to the project team initially and to the entire organization as the project progresses. This may occur through formal learning events (application training) or through information dissemination (leading practices information). The main focus is the new business processes and the Oracle Applications functionality that supports the new processes, but also included are

other learning and performance support needs of both the project team and the user population for successfully implementing and transitioning to the new system.

Risk	Mitigation
Failure to take into account all impacts of proposed changes, such as skilling resources, re-organization, and process changes.	Include the associated Adoption and Learning (AP) tasks in the project workplan that address organizational change management issues and work closely with resources skilled in these techniques.
Poor design of automated performance test programs leading to re-coding to change transaction models and rates during test execution.	Recruit experienced automated testing tool technical staff or allow time to adequately prepare staff on the use of the tool.

Tips and Techniques

This section provides tips and techniques for managing Solution Design. In addition, advice and comments on each process are included.

Business Process Architecture (BP)

Business Procedure Documentation (BP.090) is based on business process designs and defines how work is performed at the job level. The documentation provides a foundation for user procedures and user learning, as well as business systems and acceptance testing.

Business Requirements Mapping (BR)

Applications setups are defined and security profiles are designed.

Application and Technical Architecture (TA)

When evaluating alternatives to complex security requirements, leverage the standard capabilities of the applications as much as possible. You can support more complex requirements with database extensions and custom software, but this solution takes more time and resources to develop and maintain.

Module Design and Build (MD)

A major focus of Solution Design is the design of application extensions as well as interfaces between Oracle Applications, legacy systems, and third-party applications.

The overall customization approach is defined in the Application Extension Strategy (MD.010) prepared during Definition. The Application Extension Definition and Estimates (MD.020) produced during Operations Analysis are refined, and detailed designs created.

The first priority is to define the Design Standards (MD.030) and Build Standards (MD.040) that designers and developers must follow. Design and build standards are needed for the types of modules that you plan to build to support the approaches defined during Operations Analysis. For example, if none of the approaches selected for implementation require the use of database triggers, related standards are not needed. Once design standards are defined, designers can begin writing functional design documents while the build standards are being documented.

If there are many customizations, the Module Design and Build process can consume a large portion of the schedule and budget. It is important to schedule the appropriate technical resources and allocate time for business analysts and users to participate in testing. The project plan should include sufficient detail so that resources can be assigned to individual modules.

Data Conversion (CV)

At the beginning of Solution Design, or once the Data Conversion Requirements and Strategy (CV.010), Design Standards (MD.020), and Build Standards (MD.030) deliverables are complete, the conversion standards should be created. The conversion team should follow these standards when performing conversion tasks

Next, prepare the environment that is to be used for the Data Conversion design, build, and testing tasks, then map the legacy data elements to the tables and columns of the new systems. If a standard application program interface (API) is provided with the Oracle Application, the legacy data should be mapped to the standard interface tables and columns.

After the Conversion Data Mapping is complete, the Conversion Programs (CV.080) should be designed. If an automated conversion

tool is being used, you may need traditional code. Regardless of the tools being used, conversion business rules must be defined.

During this phase, Conversion Test Plans (CV.070) are developed. A manual conversion plan needs to be constructed if manual data conversions will be employed.

Business System Testing (TE)

The key focus is developing test scripts for unit, link, system, and systems integration testing. In general, test scripts include test steps and test data profiles. Unit tests usually include checklists, while systems and systems integration tests include test sequences.

The Business System Testing process emphasizes reusing test script components wherever possible to avoid duplication of effort. For example, when developing the components of the System Test Script (TE.040), it is important to build on the mapping scenarios and data profiles that were previously developed, as well as the link test scripts that are related to the business functionality that is being tested. Each level of testing builds on the previous level, testing materials are re-used, and business processes are tested in successively larger and larger pieces.

To adequately test a complex system you need extensive testing scenarios to exercise each piece of application functionality. Inadequate test preparation can create the impression that the system has problems, when in reality the testing process is at fault.

Performance Testing (PT)

After the team arrives at feasible models for Performance Testing, the technical analysts design the database and test programs needed to create the test transactions. The technical analysts decompose the transaction models into test scripts that specify the individual transactions and events to be created during the test. If you are using an automated load testing tool for Performance Testing, the technical analysts create programs to manage the specific transactions and user simulation. If not, the majority of the work in Solution Design is focused on the test database design.

One of the critical success factors for this process is the inclusion of testing against a volume test database. Performance Testing is potentially the only area where testing of the system against a significant volume of data occurs. Unfortunately, the bulk loading of data to create a database that is *industrial-sized* can be time consuming.

There may be opportunities to leverage other work in the project to alleviate this task (for example, by reusing the programs created by the data conversion process). If the project has good quality application data already set up, copy another database to provide the setup data to bulk load data.

Adoption and Learning (AP)

During Solution Design, the learning needs of the organization are assessed and the plans are established for developing and conducting the learning events. Although the published versions of the User Guide (DO.070), User Reference Manual (DO.060), and System Management Guide (DO.090) are not available, you should plan to use the current state of these deliverables as the basis for the learning material content. The classes should be role-based and provide users with a thorough introduction to their new responsibilities and procedures.

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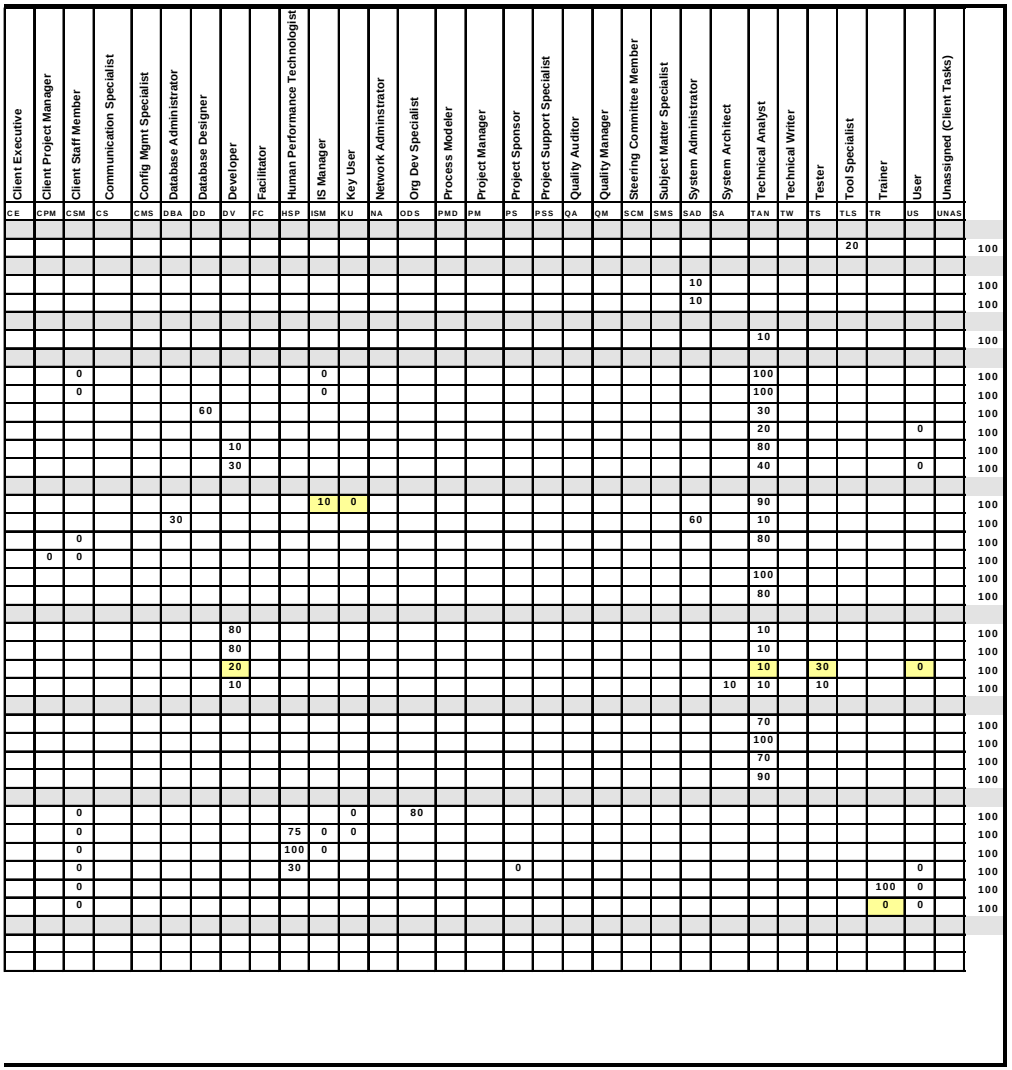
Estimating

The table below indicates the typical percentage of effort required by each task by role.

Solution Design			Phase Effort	Adult Learning Specialist	Application Specialist	Assessment Specialist	Business Analyst	Business Line Manager
ID	Task			ALS	AS	ASSP	BA	BLM
Business Process Architecture		*1%*						
C.BP.090	Document Business Procedures		1%				80	0
Business Requirements Mapping		*3%*						
C.BR.100	Define Application Setups		2%		50		40	
C.BR.110	Design Security Profiles		0%		30		60	
Application and Technical Architecture		*1%*						
C.TA.080	Define Application Security Architecture		1%		60		30	
Module Design and Build		*19%*						
C.MD.030	Define Design Standards		1%					
C.MD.040	Define Build Standards		1%					
C.MD.050	Create Application Extensions Functional Design		5%				10	
C.MD.060	Design Database Extensions		0%				80	
C.MD.070	Create Application Extensions Technical Design		10%				10	
C.MD.080	Review Functional and Technical Designs		2%				30	0
Data Conversion		*15%*						
C.CV.020	Define Conversion Standards		2%					
C.CV.030	Prepare Conversion Environment		4%					
C.CV.040	Perform Conversion Data Mapping		5%		20			
C.CV.050	Define Manual Conversion Procedures		1%		70		30	
C.CV.060	Design Conversion Programs		2%					
C.CV.070	Prepare Conversion Test Plans		1%		20			
Business System Testing		*31%*						
C.TE.020	Develop Unit Test Script		1%				10	
C.TE.030	Develop Link Test Script		3%				10	
C.TE.040	Develop System Test Script		27%		0		40	
C.TE.050	Develop Systems Integration Test Script		1%				60	
Performance Testing		*0%*						
C.PT.040	Create Performance Test Scripts		0%				30	
C.PT.050	Design Performance Test Transaction Programs		0%					
C.PT.060	Design Performance Test Data		0%				30	
C.PT.070	Design Test Database Load Programs		0%				10	
Adoption and Learning		*2%*						
C.AP.100	Identify Business Process Impact on Organization		0%				20	0
C.AP.110	Align Human Performance Support Systems		0%	25				0
C.AP.120	Align Information Technology Groups		0%					
C.AP.130	Conduct User Learning Needs Analysis		0%	70				0
C.AP.140	Develop User Learning Plan		2%					
C.AP.140	Develop User Learning Plan			100				
Project Management		*29%*						
PJM	Manage Phase		12%					
CONT	Contingency		17%					
		100%						

- FastForward Task
- Core Tasks
- Optional Component of a Task
- Role % Adjusted for FastForward

Table 4-4 Solution Design Phase Estimating



Client Executive	Client Project Manager	Client Staff Member	Communication Specialist	Config Mgmt Specialist	Database Administrator	Database Designer	Developer	Facilitator	Human Performance Technologist	IS Manager	Key User	Network Adminstrator	Org Dev Specialist	Process Modeler	Project Manager	Project Sponsor	Project Support Specialist	Quality Auditor	Quality Manager	Steering Committee Member	Subject Matter Specialist	System Administrator	System Architect	Technical Analyst	Technical Writer	Tester	Tool Specialist	Trainer	User	Unassigned (Client Tasks)	
CE	CPM	CSM	CS	CMS	DBA	DD	DV	FC	HSP	ISM	KU	NA	ODS	PMD	PM	PS	PSS	QA	QM	SCM	SMS	SAD	SA	TAN	TW	TS	TLS	TR	US	UNAS	
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Table 4-4 Solution Design Phase Estimating (cont.)

Scheduling Suggestions

If your project includes applications extensions and complex conversions, work in Solution Design can be dominated by these activities. Create subtasks in your project plan for each extension and conversion business object so that you can monitor progress at the lowest level. This granularity also allows you to collect meaningful actuals so that you can refine your estimating metrics for future projects.

If you are overlapping project phases, Solution Design and Build provide a very natural overlap opportunity. You can save time and maximize utilization of technical staff by moving directly from design to build for each extension. However, coordination of design activities and following proper approval procedures is more critical with this approach.

Scheduling suggestions for each process in Solution Design follow:

Project Management (PJM)

Project management review and acceptance meetings that are critical to Solution Design should be reflected in the schedule.

Consistently applying the policies, procedures, standards, guidelines, and tools provided to the project team members responsible for designing the new system can have a positive impact on the timeline. For example:

- Use an effective test database instance with sufficient test data to explore different scenarios.
- Use design walkthroughs to identify integration problems that could be time consuming if discovered during testing.
- Require unit test plans.
- Control design changes.

The information flow between the designers and other team members is important; however, be sure to limit unnecessary interruptions. Consider assigning designers to a physical location that is out of the mainstream.

In addition to application customizations, designs for data conversion, interfaces, technical architecture, performance testing, and user learning

are produced during this phase. Emphasis on customizations may detract from the importance of addressing these other development areas. Thorough planning and tracking can prevent schedule slippage due to last minute learning material development or an interface that was overlooked.

If a phased deployment approach is to be used, you may have both legacy and new systems in production simultaneously. Determine how consolidated reporting and queries are to be addressed. You may need temporary bridge systems to pass transactions from one system to the other, so that both the new and legacy system can access all data.

Issue management can have a major impact on the schedule for Solution Design. Emphasize the importance of identifying, documenting, investigating, and resolving issues in a timely manner.

Business Process Architecture (BP)

Use of a software tool, such as Oracle Tutor, brings the following advantages to the preparation of Business Procedure Documentation (BP.090):

- provides a consistent format
- saves time because of the library of generic procedures that only need tailoring
- allows for central distribution and maintenance
- provides access to Oracle courseware on the application

Business Requirements Mapping (BR)

The use of Oracle's workflow based setup tool, the Application Implementation Wizard (AIW) reduces the time it takes to do the physical setup, and guides you through the setup steps in the appropriate sequence.

Application and Technical Architecture (TA)

There are no specific scheduling suggestions for this process in this phase.

Module Design and Build (MD)

The primary scheduling factors associated with Module Design and Build are:

- the number of available and qualified team members
- the availability of an appropriate work environment
- the accuracy and completeness of the information developed in previous phases
- the extent to which tasks can be conducted in parallel

Data Conversion (CV)

Allow for changes to the conversion modules caused by the discovery of new requirements during the performance of Module Design and Build (MD) tasks.

Business Systems Testing (TE)

Business System Testing requires carefully documented test scenarios that include expected results. The scheduling of staff depends on the number of application extensions and interfaces being developed and whether multi-site implementations will share common extensions and interfaces.

Performance Testing (PT)

Performance Testing may be complicated by multi-phase / multi-site deployment approaches, resulting in a longer time requirement. Your system load will also increase over time. This potentially complicates performance testing but allows a cost savings by phasing in additional computer and network capacity as necessary.

Adoption and Learning (AP)

The schedule during Solution Design for the Adoption and Learning process can fluctuate tremendously depending on the following three factors:

- degree of organizational change
- extent of technology jump
- number of users and information technology resources

The impact of these factors affects how the enterprise needs to be restructured to support the business requirements in the new system. You should assess the delta between where the organization is today and where it is headed with the implementation project and adjust the schedule accordingly.

Staffing

The diagram below illustrates the roles that are needed to staff each process during Solution Design. In some cases, the same person should be used to staff the same logical role found in different processes (shared role). In other cases, different people can be used to staff the same role in different processes (unique role).

Solution Design Organization

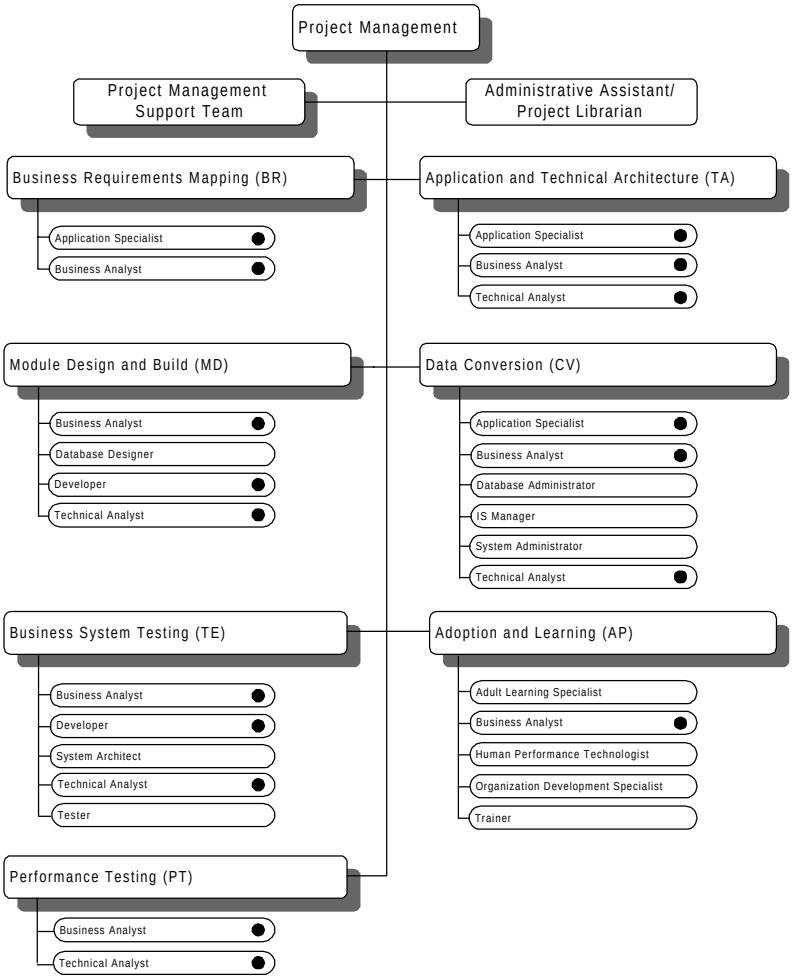

Figure 4-4 Solution Design Staffing

Staffing Suggestions

This section provides advice and comments on project organization for Solution Design.

Project Management (PJM)

During Solution Design, the primary staffing factor is the transition to a more technical team; the functional requirements should be complete. Your primary focus is addressing gaps between the organization's needs and the standard applications. This requires knowledge of the standard application's functionality and technical architecture in order to effectively design the new system.

In multi-phase / multi-site projects there may be impacts on the design of learning events, technical architecture, interface modules, application extensions, and data conversion custom software modules.

Business Process Architecture (BP)

To develop good Business Procedure Documentation (BP.090), a detailed understanding of the organization's business processes is required, along with good knowledge about the application's functionality.

Business Requirements Mapping (BR)

Although staffing continuity maintains the project productivity level, budget considerations may require that some team members be phased out when their tasks are completed. Be sure that sufficient documentation is transferred to the project before team members are released from their responsibilities.

For multi-phase / multi-site deployments, try to select staff who have experience with this approach. Experienced staff may identify key requirements that otherwise might be missed.

Application and Technical Architecture (TA)

There are no specific staffing suggestions for this process in this phase.

Module Design and Build (MD)

Experienced staff should develop the functional design specifications. Technical specifications may be created by less experienced staff, but should be reviewed by an experienced project team member.

A good development lead on a medium to large project can manage the schedule and provide technical leadership. On a small project, the project manager might perform this role. The development lead is responsible for the creation of application extensions — an expensive corporate asset. Using a structured, systematic development approach that emphasizes quality control is essential.

If multiple deployment phases are used, additional customizations may be requested or required for each deployment. Determine whether additional interface development and Data Conversion tasks are needed by a specific deployment.

Data Conversion (CV)

To develop the Data Conversion designs, technical and functional expertise and a good understanding of application integration data considerations are required.

Oracle's Advanced Conversion Team (ACT) provides expertise and tools tailored for Oracle Applications that could aid in making critical decisions.

Business System Testing (TE)

In this phase, the staff develops various test scripts. Technical resources are needed to develop unit and link test scripts. A business analyst is needed to develop the system and systems integration test scripts.

If a phased deployment is being used, determine the testing requirements that must be satisfied for each user community. Their approval of the system is closely tied to the Business System Testing results. Extensive or complicated testing may require additional staff.

Performance Testing (PT)

Consider using trained performance testing specialists from non-traditional sources to conduct practical performance tests. For example, many platform vendors, in conjunction with Oracle, provide performance testing services. You may be able to leverage their staff and facilities.

Adoption and Learning (AP)

The staffing requirements for the Adoption and Leaning tasks within Solution Design vary depending on the extent of organization or process change and the size of the user population. On smaller projects

with little organization or process change, more general resources can be given the responsibility for performing these tasks. However, on larger projects and projects with large organization or process change, more specialized resources are required.

The project managers should evaluate the extent of organization or process changes and determine the appropriate mix of staffing resources required to effectively complete these tasks.

Quality Criteria

Use the following criteria to check the quality and completeness of the core and optional tasks within the Solution Design phase.

Core Tasks

- ❑ Have business procedures been documented to reflect new business procedures?
- ❑ Have application setup documents and security profiles been documented?
- ❑ Has a system test script been developed to test application configuration and application extensions?
- ❑ Has the User Learning Plan (AP.140) been developed that takes into account user learning needs?

Optional Tasks

- ❑ Have the Design Standards (MD.030) and Build Standards (MD.040) been followed?
- ❑ Are the application extensions functional?
- ❑ Have the technical designs been created?
- ❑ Are the Conversions Programs (CV.080) properly designed and validation tested?
- ❑ Have unit (TE.020), link (TE.030), and systems integration test scripts (TE.050) been created?
- ❑ Have performance tests been designed and test scripts been prepared?
- ❑ Have user learning needs been analyzed?

CHAPTER

5 Build

This chapter describes the Build phase of AIM. The goal of Build is to formulate the detailed requirements for the computer application system and to propose a solution.

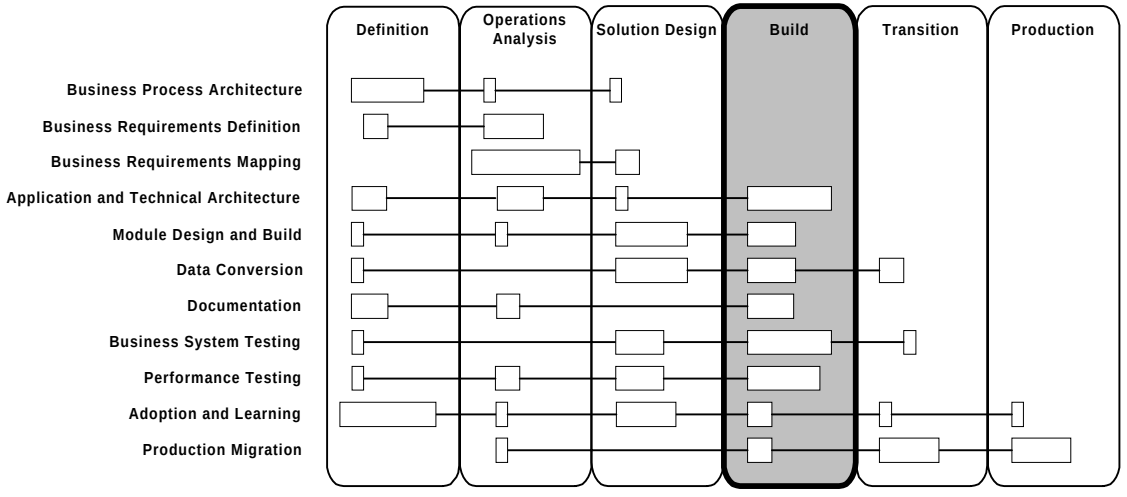

Figure 5-1 Context of AIM Build Phase

Overview

This section provides an overview of the Build phase.

Objectives

The objectives of the Build phase follow:

- Define the Application and Database Server Architecture (TA.090).
- Define the Platform and Network Architecture (TA.120).
- Define the detailed technical architecture that supports the business requirements and performance goals.
- Prepare the Development Environment (MD.090).
- Develop, test, and accept custom software, including:
  - application extensions
  - interface programs
  - data conversion software
  - custom application subsystems integrated with Oracle Applications
  - temporary bridge subsystems which transaction data between legacy and new systems during multiple deployments
- Create, test, and accept database extension and installation routines.
- Develop and accept all documentation deliverables including:
  - User Reference Manual (DO.060)
  - User Guide (DO.070)
  - Technical Reference Manual (DO.080)
  - System Management Guide (DO.090)

- Develop performance test components, execute performance tests, and prepare a report.
- Develop the User Learningware (AP.150) and the User Learning Environment (AP.160).

Critical Success Factors

The critical success factors of the Build phase follow:

- accurate and complete design documentation
- clear design and testing of platform, network, and other technical considerations
- appropriate involvement of your selected hardware vendors in the configuration of the hardware environment
- adequate testing of module source code for application extensions and interfaces
- validation tested conversion programs that provide accurate data
- performance test results that meet performance expectations
- users prepared with User Learningware (AP.150) and User Learning Environment (AP.160)
- clear understanding of the business objectives being addressed by the project
- effective participation by executive and user management
- sufficient time and resources
- a productive build environment
- effective project management
- a productive team with appropriate skills

Prerequisites

Prerequisites for the Build phase follow. You should use these prerequisites, if they exist, prior to beginning this phase. Otherwise, you may need to create them during Build. Some of the prerequisites identified below are also deliverables produced within this phase. The reason they are included in this section is because they are used as input to other tasks within this phase.

Prerequisite	Source
Existing System Capacity Strategy or Analysis Documentation	Organization
System Management Documents Describing Current Tools and Procedures	Organization
Current Support Requirements	Organization
Physical Database Design	Oracle
Project Management Plan	Project Management
Physical Resource Plan	Project Management
Prepared Infrastructure	Project Management
Current Process Model	Business Process Architecture
Business Procedure Documentation	Business Process Architecture
Process and Mapping Summary	Application and Technical Architecture
Business Volumes and Metrics	Business Requirements Definition
Business Requirements Scenarios	Business Requirements Definition

Prerequisite	Source
Application Setup Documents	Business Requirements Mapping
High-Level Gap Analysis	Business Requirements Mapping
Mapped Business Requirements	Business Requirements Mapping
Architecture Requirements and Strategy	Application and Technical Architecture
Current Technical Architecture Baseline	Application and Technical Architecture
Application Architecture	Application and Technical Architecture
System Availability Strategy	Application and Technical Architecture
Conceptual Architecture	Application and Technical Architecture
Application Security Architecture	Application and Technical Architecture
Application and Database Server Architecture	Application and Technical Architecture
System Capacity Plan	Application and Technical Architecture
Platform and Network Architecture	Application and Technical Architecture
Application Deployment Plan	Application and Technical Architecture
Performance Risk Assessment	Application and Technical Architecture

Prerequisite	Source
System Management Procedures	Application and Technical Architecture
Design Standards	Module Design and Build
Build Standards	Module Design and Build
Application Extensions Functional Design	Module Design and Build
Database Extensions Design	Module Design and Build
Application Extensions Technical Design	Module Design and Build
Approved Designs	Module Design and Build
Development Environment	Module Design and Build
Custom Database Objects	Module Design and Build
Module Source Code	Module Design and Build
Installation Routines	Module Design and Build
Data Conversion Requirements and Strategy	Data Conversion
Conversion Standards	Data Conversion
Conversion Environment	Data Conversion
Conversion Data Mapping	Data Conversion
Manual Conversion Procedures	Data Conversion
Conversion Program Designs	Data Conversion
Conversion Test Plans	Data Conversion
Conversion Programs	Data Conversion

Prerequisite	Source
Unit-Tested Conversion Programs	Data Conversion
Business Object-Tested Conversion Programs	Data Conversion
Validation-Tested Conversion Programs	Data Conversion
Documentation Requirements and Strategy	Documentation
Documentation Standards and Procedures	Documentation
Glossary	Documentation
Documentation Environment	Documentation
Documentation Prototypes and Templates	Documentation
User Reference Manual	Documentation
User Guide	Documentation
System Management Guide	Documentation
Testing Requirements and Strategy	Business System Testing
Unit Test Script	Business System Testing
Link Test Script	Business System Testing
System Test Script	Business System Testing
Systems Integration Test Script	Business System Testing
Testing Environments	Business System Testing
Unit-Tested Modules	Business System Testing
Link-Tested Modules	Business System Testing

Prerequisite	Source
Tested Installation Routines	Business System Testing
Prepared Key Users	Business System Testing
System-Tested Applications	Business System Testing
Integration-Tested System	Business System Testing
Performance Testing Strategy	Performance Testing
Performance Test Transaction Models	Performance Testing
Performance Test Transaction Program Designs	Performance Testing
Performance Test Data Design	Performance Testing
Performance Test Database Load Program Designs	Performance Testing
Performance Test Transaction Programs	Performance Testing
Performance Test Database Load Programs	Performance Testing
Performance Test Database	Performance Testing
Performance Test Environment	Performance Testing
Performance Test Results	Performance Testing
Project Team Learning Environment	Adoption and Learning
Human Performance Support Systems	Adoption and Learning
Aligned Information Technology Groups	Adoption and Learning
User Learning Plan	Adoption and Learning

Prerequisite	Source
User Learningware	Adoption and Learning
Transition Strategy	Production Migration
Production Support Infrastructure Design	Production Migration
Transition and Contingency Plan	Production Migration

Table 5-1 Build Phase Prerequisites

Processes

The processes used in this phase are as follows:

Application and Technical Architecture (TA)

Create detailed designs for application and database deployment and application configuration. Document the detailed hardware and network configuration needed to support the applications deployment, including system capacity planning. Document the System Management Procedures (TA.150) needed to maintain the system.

Model Design and Build (MD)

Develop custom application extensions, interface programs, and custom application subsystems to be integrated with Oracle Applications.

Data Conversion (CV)

Develop and test the Conversion Programs (CV.080) and perform conversion business object and validation testing.

Documentation (DO)

Create the User Reference Manual (DO.060), User Guide (DO.070), Technical Reference Manual (DO.080), and System Management Guide (DO.090) and prepare for transfer of ownership to the user community.

Business System Testing (TE)

Prepare Testing Environments (TE.060) and perform testing tasks for the application extensions to the new system. This includes the execution of the test scripts, documentation, and analysis of test results. It also includes the problem management process, whereby errors are identified, resolved, and retested.

Performance Testing (PT)

Develop the special database load and transaction programs, construct the test database, create the test environment, and execute the performance tests. Document the Performance Testing process and results in the final Performance Test Report (PT.130).

Adoption and Learning (AP)

Develop the User Learningware (AP.150) and prepare the User Learning Environment (AP.160).

Production Migration (PM)

Design the production support infrastructure and develop the Transition and Contingency Plan (PM.030) for the project.

Key Deliverables

The key deliverables of this phase are as follows:

Deliverable	Description
Application and Database Server Architecture	Provides a blueprint for the logical and physical architecture of the application and database servers. These servers are used in two of the three tiers of the architecture. This deliverable also details the configuration of these servers.
Platform and Network Architecture	Describes the deployment of the key hardware platform and network components of the new system and their relationship to the application and server architecture.
Validation-Tested Conversion Programs	The conversion programs that produce converted business objects that function correctly in the target applications system.
User Guide	Describes each business procedure and provides detailed instructions for using the applications in response to day-to-day business events.
Link-Tested Modules	The Link Test Script (TE.030) is executed to test the detailed interaction between related application extension modules.
System-Tested Applications	The System Test Script (TE.040) is executed to validate that the system meets defined business requirements and supports execution of business processes.

Deliverable	Description
Integration-Tested System	The integration between the target application system and other systems is tested.
Performance Test Report	Summarizes the work done in defining the performance test and presents the results from performance testing. It includes the testing approach, the test models, test hardware and software configuration, test results, and conclusions.
Transition and Contingency Plan	The transition plan, implementation contingency alternatives, and former systems decommission plan are developed.

Table 5-2 Build Phase Key Deliverables

Attention: Key deliverables represent the culmination, end result, or major milestone of activities performed during a phase. They should not be confused with deliverables produced by core tasks. Core tasks produce the minimum set of deliverables needed for every project; key deliverables represent the end result and define the end of each phase. However, not every key deliverable is required for every project. For example, an Integration-Tested System (TE.120) only exists when a project includes *interfaces* with external systems.

Approach

This section describes the approach for the Build phase.

Tasks and Deliverables

The table below lists the tasks executed and the deliverables produced during Build.

ID	Task	Deliverable	Type*
Application and Technical Architecture			
TA.090	Define Application and Database Server Architecture	Application and Database Server Architecture	SI
TA.100	Define and Propose Architecture Subsystems	Architecture Subsystems Proposal	MI
TA.110	Define System Capacity Plan	System Capacity Plan	SI
TA.120	Define Platform and Network Architecture	Platform and Network Architect	SI
TA.130	Define Application Deployment Plan	Application Deployment Plan	IT
TA.140	Assess Performance Risks	Performance Risk Assessment	SI
TA.150	Define System Management Procedures	System Management Procedures	SI
Module Design and Build			
MD.090	Prepare Development Environment	Development Environment	SI
MD.100	Create Database Extensions	Custom Database Objects	SI
MD.110	Create Application Extension Modules	Module Source Code	MI
MD.120	Create Installation Routines	Installation Routines	MI
Data Conversion			
CV.080	Develop Conversion Programs	Conversion Programs	MI
CV.090	Perform Conversion Unit Tests	Unit-Tested Conversion Programs	MI
CV.100	Perform Conversion Business Object Tests	Business Object-Tested Conversion Programs	MI
CV.110	Perform Conversion Validation Tests	Validation-Tested Conversion Programs	MI

ID	Task	Deliverable	Type*
Documentation			
DO.060	Publish User Reference Manual	User Reference Manual	IT
DO.070	Publish User Guide	User Guide	IT
DO.080	Publish Technical Reference Manual	Tech Reference Manual	IT
DO.090	Publish System Management Guide	System Management Guide	IT
Business System Testing			
TE.060	Prepare Testing Environments	Testing Environments	MI
TE.070	Perform Unit Test	Unit-Tested Modules	MI, IT
TE.080	Perform Link Test	Link-Tested Modules	MI, IT
TE.090	Perform Installation Test	Tested Installation Routines	IT
TE.100	Prepare Key Users for Testing	Prepared Key Users	SI
TE.110	Perform System Test	System-Tested Applications	IT
TE.120	Perform Systems Integration Test	Integration-Tested System	IT
Performance Testing			
PT.080	Create Performance Test Transaction Programs	Performance Test Transaction Programs	MI
PT.090	Create Test Database Load Programs	Performance Test Database Load Programs	MI
PT.100	Construct Performance Test Database	Performance Test Database	SI
PT.110	Prepare Performance Test Environment	Performance Test Environment	MI, IT
PT.120	Execute Performance Test	Performance Test Results	MI, IT
PT.130	Create Performance Test Report	Performance Test Report	SI
Adoption and Learning			
AP.150	Develop User Learningware	User Learningware	MI, IT
AP.160	Prepare User Learning Environment	User Learning Environment	SI
Production Migration			
PM.020	Design Production Support Infrastructure	Product Support Infrastructure Design	SI
PM.030	Develop Transition and Contingency Plan	Transition and Contingency Plan	SI

*Type: SI=singly instantiated, MI=multiply instantiated, MO=multiply occurring, IT=iterated, O=ongoing. See Glossary.

Table 5-4 Build Phase Tasks and Deliverables

Core Task Dependencies

The diagram below shows the dependencies between core tasks in the Build phase.

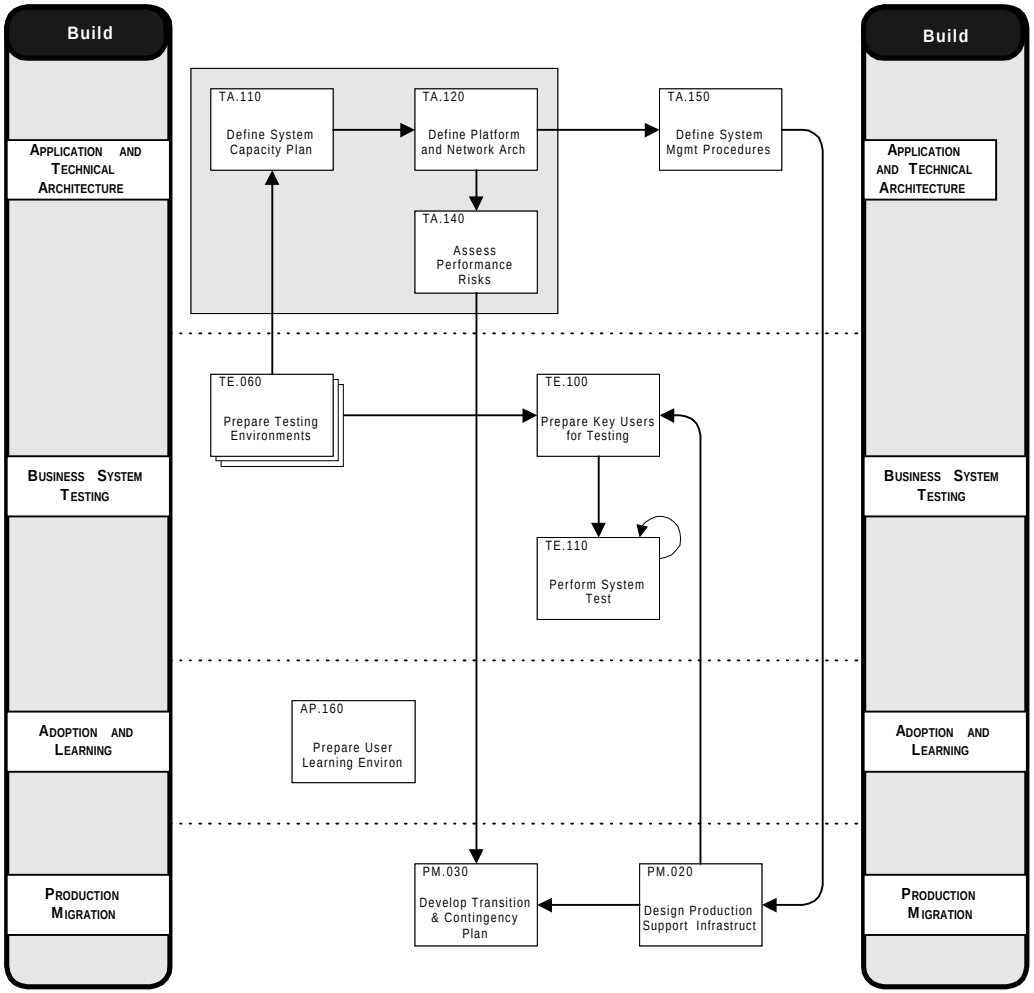

Figure 5-2 Build Phase Core Task Dependencies

Core and Optional Task Dependencies

The diagram below shows the dependencies between core and optional tasks in the Build phase.

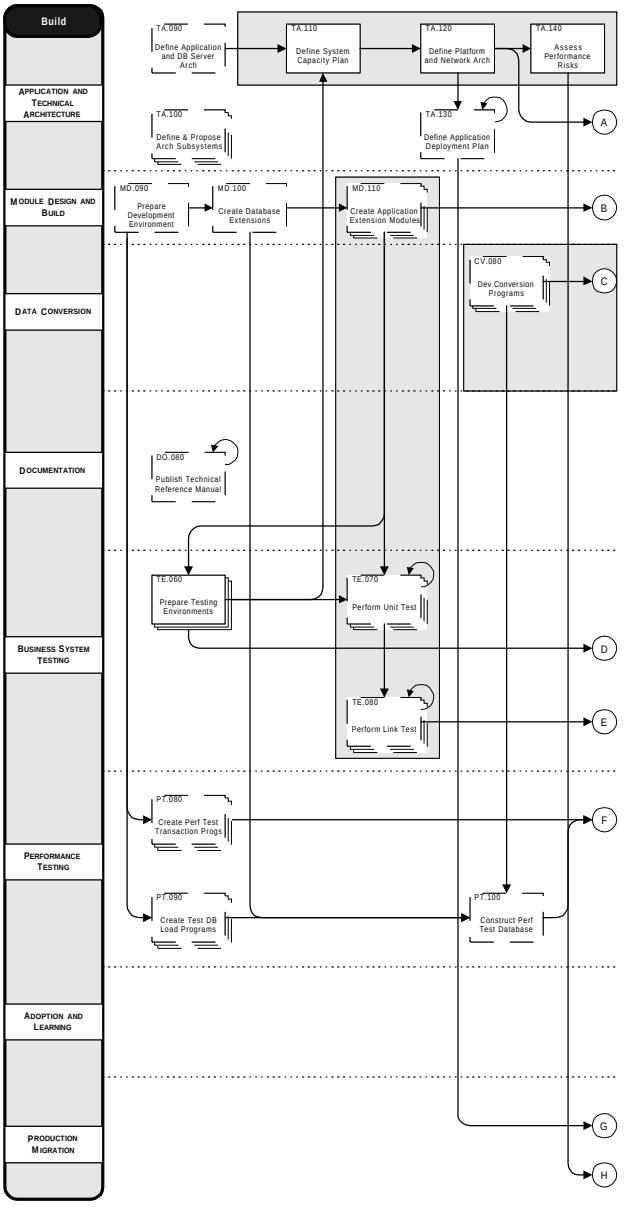

Figure 5-3 Build Phase Core and Optional Task Dependencies

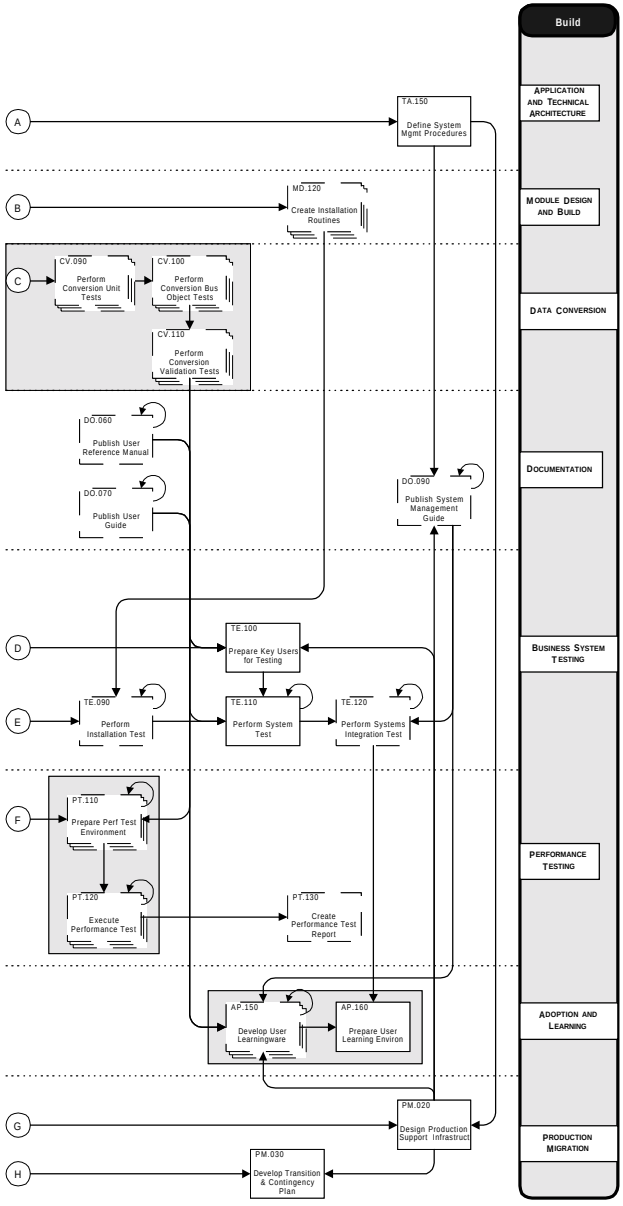

Figure 5-3 Build Phase Core and Optional Task Dependencies (cont.)

Risk Management

The areas of risk and mitigation for Build include the following:

Integration Management

Focus on integration issues between teams, business processes, organizations, and applications and identify and resolve integration issues through communication and definition of standards and procedures. Examples of areas that would include integration management are:

- business processes design
- systems testing strategies
- integration between functional and technical teams
- interfaces between Oracle Applications and third-party or legacy systems
- data cleanup and conversion strategies

Risk	Mitigation
Incomplete business system and systems integration tests.	Systems test (TE.110) and systems integration test (TE.120) scripts should be executed and documented by personnel who understand the business processes and interfaces that are being tested.

Planning

Planning is critical to maintaining project focus and direction. Initially the overall project plan is developed and the implementation strategy defined. As each phase progresses, subsequent phases are planned in detail and plans include the people, tools, strategies, and procedures for accomplishing the objectives of the phase.

Risk	Mitigation
Inaccurate or non-existent capacity planning.	Encourage detailed capacity planning including future volume projections, peak periods, and changes of headcount. Assess capacity risks and the strategy for dealing with uncertainties. Verify that expertise is available to support the need for capacity planning.
Underestimation of Transition resource requirements.	Develop a detailed plan, mapping transition activities to existing project resources; if needed, augment existing resources by enlisting additional personnel and support.
Inadequate contingency plan.	Emphasize the importance of having contingency plans to support normal business operations for key processes (shipping and invoicing) in the event that production cutover is unsuccessful.
New hardware or disk purchases do not arrive in time to prepare the performance test environment.	Consider hardware or disk purchase lead times in scheduling the performance testing.

Risk	Mitigation
The development environment is not available when Module Design and Build (MD) activities are scheduled to begin.	Provide adequate lead time for hardware and software procurement and environment preparation.

Quality Assurance

Quality assurance focuses on providing the infrastructure to support development of the key deliverables for the project. Producing high quality deliverables within the time and budget constraints of the project plan is key to reducing overall risk to the implementation. Areas of quality assurance include:

- adherence to the method
- establishing quality standards in the early planning process
- review of key deliverables
- establishing acceptance and sign-off procedures

Risk	Mitigation
Inadequate testing of performance test transaction programs against the performance test database, prior to starting test measurement executions.	Begin test measurement executions only after performance test transaction programs have been tested and approved.
Inadequately tested custom code that interferes with effective system testing.	Perform rigorous unit and link tests of custom modules.
Custom documentation is not ready in time or is not kept current of modifications that are tested during business system testing.	Identify documentation requirements early, agree on documentation standards and procedures, create prototypes, and obtain acceptance.

Risk	Mitigation
Ineffective conversion programs due to insufficient conversion designs.	The conversion developers verify that the level of detail provided in the Conversion Program Designs (CV.060) are adequate.
Insufficient test data.	Verify that sufficient time and resources are provided for test data development.
Inadequate testing environment affecting control over testing data and processes, as well as the validity of test results.	Separate testing environments should be configured to support each type of testing, if possible. At a minimum, a given testing environment can be managed to support multiple types of testing, but should not be used for other non testing-related project activities.
Inadequate defect management, resulting in defects that are identified but not resolved in a controlled, reliable manner.	The defect management process should be established in the Testing Requirements and Strategy (TE.010) deliverable, implemented prior to custom development, and described in a step-by-step process to be followed in identifying, correcting, and re-testing a defect.
Disruption of custom development activities caused by frequent rework due to changing requirements or insufficient definition of requirements.	Effective change control processes should be established in the Application Extension Strategy deliverable (MD.010). Rigorous review and signoff process for each design.

Training and Performance Support

The skills required for a successful implementation must be considered and the project should be staffed with resources who have these skills to the extent possible. Training and performance support involves providing the learning events and information necessary to bring the knowledge and skills required for the project to the project team

initially and to the entire organization as the project progresses. This may occur through formal learning events (application training) or through information dissemination (leading practices information). The main focus is the new business processes and the Oracle Applications functionality that supports the new processes, but also included are other learning and performance support needs of both the project team and the user population for successfully implementing and transitioning to the new system.

Risk	Mitigation
Inadequate preparation of testers for conversion business object and validation tests.	Prepare staff who will conduct conversion object tests on the functionality of the target applications and testing procedures.

Tips and Techniques

This section discusses the primary techniques that may be helpful in conducting the Build phase. It also includes advice and commentary on each process.

Application and Technical Architecture (TA)

Build is the phase where you assemble the final Application and Technical Architecture documentation. The degree of detail needed for these deliverables depends on the scope of the project and the project architecture process. If the architecture is being designed for a localized application implementation project with a single installation, the architect will perform these tasks in detail. The system administrators can then configure and set up the technical infrastructure for the new system without requiring further work.

If, however, the architecture is at the enterprise level (spanning multiple site implementations, installations, or databases), designing to the lowest level of detail may not be possible. Under these circumstances, the architects should design to the degree of detail possible, with the understanding that the enterprise-level architecture only addresses the enterprise-level issues. Individual architecture processes of a more limited scope will create the detailed designs for the individual implementations.

If the applications are to be deployed in multiple locations, the system architect creates a detailed application deployment plan, specifying key

application setup configurations, logical database architecture, and application installations, and determines the application-level security to be implemented in the system.

The system architect works with the system administrator to design the hardware and network infrastructure to support the application architecture and help verify that key business and information systems requirements are met.

The architecture team may identify architecture components that are standalone subsystems and have a wider impact on the information systems architecture than a localized extension to a collection of modules or a simple interface to a third-party application. Examples of such subsystems include a data distribution system that links multiple application installations and legacy applications; an operational data repository that is synchronized to provide real-time information about the state of business; a data warehouse; or an intranet web interface to the new systems. Typically, these types of subsystems are only important in larger scale projects, but the concept of a non-localized component to an architecture, affecting multiple applications, interfaces, or databases, is entirely general.

Because of the possible impact of these subsystems on the overall systems architecture and on multiple individual technical groups working on the project, separate the specification, design, and build of these systems into subprojects linked to the core Application and Technical Architecture process. The individuals or teams assigned the task of managing the subsystems produce individual proposals for the work needed to integrate the subsystems into the overall technical infrastructure. Even if the subprojects components are purchased as pre-built packaged applications, significant integration work may be necessary to integrate them.

Module Design and Build (MD)

Module Design and Build and Business System Testing (TE) are two distinct processes in AIM, but must be treated as a coordinated set of activities to help achieve success. In particular, Create Application Extension Modules (MD.110) is tightly integrated with Perform Unit Test (TE.070) and Perform Link Test (TE.080) in Business System Testing. Developers and testers repeat these three tasks for each application extension and related sets of custom modules until all application extensions are ready for the business system test.

The movement of application extension modules and database extensions from the development, unit, and link test environments to

the business system test environment must be carefully executed to help verify that all components function properly. This can be a major issue when customizations consist of a combination of different module types that have different migration procedures. Some can be automated with scripts, while other steps must be completed by entering parameters manually in Application Object Library forms. The Testing Requirements and Strategy (TE.010) describes the various testing environments, while the Build Standards (MD.040) define the migration procedures.

Data Conversion (CV)

During Build, Conversion Programs (CV.080) are developed. If an automated tool has been selected, it may be used to build conversion templates that map the legacy data to the Oracle Application tables and then load the legacy data into the Oracle tables.

The Conversion Programs (CV.080) should be unit tested during this phase to verify that they function as intended. Once legacy data is loaded into the Oracle Application, the integrity of the data should be tested within each Oracle Application. In addition, a conversion validation test should be executed to test the performance of the legacy data within the entire suite of installed Oracle Applications.

Documentation (DO)

During the Build phase custom documentation is being analyzed, edited, and published. Functional and technical documentation should be continually updated as the applications are being configured and application extensions and interfaces are being tested and revised. After the implementation is complete and the project team disbanded, the documentation will be a major resource for every area using the new system.

Business System Testing (TE)

Creating the Testing Environments (TE.060) needed to support each type of testing can be done in the beginning of the phase, or each environment can be created as needed during the testing process. The Testing Requirements and Strategy (TE.010) lists the number and type of Testing Environments needed to support the testing tasks, including unit, link, system, systems integration testing.

You may choose to perform multiple types of testing in a single testing environment. However, it is not recommended that testing be performed in an environment that is concurrently supporting other

project activities, such as training or conversion testing. This practice can cause corruption of test data or programs, inaccurate test results, and frustration for testers and the other users of the shared environment.

The emphasis during Build involves testing each custom module as it moves through development (unit and link testing), and testing the applications and their integration with external systems (system testing and systems integration testing).

For each type of testing, it is preferable that test scripts be executed more than once for each testing target (module, linked modules, business process, and integrated system). In the case of unit and link testing, developers generally test each other's code in an iterative process until the module or linked module is ready for system testing. Regression testing is not a formal task but is an important part of unit and link testing.

System testing and systems integration testing should reflect actual business flows and be executed in cycles. Each test specification is tested multiple times with different data profiles, within the context of different occurrences of each business transaction.

Performance Testing (PT)

System and database administrators construct the Performance Test Environment (PT.110) during Build. This includes:

- preparing the hardware and network connections
- migrating the fully populated test database
- migrating the special test transaction programs
- installing the applications
- installing performance monitoring tools

Administrators should perform as much environment testing as possible before formally starting the test execution. The technical analysts and administrators should also perform testing of the transaction programs, the test scripts, and the test database in the test environment.

The execution of a complex performance test rarely proceeds without initial problems. Each iteration or test cycle may need to correct problems in the environment found during a prior cycle or may test the effects of a system retuning. There is a good deal of tuning and

retuning necessary during the execution of a large-scale, multiple transaction performance test. To collect system measurements for a particular set of test parameters or a test configuration may require multiple cycles before the system and the test programs are tuned properly to give realistic or useful results.

At the end of the formal Performance Testing process, a Performance Test Report (PT.130) summarizes the work performed by the team during the process, the results obtained, conclusions, and recommendations. The creation of a formal report is optional and may not be necessary if the performance test process is relatively limited in scale, and is not making strategic or critical project recommendations. The project manager responsible for the performance test project decides whether a formal report is warranted.

At the end of the formal testing process, the programs and scripts may be useful for performance regression testing in a continuing performance quality management system. Before making changes to the production technical configuration, or applying software patches or upgrades, the business can use the performance test suite to assess the performance impact of changes.

Adoption and Learning (AP)

During this phase, you tailor the learningware and other skills-change materials and develop the learning environment to meet the requirements and objectives outlined in the User Learning Plan (AP.140). The general objective is to support the reskilling of those employees whose knowledge, skills, and aptitudes need to change in order to obtain the desired benefits from the new technology.

Production Migration (PM)

During the Build phase, you identify and design the operational infrastructure for supporting the new system. This design should include the human resources, facilities, and system reference materials. In addition, you align the sequence of steps required to transition to the new system with the project requirements and identify and analyze the risks and failure points in the process.

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Estimating

The table below indicates the typical percentage of effort required by each task by role.

Build		Phase Effort	Adult Learning Specialist	Application Specialist	Assessment Specialist	Business Analyst	Business Line Manager
ID	Task		ALS	AS	ASSP	BA	BLM
Application and Technical Architecture	***16%***						
D.TA.090	Define Application and Database Server Architecture	4%					
D.TA.100	Define and Propose Architecture Subsytems	1%					
D.TA.110	Define System Capacity Plan	3%					
D.TA.120	Define Platform and Network Architecture	2%					
D.TA.130	Define Application Deployment Plan	1%				15	
D.TA.140	Assess Performance Risks	2%					
D.TA.150	Define System Management Procedures	2%					
Module Design and Build	***12%***						
D.MD.090	Prepare Development Environment	2%					
D.MD.100	Create Database Extensions	3%					
D.MD.110	Create Application Extension Modules	7%					
D.MD.120	Create Installation Routines	1%					
Data Conversion	***3%***						
D.CV.080	Develop Conversion Programs	1%					
D.CV.090	Perform Conversion Unit Tests	0%					
D.CV.100	Perform Conversion Business Object Tests	1%					
D.CV.110	Perform Conversion Validation Tests	0%				30	
Documentation	***7%***						
D.DO.060	Publish User Reference Manual	4%				20	
D.DO.070	Publish User Guide	0%				10	
D.DO.080	Publish Technical Reference Manual	1%					
D.DO.090	Publish System Management Guide	1%					
Business System Testing	***17%***						
D.TE.060	Prepare Testing Environments	2%		0			
D.TE.070	Perform Unit Test	3%				10	
D.TE.080	Perform Link Test	4%				20	
D.TE.090	Perform Installation Test	1%					
D.TE.100	Prepare Key Users for Testing	1%				30	0
D.TE.110	Perform System Test	5%		0		10	0
D.TE.120	Perform Systems Integration Test	1%				10	
Performance Testing	***0%***						
D.PT.080	Create Performance Test Transaction Programs	0%				5	
D.PT.090	Create Test Database Load Programs	0%				5	
D.PT.100	Construct Performance Test Database	0%					
D.PT.110	Prepare Performance Test Environment	0%					
D.PT.120	Execute Performance Test	0%					
D.PT.130	Create Performance Test Report	0%				5	
Adoption and Learning	***9%***						
D.AP.150	Develop User Learningware	6%	90	10			
D.AP.160	Prepare User Learning Environment	2%		20			
Production Migration	***7%***						
D.PM.020	Design Production Support Infrastructure	3%					
D.PM.030	Develop Transition and Contingency Plan	4%					0
Project Management	***29%***						
PJM	Manage Phase	12%					
CONT	Contingency	17%					
	100%						

- FastForward Task
- Core Tasks
- Role % Adjusted for FastForward

Table 5-3 Build Phase Estimating

Client Executive	Client Project Manager	Client Staff Member	Communication Specialist	Config Mgmt Specialist	Database Administrator	Database Designer	Developer	Facilitator	Human Performance Technologist	IS Manager	Key User	Network Adminstrator	Org Dev Specialist	Process Modeler	Project Manager	Project Sponsor	Project Support Specialist	Quality Auditor	Quality Manager	Steering Committee Member	Subject Matter Specialist	System Administrator	System Architect	Technical Analyst	Technical Writer	Tester	Tool Specialist	Trainer	User	Unassigned (Client Tasks)	
CE	CPM	CSM	CS	CMS	DBA	DD	DV	FC	HSP	ISM	KU	NA	ODS	PMD	PM	PS	PSS	QA	QM	SCM	SMS	SAD	SA	TAN	TW	TS	TLS	TR	US	UNAS	
		0			10	40																	30	20							100
										0					20								80								100
		0			10					0		10			0							35	45	0					0		100
		0			20					0		10			0							20	50						0		100
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Table 5-4 Build Phase Estimating (cont.)

Scheduling Suggestions

The objective of Build is to thoroughly test your new system. However, if you have applications extensions, they must be carefully built and tested first. Unforeseen problems or challenging bugs can cause aggravating delays. Your best defense is to plan carefully and make sure that all resources are continuously aware of their deadlines. Publish a new schedule weekly and have project team members post it where they can refer to it often.

Scheduling suggestions for each process in Build follow:

Project Management (PJM)

Team size can affect the Build phase schedule. Maximize parallel activities by having as large a team as possible, but avoid going beyond the size threshold where incremental administration and communication needs decrease productivity.

Consider seating arrangements as a productivity tool. You should try to balance the need to insulate the development team to minimize interruptions versus providing them with access to others for clarification of design specifications.

Application and Technical Architecture (TA)

Make sure function frequencies and data retention rules are reviewed and agreed on from a business perspective before finalizing the System Capacity Plan (TA.110). Both the new applications and legacy systems may need support until all business units convert to the Oracle Applications.

Module Design and Build (MD)

Make every effort to ensure the development environment is ready on time. To be productive, a development team needs:

- computer resources and workstations
- a test database instance with sufficient test data
- design, coding, and testing standards and procedures

- various tools (for example, automated tools to facilitate the creation of design documents)
- administrative procedures for issue resolution, registering modules, getting deliverables approved, and obtaining answers to questions

Data Conversion (CV)

For multi-phase/multi-site deployments, data conversions may be scheduled at different times according to site requirements.

Documentation (DO)

The time needed to develop documentation is frequently underestimated. Consider using professionals (for example, technical writers) to improve productivity.

The primary factors influencing the schedule are the scope of the document being produced and the productivity of the team.

Business System Testing (TE)

For smaller projects with good user participation, you may consider combining system testing and the acceptance test. Combining the two tasks requires careful planning and extensive user participation, but can significantly reduce the timeline.

If you choose to combine the tests, the usual errors detected during Business System Testing can be misinterpreted by users, resulting in a credibility issue for project management.

Performance Testing (PT)

Schedule sufficient time to adequately code and test data load programs and transaction programs, particularly if the selected performance testing tool is unfamiliar to your developers. Plan enough time to execute several test iterations so that issues can be resolved between tests.

Adoption and Learning (AP)

For multi-phase/multi-site deployments, the development of learningware and preparation of the User Learning Environment (AP.160) needs to take into account the requirements of all sites directly impacted by the implementation. With this in mind, multiple iterations of the learningware may need to be developed and reflected in the

learning environment. When scheduling for these activities you must take into account the dependencies within the project timeline and among the various sites involved.

Production Migration (PM)

For multi-phase / multi-site deployments, the Production Support Infrastructure Design (PM.020) and the Transition and Contingency Plan (PM.030) need to be augmented based on the site requirements. Therefore, more time should be allocated and the interdependencies incorporated into the project schedule for these tasks.

Staffing

The diagram below illustrates the roles that are needed to staff each process during Build. In some cases, the same person should be used to staff the same logical role found in different processes (shared role). In other cases, different people can be used to staff the same role in different processes (unique role).

Build Organization

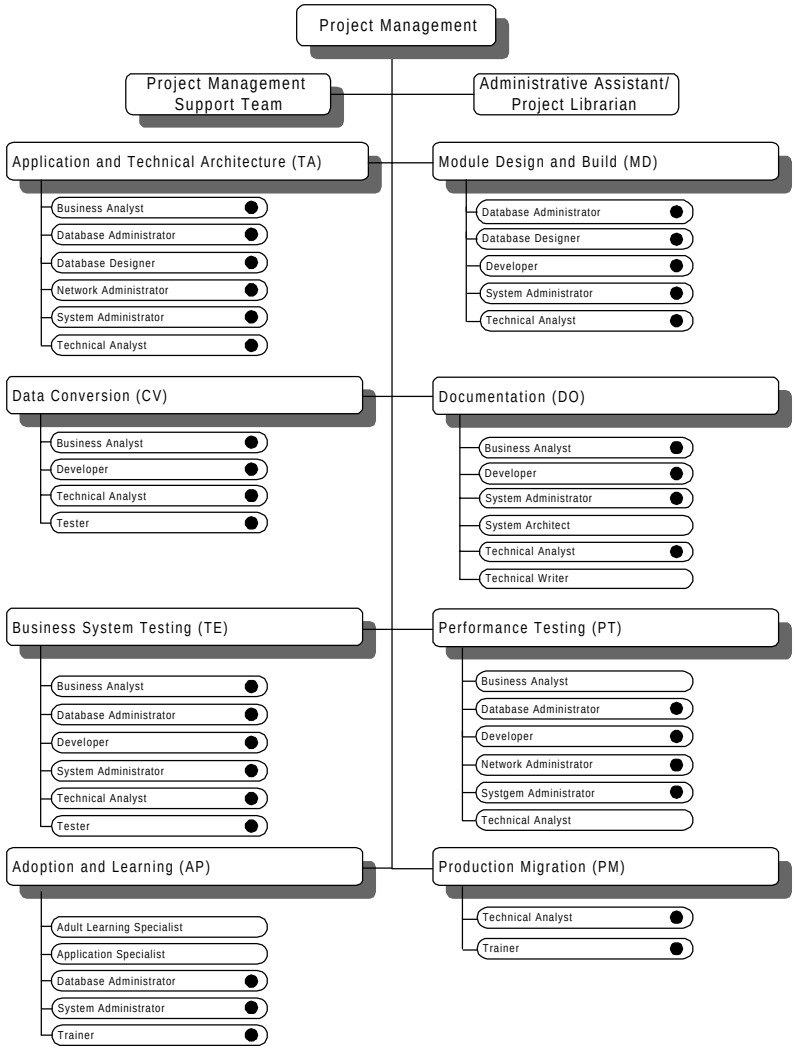

Figure 5-4 Build Phase Staffing

Staffing Suggestions

This section provides advice and comments on project organization for the Build phase.

Project Management (PJM)

The most important staffing factor in Build is having a strong development lead. This individual needs knowledge of Oracle Applications technical architecture and the custom development tools to be used and must motivate developers to meet deadlines and to follow project policies and procedures.

The development environment can have an impact on the morale and productivity of developers. Custom software developers are very dependent on their environment to perform fundamental tasks.

Fewer team members with functional skills are required during Build, so some may be released from the team. At the same time, developers may be added to enhance the technical staff.

Application and Technical Architecture (TA)

Participation by skilled system architects is critical. The information systems department may be reluctant to use external system architects, if they believe their group expertise is sufficient. Whether the system architect is an employee or consultant is less important than the qualifications they bring to the process. Verifying that the technical architecture will support the future system load is a critical component of a successful project.

Module Design and Build (MD)

Focus on the following key elements to help achieve a productive development team:

- strong development lead
- productive work environment
- committed developers willing to follow project policies and procedures
- planned knowledge transfer approach to address orientation requirements during project team personnel changes for multi-phase / multi-site projects
- effective issue management

Data Conversion (CV)

Using commercially available software can significantly affect the development time and reduce staffing requirements during this phase.

If your data conversions will be audited, you should begin to assemble the appropriate documents and statistics. If a phased conversion approach is being used, the conversion process could span several site deployments. The conversion of a given business object may need to be repeated multiple times. Multi-phased conversion deployment has a significant impact on staffing requirements.

Documentation (DO)

In this phase, the technical writers publish their documentation. The quality of documentation completed in this phase impacts the success of the project after the system has gone into production. Staff this final documentation effort with team members who have exceptional writing skills and are detail oriented.

Business System Testing (TE)

In this phase, the unit, link, system, and systems integration tests are performed. A systems administrator helps set up the Testing Environments (TE.060) and installing application extensions in the system test environment. A developer performs the unit and link test. Testers perform the system test and systems integration test. The system test relies heavily on the participation of the user community. Sufficient users must be available for the test and be adequately trained in the new system functionality. Their approval of the system test results determines whether the project continues on to the Transition phase where acceptance testing occurs.

Performance Testing (PT)

Schedule developers who build test transaction programs to be available during the execution of the performance tests so that they can modify the programs as needed. Reserve some time from developers who are working on application extensions also since custom code can often be a performance bottleneck.

The last Performance Testing task steps analyze test results and develop conclusions. The Performance Testing team can be deployed elsewhere at this time, unless you decide to undertake follow-up performance testing projects.

Adoption and Learning (AP)

If you are developing learningware, carefully select your learningware developers to help achieve a quality product. Properly skilled users are critical to the overall success of the implementation.

In deployments that might occur every few months for a year, the learningware must be packaged so that people new to the project can be effective.

Production Migration (PM)

Although the project managers are primarily responsible for the majority of this work effort, key functional and technical resources are needed to help assess the support, business, technical, and learning requirements for the project.

Quality Criteria

Use the following criteria to check the quality and completeness of the core and optional tasks within the Build phase.

Core Tasks

- ❑ Has a System Capacity Plan (TA.110) been developed?
- ❑ Has the Platform and Network Architecture (TA.120) been developed?
- ❑ Has a Performance Risk Assessment (TA.140) been created?
- ❑ Have System Management Procedures (TA.150) been developed?
- ❑ Has one or more Testing Environments (TE.060) been set up?
- ❑ Have User Learning Environments (AP.160) been set up?
- ❑ Have key users performed their system test?
- ❑ Has the Production Support Infrastructure (PM.060) been designed?
- ❑ Has a Transition and Contingency Plan (PM.030) been created?

Optional Tasks

- ❑ Has an Application Deployment Plan (TA.130) been developed?
- ❑ Has an Application and Database Server Architecture (TA.090) been developed?
- ❑ Has an architecture subsystem proposal been developed?
- ❑ Have you created a Development Environment (MD.090) where you can create database extensions, module source code, and installation routines?
- ❑ Have you developed Conversion Programs (CV.080) that have been tested for unit, business object, and validation testing?
- ❑ Have you published the functional and technical custom documentation?
- ❑ Have you tested your applications extensions and interfaces?
- ❑ Have you run the necessary performance tests?
- ❑ Have you developed custom User Learningware (AP.150)?

CHAPTER

6 Transition

This chapter describes the Transition phase of AIM. The goal of the Transition phase is to install the new system, prepare client personnel, establish the system administration function, and then cut over to the new system.

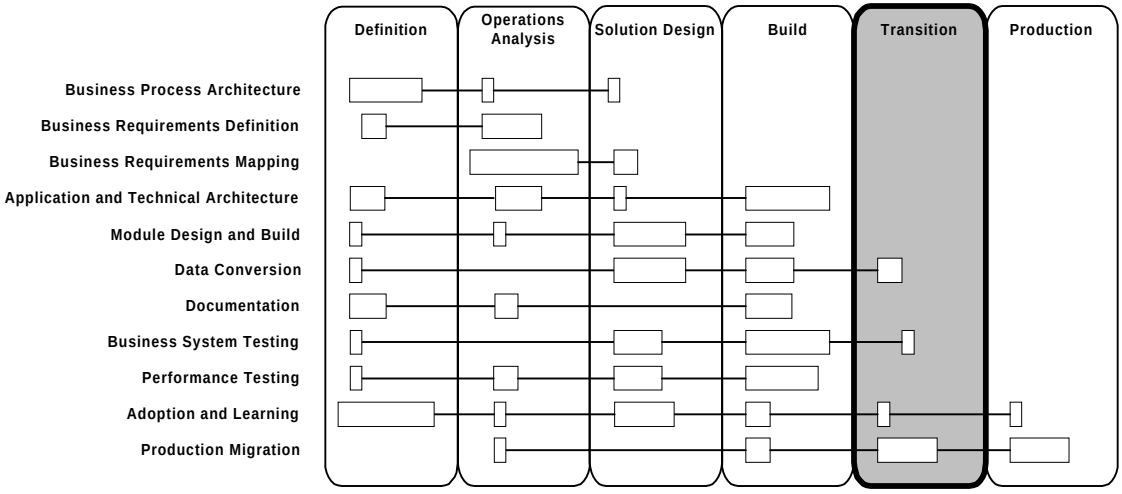

Figure 6-1 Context of AIM Transition Phase

Overview

This section provides an overview of the Transition phase.

Objectives

The objectives of the Transition phase are:

- Install data conversion programs and automated utilities.
- Convert and verify legacy data.
- Perform acceptance testing.
- Skill user personnel.
- Prepare the production environment and configure the applications.
- Implement the production support infrastructure.
- Verify that all aspects of the system are ready for transition.
- Begin to use the Production System (PM.080).

Critical Success Factors

The critical success factors of the Transition phase are as follows:

- clear understanding of the business objectives
- reasonable expectations that are understood by the stakeholders
- acceptable transition and contingency plan
- effective participation by business management
- sufficient time and resources
- sufficient technical and application architecture
- available and committed client staff to implement the new systems
- committed user involvement and ownership
- successful performance of acceptance testing

- successful completion of the production readiness plan
- active listening and timely response to all concerns and opinions about the new systems
- evidence that all employees understand their new performance objectives and expectations, as well as the importance of their contribution in the change effort
- just-in-time learning events that are tailored to the learning and performance needs of all impacted roles

Prerequisites

Prerequisites for the Transition phase follow. You should use these prerequisites, if they exist, prior to beginning the project. Otherwise, you will need to create them during this phase. Some of the prerequisites identified below are also deliverables produced within this phase. The reason they are included in this section is because they are used as input to other tasks within this phase.

Prerequisite	Source
Legacy Data Cleanup	Organization
Hardware and Software Delivered to Installation Site	Organization
Return on Investment (ROI) Analysis	Oracle
Project Management Plan	Project Management (PJM)
Application Setup Documents	Business Requirements Mapping
Security Profiles	Business Requirements Mapping
Application and Database Server Architecture	Application and Technical Architecture
Platform and Network Architecture	Application and Technical Architecture

Prerequisite	Source
System Management Procedures	Application and Technical Architecture
Manual Conversion Procedures	Data Conversion
Conversion Program Designs	Data Conversion
Validation-Tested Conversion Programs	Data Conversion
Installed Conversion Programs	Data Conversion
Converted and Verified Data	Data Conversion
User Reference Manual	Documentation
User Guide	Documentation
System Management Guide	Documentation
System-Tested Applications	Business System Testing
Integration-Tested System	Business System Testing
Acceptance Test Results	Business System Testing
Performance Test Results	Performance Testing
Human Performance Support Systems	Adoption and Learning
User Learning Plan	Adoption and Learning
User Learningware	Adoption and Learning
User Learning Environment	Adoption and Learning
Skilled Users	Adoption and Learning
Production Support Infrastructure Design	Production Migration

Prerequisite	Source
Transition and Contingency Plan	Production Migration
Production Environment	Production Migration
Configured Applications	Production Migration
Production Support Infrastructure	Production Migration
Production-Ready System	Production Migration

Table 6-1 Transition Phase Prerequisites

Processes

The processes used in this phase are as follows:

Data Conversion (CV)

Install the data conversion programs and automated conversion tools in the Production Environment (PM.040), convert the legacy data to the Oracle Applications, and verify data accuracy.

Business System Testing (TE)

Perform Acceptance Test (TE.130) is the only testing task in Transition. Create a separate test environment that closely resembles the proposed Production Environment (PM.040). Provide acceptance test scripts (with acceptance criteria) to users and conduct learning events for testers on the new system prior to testing. Coordinate and support the acceptance testing and manage the issue resolution process.

Adoption and Learning (AP)

The general goal of user learning events is to conduct and track the skills-change events designed to provide the groups of learners (at all levels) with the skills they need to meet the performance objectives of their new roles. Monitor the pulse and progress of the user learning events as they unfold, to make sure that the momentum and quality are maintained.

Success of the skills-change event may be measured on its *performance validity* (whether performance in the learning event transferred to the

job) and its *intra-organizational validity* (whether the learning events are equally successful from one group of learners to the next). The inclusion of a control group and determination of validity and reliability help make sure that the measurement incorporates sound research methods.

Include communication, orientation, and skilling to help the managers learn how to use the new human performance support systems tools to manage the performance of the new roles reporting to them. Target any individual who will be using the human performance support tools (middle managers and first line managers, who in turn will orient target job group incumbents). HR personnel may also be included in the skilling target groups.

Develop communications on the purpose, value, context, and overall logistics surrounding the learning events. Tailor the messages to the various groups of learners. Use the communications from the Communications Campaign (AP.080) to set the proper tone for the learning events. Position the learning events in the context of the whole project and the expected business benefits. Consider a highly interactive campaign to address the changes in roles and performance expectations in a positive and motivational manner. Link the communications to the project go-live activities.

Production Migration (PM)

Prepare the Production Environment (PM.040)—including entering application setups. Implement the support infrastructure, assess production readiness, and execute production cutover.

Key Deliverables

The key deliverables of this phase are as follows:

Deliverable	Description
Converted and Verified Data	Converted data in the production database that has been reviewed and verified.

Deliverable	Description
Acceptance Test Results	Documented evidence that the new system meets the acceptance criteria as defined in the Project Management Plan (PJM.CR.030).
Skilled Users	Prepared users that have learned what they need to succeed in their new roles, including system literacy, procedural skills, and business skills.
Production System	Verifies that all aspects of the system are operational and production status is achieved.
Production Support Infrastructure	Activated operational infrastructure including support personnel, procedures, and other support services for the new business system.

Table 6-2 Transition Phase Key Deliverables

Attention: Key deliverables represent the culmination, end result, or major milestone of activities performed during a phase. They should not be confused with deliverables produced by core tasks. Core tasks produce the minimum set of deliverables needed for every project; key deliverables represent the end result and define the end of each phase. However, not every key deliverable is required for every project. For example, Converted and Verified Data (CV.130) only exists when a project includes *programmatic data conversion* or *manual data conversion* of legacy business objects.

Approach

This section describes the approach for the Transition phase.

Tasks and Deliverables

The table below lists the tasks executed and the deliverables produced during Transition.

ID	Task	Deliverable	Type*
Data Conversion			
CV.120	Install Conversion Programs	Installed Conversion Programs	SI
CV.130	Convert and Verify Data	Converted and Verified Data	SI
Business System Testing			
TE.130	Perform Acceptance Test	Acceptance Test Results	SI
Adoption and Learning			
AP.170	Conduct User Learning Events	Skilled Users	MI, IT
Production Migration			
PM.040	Prepare Production Environment	Production Environment	SI
PM.050	Set Up Applications	Configured Applications	MI
PM.060	Implement Production Support Infrastructure	Production Support Infrastructure	SI
PM.070	Verify Production Readiness	Production-Ready System	SI
PM.080	Begin Production	Production System	SI

*Type: SI=singly instantiated, MI=multiply instantiated, MO=multiply occurring, IT=iterated, O=ongoing. See Glossary.

Table 6-3 Transition Phase Tasks and Deliverables

Core Task Dependencies

The diagram below shows the dependencies between core tasks in Transition.

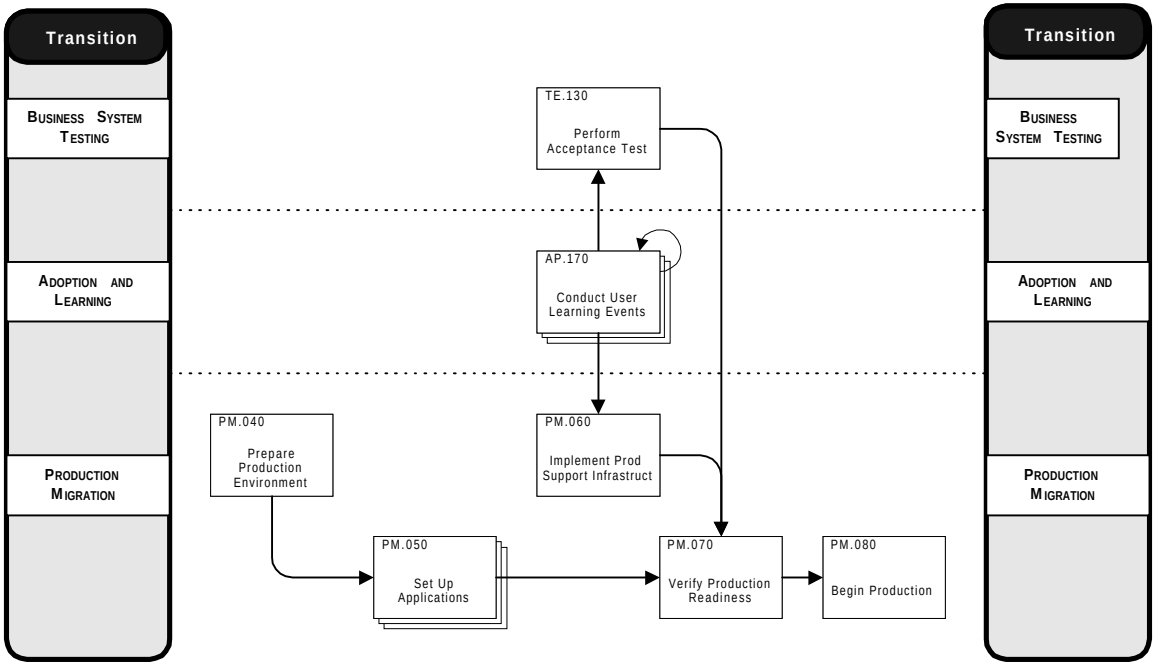

Figure 6-2 Transition Phase Core Task Dependencies

Core and Optional Task Dependencies

The diagram below shows the dependencies between core and optional tasks in Transition.

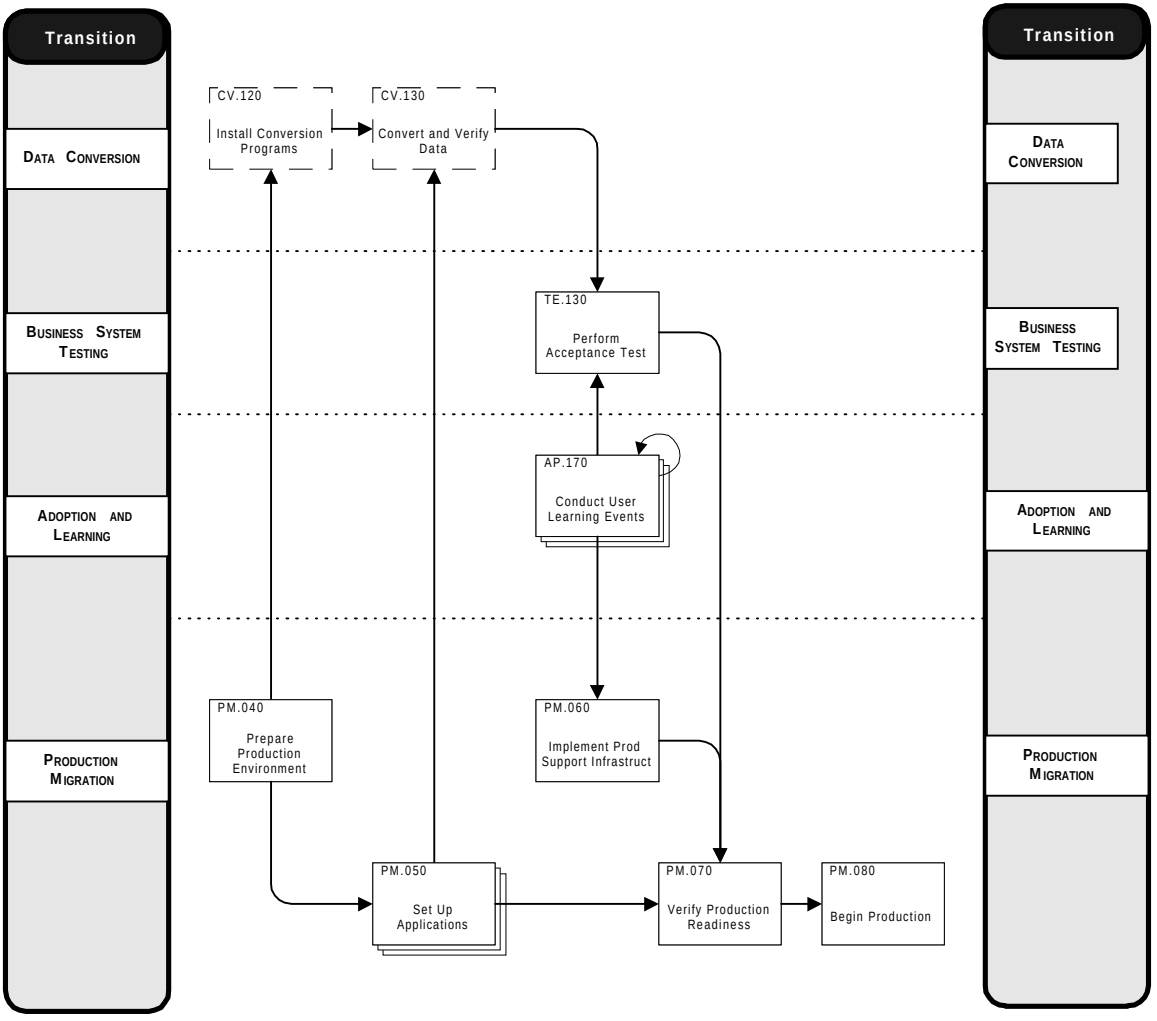

Figure 6-3 Transition Phase Core and Optional Task Dependencies

Risk Management

The areas of risk and mitigation for Transition include the following:

Quality Assurance

Quality assurance focuses on providing the infrastructure to support development of the key deliverables for the project. Producing high quality deliverables within the time and budget constraints of the project plan is critical for reducing overall risk to the implementation. Areas of quality assurance include:

- adherence to the method
- establishing quality standards in the early planning process
- review of key deliverables
- establishing acceptance and sign off procedures

Risk	Mitigation
Inadequate production environment for conversion software.	Verify in Build that the production environment will be prepared in time to install the conversion software. Verify that qualified and effective staff reviews are made, and associated deliverables approved.
Unwilling to sign acceptance certificate for the new system.	Predefine your acceptance criteria. Acceptance tests should be designed to show that all predefined criteria have been met. Obtain formal and independent quality acceptance of all testing activities.
Changes made to application setups in the testing environment not documented in the production setup documents or implemented in the production environment.	Establish a procedure for migrating changes to application setups into the production environment.

Training and Performance Support

The skills required for a successful implementation must be considered and the project should be staffed with resources who have these skills to the extent possible. Training and performance support involves providing the learning events and information necessary to bring the knowledge and skills required for the project to the project team initially and to the entire organization as the project progresses. This may occur through formal learning events (application training) or through information dissemination (leading practices information). The main focus is the new business processes and the Oracle Applications functionality that supports the new processes, but also included are other learning and performance support needs of both the project team and the user population for successfully implementing and transitioning to the new system.

Risk	Mitigation
Users who are unprepared to use the production system.	Establish a user certification or readiness program that provides incentives for system skill mastery, and prevents system use by people who have not demonstrated the proper level of qualification.
Inadequate communication of support procedures to users prior to production cutover.	Integrate support procedures into user learning events and system testing processes.
Unprepared learning agents.	Prepare learning agents adequately so they are able to deploy the skills-change events with consistent quality and content, establish the right level of rapport with the learners, and fulfill the requirements of adult-centered learning.

Tips and Techniques

This section discusses the primary techniques that may be helpful in conducting the Transition phase. It also includes advice and commentary on each applicable process.

Data Conversion (CV)

The conversion software should be installed in the production environment. Assuming the prerequisite Business System Testing (TE) tasks are complete, the legacy data should be converted to the Oracle Application Production Environment (PM.040) and verified for accuracy and audit requirements.

Business System Testing (TE)

The final testing task involves supporting skilled users in the execution of Perform Acceptance Test (TE.130). The system's functionality is measured in general against business requirements, and specifically against acceptance test criteria as identified in the Project Management Plan (PJM.CR.010). The acceptance test is performed in an environment that closely resembles the proposed Production Environment (PM.040).

If users have been involved throughout the implementation, there should be no surprises during the final system acceptance test. Prior to the test, users must be prepared for appropriate system skills to enable their successful participation in the acceptance testing effort. A procedure should be implemented to address any issues or problems that are identified during testing, and all resolutions must be communicated to the acceptance test team.

Adoption and Learning (AP)

Through a series of learning and communication events, users acquire the skill and the will to perform their new role using the full potential of the technology. This includes the procedural, functional, and technical proficiencies users need to meet their new performance expectations.

User learning events should be delivered *just-in-time* prior to the new system going into production; timing is critical. If the learning events are delivered too soon, users are not able to retain their knowledge; if delivered too late, some users may be unprepared for their new responsibilities. The best approach is to conduct a program of user certification or readiness testing.

To retain the learners' attention and avoid overwhelming them with information, it is important to time the learning events in such a way that they do not have to worry about their workload awaiting them. In addition, break learning events into manageable sections that focus on clear objectives. Providing hands-on interaction with the application encourages confidence in the learners' ability to use the system.

Periodic checks of progress during these learning events allow you to determine any mediating or moderating variables that may influence the success of the learning. Identification of these factors is critical to revising the learningware in the upcoming tasks. Mediating and moderating variables include, but are not limited to, attitudes of the learners, facilitating styles of the learning agents, procedural glitches, and clarity of the activities and collateral.

Production Migration (PM)

The Business System Testing (TE) and Adoption and Learning (AP) tasks during Transition provide opportunities to test the support procedures that have been developed and documented. Distribute support materials throughout the company, and review them during user learning events and testing preparation. Practice using the online support log during testing and learning events to familiarize users with the support procedures and to highlight any areas lacking sufficient coverage.

Notify external vendor support groups of the production cutover schedule. You may want to request additional support coverage during this period.

The establishment of a robust and capable internal and vendor external support infrastructure is critical to the success of your project. Oracle Support provides a unique service to assess your current support capabilities and assist with planning, updating, and aligning these capabilities to Oracle's support infrastructure. This should coincide with the activities planned for the Implement Production Support Infrastructure (PM.060) task.

Suggestion: Contact your local Oracle Support representative to schedule an Oracle Support Assessment (OSA).

The typical Transition phase time period is one month for small to moderate projects with one deployment phase and includes the execution of all learning events, support infrastructure, data conversion, and the setup of the Production Environment (PM.040).

A meeting with the entire organization allows management to answer any concerns and review contingency plans. In addition, key managers should be notified of the impending transition, so they can be prepared to deal with any issues, potential delays in service, or organizational changes. Once verification is made that the users are prepared, the production system is ready, and the contingency plan is in place, the organization should be ready to transition to production.

If you have built custom extensions, you may need developers during cutover to address any problems encountered with custom code.

Estimating

The table below indicates the typical percentage of effort required by each task by role.

Transition ID	Task	Phase Effort %	Adult Learning Specialist ALS	Application Specialist AS	Assessment Specialist ASSP	Business Analyst BA	Business Line Manager BLM
Data Conversion	***9%***						
E.CV.120	Install Conversion Programs	0%					
E.CV.130	Convert and Verify Data	9%					
Business System Testing	***11%***						
E.TE.130	Perform Acceptance Test	11%				10	0
Adoption and Learning	***14%***						
E.AP.170	Conduct User Learning Events	14%					0
E.AP.170	Conduct User Learning Events		85				
Production Migration	***40%***						
E.PM.040	Prepare Production Environment	12%					
E.PM.050	Set Up Applications	3%		0		70	
E.PM.060	Implement Production Support Infrastructure	10%					
E.PM.070	Verify Production Readiness	12%				5	
E.PM.080	Begin Production	3%				60	0
Project Management	***26%***						
PJM	Manage Phase	12%					
CONT	Contingency	13%					
	100%						

- FastForward Task
- Core Tasks
- Optional Component of a Task
- Client is 100% Responsible for this Task
- Go Live
- Role % Adjusted for FastForward

Table 6-4 Transition Phase Estimating

Client Executive	Client Project Manager	Client Staff Member	Communication Specialist	Config Mgmt Specialist	Database Administrator	Database Designer	Developer	Facilitator	Human Performance Technologist	IS Manager	Key User	Network Adminstrator	Org Dev Specialist	Process Modeler	Project Manager	Project Sponsor	Project Support Specialist	Quality Auditor	Quality Manager	Steering Committee Member	Subject Matter Specialist	System Administrator	System Architect	Technical Analyst	Technical Writer	Tester	Tool Specialist	Trainer	User	Unassigned (Client Tasks)	
CE	CPM	CSM	CS	CMS	DBA	DD	DV	FC	HSP	ISM	KU	NA	ODS	PMD	PM	PS	PSS	QA	QM	SCM	SMS	SAD	SA	TAN	TW	TS	TLS	TR	US	UNAS	
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	0	0													40														0		100

Table 6-4 Transition Phase Estimating (cont.)

Scheduling Suggestions

Migrating the business to a new Production Environment (PM.040) requires a high degree of planning and coordination. Scheduling is driven by the operational concerns of the business, the effort and timing of data conversion, and the number of users and sites to be migrated.

Scheduling suggestions for each process in Transition follow:

Project Management (PJM)

Pay particular attention to the dependencies associated with entering setup data and data conversion tasks. For example:

- Fixed assets account codes must be entered into the general ledger before asset categories can be entered into fixed assets.
- Categories must be established before assets can be converted.

Cutoff dates for production transactions to the legacy system and the dates that transactions can be entered into the Oracle Applications must be determined and communicated to the user community with adequate lead time. For example, the Data Conversion approach may call for closing all open purchase orders before going live. This means that all invoices for those purchase orders must be entered and matched. To allow calendar time for invoices to be processed before cut-over, you may decide that no new purchase orders or invoices can be entered into the legacy system for two weeks before cutover to the new applications. Purchasing and Payables would need to hold new requisitions and invoices until they can be entered into the new purchasing and accounts payable systems. Similar cutoff requirements may exist for other applications.

The focus during Transition is the transfer of knowledge about the application system to the user staff. This phase requires substantial user involvement and possibly third-party vendor participation or networking and hardware support.

A multi-phase / multi-site deployment approach can create several Transition challenges. You need to repeat most, if not all, Transition tasks for each deployment.

Data Conversion (CV)

Data Conversion tasks require careful scheduling due to complex dependencies among conversion steps and the entry of setup data. For multi-phase / multi-site deployments, you probably have to repeat data conversions for each deployment.

Business System Testing (TE)

Perform Acceptance Test (TE.130) occurs during the first part of Transition. For multi-site / multi-phase deployments, decide whether Perform Acceptance Test (TE.130) occurs separately for each multi-site / multi-phase deployment or if you rely on one initial Perform Acceptance Test (TE.130). It may be necessary to schedule separate acceptance tests if each site / phase has different application extensions, setup configurations, or acceptance criteria.

Adoption and Learning (AP)

Multi-phase / multi-site deployment approaches may require learning events to be conducted separately for each deployment.

The following factors may affect scheduling:

- site availability
- classroom hardware, software, audio / visual equipment
- availability of learning agents
- production and availability of learningware
- separate database instances may be required for each learning event conducted simultaneously with other events
- development of data to support hands on exercises
- identification and distribution of operating system and application logon IDs, passwords, and application responsibilities for learning events
- development and distribution of user manuals to learning events and user sites prior to cutover
- availability of technical support personnel to address issues encountered during the execution of the learning events

Production Migration (PM)

The establishment of a robust and capable internal and vendor external support infrastructure is critical to the success of your project. To that end, it is important to allocate time to rehearse the support procedures. You can simulate various types of support calls and evaluate whether the expected response time, accuracy of the resolutions, and the general flow of the process is adequate to support the request volume. This is also a good opportunity to test default support mechanisms, after-business-hours support, and supplier support hotlines.

Time should also be allocated to verify that all aspects of the new system are ready before transitioning into production. This includes, but is not limited to, verifying that the users are ready, the production system is ready, and that the necessary contingency plan is in place.

For projects with multiple deployments, the tasks associated with the production migration process will need to be repeated for each deployment.

Staffing

The diagram below illustrates the roles that are needed to staff each process during Transition. In some cases, the same person should be used to staff the same logical role found in different processes (shared role). In other cases, different people can be used to staff the same role in different processes (unique role).

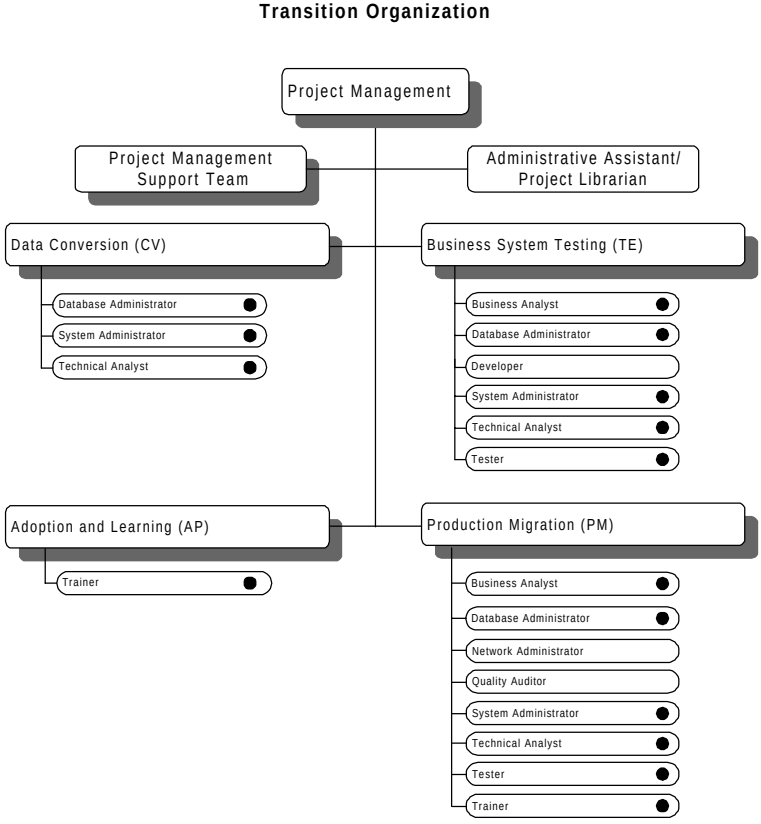

Figure 6-4 Transition Phase Staffing

Staffing Suggestions

This section provides advice and comments on project organization for the Transition phase.

Project Management (PJM)

In addition to standard functionality testing, the acceptance test may include:

- a test to simulate cutover and a day of production use; this is performed in conjunction with an iteration of data conversion
- a parallel test that consists of running both the new application and the legacy system in parallel and performing the same operations with both; the results are verified to help verify that the new system has the same functionality as the legacy system

Users are often expected to perform their normal duties while also attending learning activities and preparing to move to a new application system. Keep this in mind while trying to complete the tasks associated with the Transition phase.

Once Transition is complete, the client staff should be able to support and maintain the application without outside assistance. Users should be confident in their ability to use the new system.

Data Conversion (CV)

User management is responsible for the final data conversion results. Insist that key users participate in the data conversion validation and signoff.

For multi-phase / multi-site deployments, data conversion team members may be needed over a long time period. Enable new team members to be productive quickly by carefully documenting conversion activities.

Business Systems Testing (TE)

Sufficient user participation in testing enables user management to accept and sign off on the new system. For multiple deployments, decide if user testing will occur for each deployment or only for the first deployment. Testing for subsequent deployments may trigger new requests for customizations and other changes.

Schedule all testing activity well in advance with management so that it does not create a hardship on management when users are away from their workplace during new system learning events and acceptance testing.

Adoption and Learning (AP)

For effective skilling of users, make sure learning agents are adequately prepared to deploy the learning events and to measure their results.

For multi-phase / multi-site deployments, the learning agents may need to be skilled on site-specific requirements and needed over a long time period, or there may be a need to skill multiple groups of learning agents specific to each site.

Production Migration (PM)

Do not release specialists from their team responsibilities too soon. There are usually unexpected issues near and during production cutover that may require their assistance.

For projects with multiple deployments, the tasks associated with the Production Migration process need to be repeated for each deployment.

Quality Criteria

Use the following criteria to check the quality and completeness of the core and optional tasks within the Transition phase.

Core Tasks

- ❑ Have all acceptance criteria from the Project Management Plan (PJM.CR.010) been incorporated into the test scripts, tested, and approved by the user community?
- ❑ Has testing for Century Date compliance been performed on all customizations, legacy data conversions, and custom interfaces?
- ❑ Are the users ready for production cutover?
- ❑ Has the production system installation been verified against the Oracle Installation QA Checklist component (PM.040).
- ❑ Have the applications been completely configured and their operation verified?
- ❑ Has the Production Support Infrastructure, as documented in the Production Support Infrastructure Design (PM.020) been implemented?
- ❑ Has the production readiness been verified using the Transition and Contingency Plan (PM.030)?
- ❑ Has confirmation been obtained that the organization-wide use of all aspects of the Production System (PM.080) is in place?

Optional Tasks

- ❑ Have all data conversion maps, conversion templates, installation routines, and conversion programs been tested?
- ❑ Has all converted production data been reviewed and approved by the users?
- ❑ Has all converted data been reviewed for Century Date compliance?

CHAPTER

7 Production

This chapter describes the Production phase of AIM. The goal of Production is to monitor and confirm that the application is performing adequately and to plan for future functional enhancements.

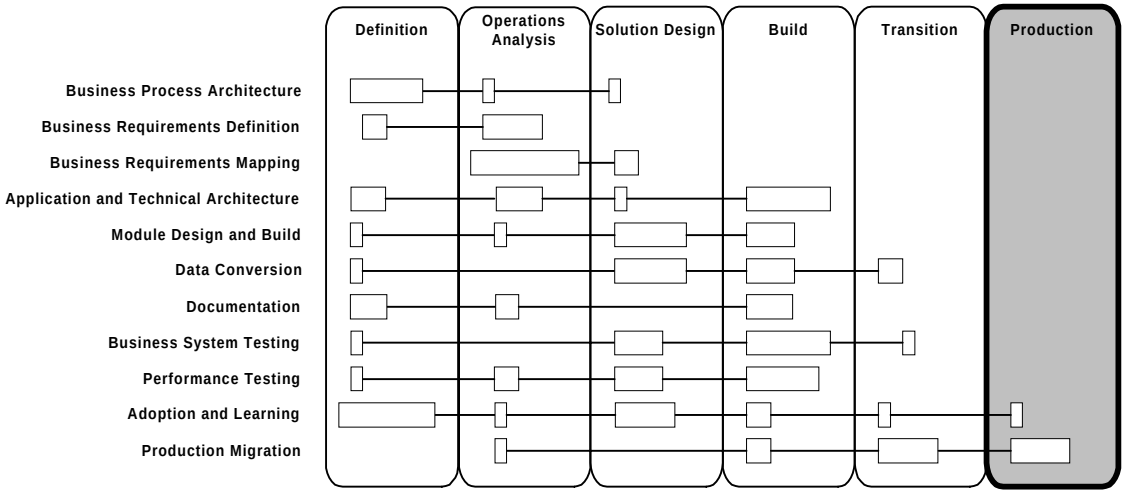

Figure 7-1 Context of AIM Production Phase

Overview

This section provides an overview of the Production phase.

Objectives

The objectives of the Production phase follow:

- Provide agreed upon levels of user support.
- Measure system performance and enhance as required
- Maintain the Production System (PM.080).
- Decommission the former systems.
- Propose and plan the future business and technical direction.
- Improve organizational knowledge and skills for the new environment.
- Improve organizational effectiveness through continuous improvement programs.
- Devote attention to post-implementation issues like user acceptance, productivity, and human performance support.

Critical Success Factors

The critical success factors of the Production phase follow:

- effective use of change control tools and procedures
- accurate compilation of volumes, transaction histories, and other performance drivers
- sufficient time and resources
- adequate staff and expertise
- effective participation by business management and users
- effective technical and application architecture
- effective post-implementation environment to facilitate productivity

Prerequisites

Prerequisites for the Production phase follow. You should use these prerequisites, if they exist, prior to beginning the project. Otherwise, you will need to create them during this phase. Some of the prerequisites identified below are also deliverables produced within this phase. The reason they are included in this section is because they are used as input to other tasks within this phase.

Prerequisite	Source
Existing Information Systems Strategy Documents	Organization
Project Management Plan	Project Management (PJM)
Change Catalog	Business Process Architecture
High-Level Process Vision	Business Process Architecture
Business Procedure Documentation	Business Process Architecture
Business Volumes and Metrics	Business Requirements Definition
Architecture Requirements and Strategy	Application and Technical Architecture
System Capacity Plan	Application and Technical Architecture
Platform and Network Architecture	Application and Technical Architecture
Performance Risk Assessment	Application and Technical Architecture
Technical Reference Manual	Documentation
System Management Guide	Documentation

Prerequisite	Source
Testing Environments	Business System Testing
Performance Test Transaction Programs	Performance Testing
Performance Test Results	Performance Testing
Project Readiness Roadmap	Adoption and Learning
Effectiveness Assessment	Adoption and Learning
Transition Strategy	Production Migration
Transition and Contingency Plan	Production Migration
Production System	Production Migration
System Performance Assessment	Production Migration
Maintained Production Environment	Production Migration
Refined Production Environment	Production Migration

Table 7-1 Production Phase Prerequisites

Processes

The processes used in this phase follow:

Adoption and Learning (AP)

Determine how well the Production System (PM.080) meets the business objectives set at the beginning of the project. Using the Effectiveness Assessment (AP.180), generate key findings against the Project Readiness Roadmap (AP.070) and develop recommendations towards a roadmap for enhanced organizational effectiveness.

Production Migration (PM)

Assess system performance, maintain and refine the Production System (PM.080), decommission former systems, and propose the future business and technical direction for the enterprise.

Key Deliverables

The key deliverables of this phase follow:

Deliverable	Description
Effectiveness Assessment	An assessment of how well the production system and business and organizational performance meet the business objectives set at the beginning of the project.
Business Direction Recommendations	The functional project team, along with senior management, begins planning for future improvement opportunities.
Technical Direction Recommendations	The technical project team, the information technology staff, and senior management begin planning for using new technologies.

Table 7-2 Production Phase Key Deliverables

Attention: Key deliverables represent the culmination, end result, or major milestone of activities performed during a phase. They should not be confused with deliverables produced by core tasks. Core tasks produce the minimum set of deliverables needed for every project; key deliverables represent the end result and define the end of each phase. However, not every key deliverable is required for every project. For example, Technical Direction Recommendations (PM.140) may be prepared only when a project includes *post-production system architecture enhancement* or *technology migration recommendation objectives*.

Approach

This section describes the approach for the Production phase.

Tasks and Deliverables

The table below lists the tasks executed and the deliverables produced during Production.

ID	Task	Deliverable	Type*
Adoption and Learning			
AP.180	Conduct Effectiveness Assessment	Effectiveness Assessment	SI
Production Migration			
PM.090	Measure System Performance	System Performance Assessment	SI
PM.100	Maintain System	Maintained Production Environment	SI
PM.110	Refine Production System	Refined Production Environment	SI
PM.120	Decommission Former Systems	Decommissioned Systems	MI
PM.130	Propose Future Business Direction	Business Direction Recommendations	SI
PM.140	Propose Future Technical Direction	Technical Direction Recommendations	SI

*Type: SI=singly instantiated, MI=multiply instantiated, MO=multiply occurring, IT=iterated, O=ongoing. See Glossary.

Table 7-3 Production Phase Tasks and Deliverables

Core Task Dependencies

This diagram shows the dependencies between core tasks in the Production phase.

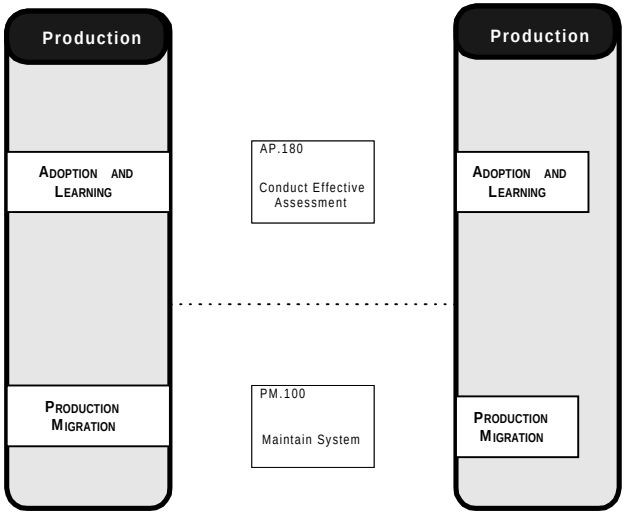

Figure 7-2 Production Phase Core Task Dependencies

Core and Optional Task Dependencies

This diagram shows the dependencies between core and optional tasks in the Production phase.

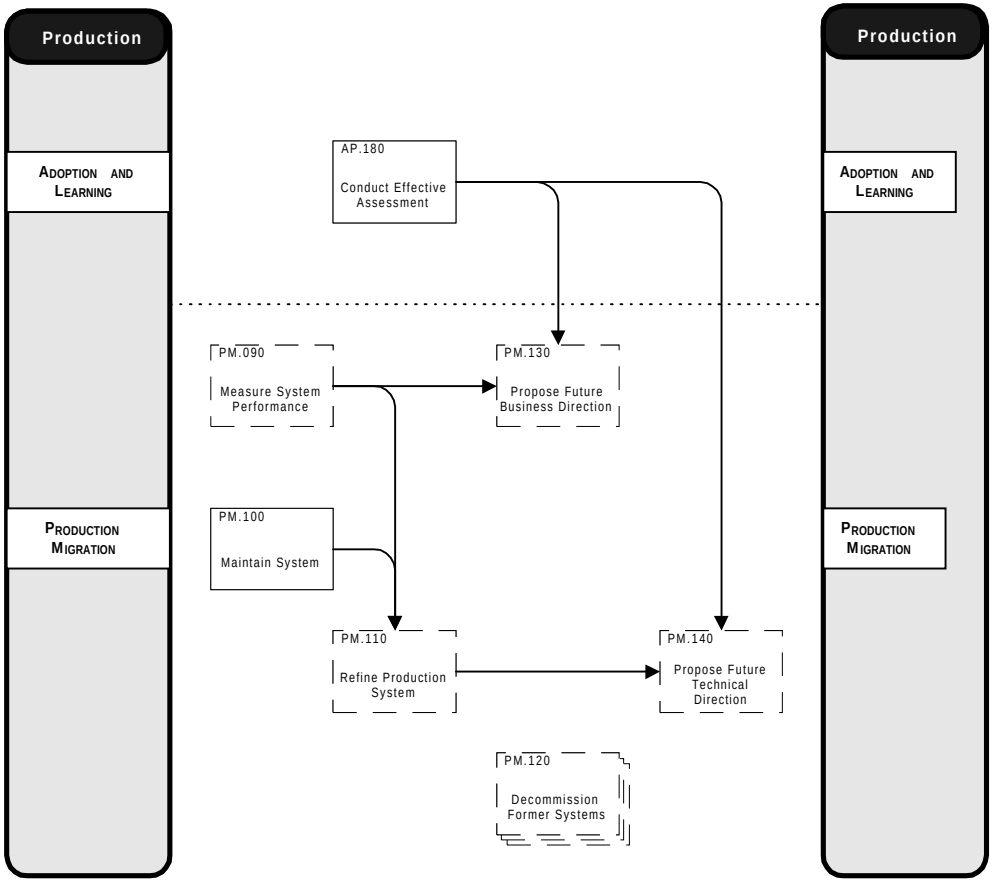

Figure 7-3 Production Phase Core and Optional Task Dependencies

Risk Management

The areas of risk and mitigation for Production include the following:

Quality Assurance

Quality assurance focuses on providing the infrastructure to support development of the key deliverables for the project. Producing high quality deliverables within the time and budget constraints of the project plan is key to reducing overall risk to the implementation. Areas of quality assurance include:

- adherence to the method
- establishing quality standards in the early planning process
- review of key deliverables
- establishing acceptance and sign-off procedures

Risk	Mitigation
System performance cannot adequately support production level transaction volumes.	Refine the production system setup and configuration based on user feedback regarding system performance, reporting, and system functionality.
Additional exception case business requirements are discovered as users perform job duties following production cutover.	Establish an ongoing application support business function with policies, procedures, organization, and staff to address new and changed requirements.

Training and Performance Support

The skills required for a successful implementation must be considered and the project should be staffed with resources who have these skills to the extent possible. Training and performance support involves providing the learning events and information necessary to bring the knowledge and skills required for the project to the project team initially and to the entire organization as the project progresses. This may occur through formal learning events (application training) or through information dissemination (leading practices information).

The main focus is the new business processes and the Oracle Applications functionality that supports the new processes, but also included are other learning and performance support needs of both the project team and the user population for successfully implementing and transitioning to the new system.

Risk	Mitigation
Ongoing production staff does not possess adequate system knowledge.	Retain contractors to provide support during the critical period. Verify that ongoing client staff are adequately prepared and supporting documentation is effective.

Tips and Techniques

This section discusses the primary techniques that may be helpful in conducting the Production phase. It also includes advice and commentary on each process.

Adoption and Learning (AP)

The Effectiveness Assessment (AP.180) results from a business performance and organizational assessment that evaluates the organization's effectiveness with its new systems and compares it to the initial readiness measurements. From the findings, new strategies are defined to optimize the effectiveness of the organization.

Production Migration (PM)

System maintenance falls into three major categories: routine, on-demand, and upgrade:

- Routine maintenance includes setting up and executing hot and cold backups, monitoring system performance, managing tablespace, archiving and purging data, and database tuning. It also involves tracking updates to the production configuration, application setup, and application of patches.
- On-demand maintenance usually occurs in response to a user request and includes setting up users, maintaining user access, and correcting user and interface table data errors.
- Upgrade maintenance involves both minor and major upgrades. It may need to be evaluated in terms of organizational and structural impact, particularly in the case of major upgrades. Minor upgrades are typically small changes or corrections to system functionality, or performance enhancements for a specific process.

System refinement involves soliciting user feedback and acting on requests relative to the implementation, production system, or support. These requests may involve adjusting application setups or profile options, tuning a report or form, or developing major custom extensions. All enhancement requests should be logged, evaluated in terms of impact to the system and/or organization, and tested thoroughly prior to implementing the changes in the production environment.

Adapt the Module Design and Build (MD) and Business System Testing (TE) processes to support the design, development, and testing of enhancements to the production system. Incorporate the updated information into the Application Extension Strategy (MD.010), Design Standards (MD.030), and Build Standards (MD.040), so that they represent the standards for future enhancements. Define additional standards for tools that you may use for future enhancements.

It is strongly recommended that a separate *shadow* instance be created and refreshed from the production instance to provide an environment that resembles the production configuration, but is safe for testing patches, upgrades, and system refinements.

Estimating

The table below indicates the typical percentage of effort required by each task by role.

Production ID	Task	Phase Effort	Adult Learning Specialist	Application Specialist	Assessment Specialist	Business Analyst	Business Line Manager
			ALS	AS	ASSP	BA	BLM
Adoption and Learning	***9%***						
F.AP.180	Conduct Effectiveness Assessment	9%		0		40	0
F.AP.180	Conduct Effectiveness Assessment		30		40		0
Production Migration	***50%***						
F.PM.090	Measure System Performance	0%					
F.PM.100	Maintain System	50%					
F.PM.110	Refine Production System	0%				20	
F.PM.120	Decommission Former Systems	0%					
F.PM.130	Propose Future Business Direction	0%		0		25	
F.PM.140	Propose Future Technical Direction	0%		0			
Project Management	***40%***						
PJM	Manage Phase	31%					
CONT	Contingency	9%					
	100%						

- FastForward Task
- Core Tasks
- Optional Component of a Task
- Client is 100% Responsible for this Task
- Role % Adjusted for FastForward

Table 7-4 Production Phase Estimating

Client Executive	Client Project Manager	Client Staff Member	Communication Specialist	Config Mgmt Specialist	Database Administrator	Database Designer	Developer	Facilitator	Human Performance Technologist	IS Manager	Key User	Network Adminstrator	Org Dev Specialist	Process Modeler	Project Manager	Project Sponsor	Project Support Specialist	Quality Auditor	Quality Manager	Steering Committee Member	Subject Matter Specialist	System Administrator	System Architect	Technical Analyst	Technical Writer	Tester	Tool Specialist	Trainer	User	Unassigned (Client Tasks)	
CE	CPM	CSM	CS	CMS	DBA	DD	DV	FC	HSP	ISM	KU	NA	ODS	PMD	PM	PS	PSS	QA	QM	SCM	SMS	SAD	SA	TAN	TW	TS	TLS	TR	US	UNAS	
0	0	0											40		20														0		100
0	0	0	30																										0	0	100
					40																	40		20							100
		0			50							20										30									100
		0			20							15										25		20							100
		0								0																			100		100
	0														50									25							100
	0									0					20								40	40							100

Table 7-4 Production Phase Estimating (cont.)

Scheduling Suggestions

The pace of the Production phase is somewhat relaxed compared to all other phases. Allocate whatever time is needed to achieve a stable and reliable production environment. Schedule tasks that require external resources early since these resources may be leaving the project for good.

Scheduling suggestions for Production follow:

Project Management (PJM)

Although budgetary concerns may be an issue, retain sufficient resources to complete the project in a quality manner.

Verify that you have completed the following activities:

- prepared the organization's application support group to deal with questions and initial system problems
- provided the appropriate applications and technical architecture to support the system load
- facilitated preparation of support infrastructure mechanisms
- developed appropriate documentation for support organizations
- skilled users and provided them with effective documentation

Multiple deployments require multiple iterations of Production tasks which may differ in significant ways. This will have a scheduling impact.

Complexities that can affect scheduling are:

- "Mini" AIM phases and processes may be needed for each deployment unless the business functions operate *exactly* the same at all sites.
- Procedural workarounds that address gaps may vary according to specific site requirements and could require adjustments to the user learning events and user documentation.

- New interface and data conversion requirements could exist for specific deployments if legacy systems are not available throughout the company.
- Oracle Applications upgrades may be necessary during the rollout period.

The implementation development project does not end when the team installs the application system into production; the system should be evaluated, and users may have questions or issues to be resolved. Production prepares for these situations in an organized and systematic way. There is also an opportunity to plan future development efforts.

Adoption and Learning (AP)

The conducting of the Effectiveness Assessment (AP.180) is best done after the organization has had enough time to adjust to the new system, for example, from three to six months after production cutover.

Production Migration (PM)

After production cutover, new system maintenance and enhancement begin. Some related considerations are:

- New technologies that were not available or out of scope at the beginning of the implementation may now be considered.
- New products and applications may be investigated.
- Requested customizations that were out of scope for the initial implementation may be addressed.
- Planning for the next release of Oracle Applications may begin.

These new opportunities should be identified, evaluated, and addressed with the organization's key stakeholders.

Staffing

The diagram below illustrates the roles that are needed to staff each process during Production. In some cases, the same person should be used to staff the same logical role found in different processes (shared role). In other cases, different people can be used to staff the same role in different processes (unique role).

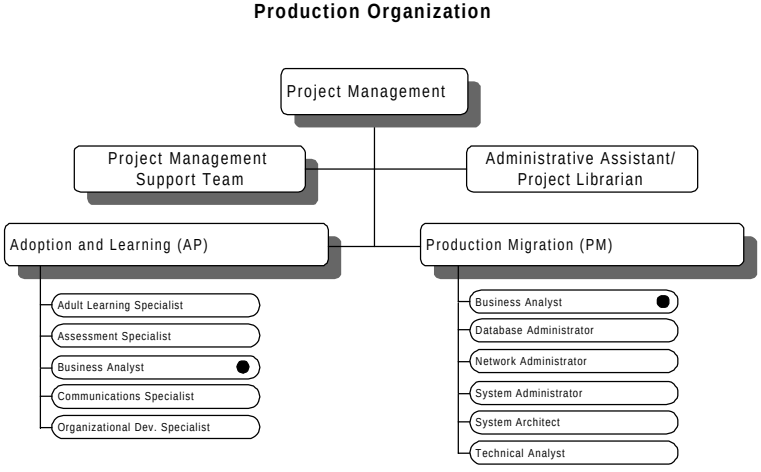

Figure 7-4 Production Phase Staffing

Staffing Suggestions

This section provides advice and comments on project organization for the Production phase.

Project Management (PJM)

In addition to support and maintenance responsibilities, Production requires involvement from other members within the organization. Users must be prepared to provide data on transaction volumes and response times. In addition, users may be asked to search for and report as many problems as possible during the warranty period.

During Production, the project team is usually limited to developers and support personnel. Each team member has to maintain or support a broad functional area and must be cross-skilled appropriately for this responsibility. In addition, time should be spent transferring the ongoing jobs of support and maintenance to the users.

The primary staffing challenges in Production are:

- retaining an appropriate number of team members to complete the project
- managing “virtual” staff in departments where minimal direct control of the resources exists (such as help desks and applications support) and transferring the responsibilities to these user groups
- managing staff during the rollout of a multi-phased deployment when key personnel may not be available for the project duration

Adoption and Learning (AP)

The staff involved in the Effectiveness Assessment (AP.180) should be able to tap into system implementation experiences of similar nature and into a solid background in organizational development and productivity.

Production Migration (PM)

Key individuals from the organization’s management and the project team should be retained on the project to obtain project closure and to evaluate opportunities for the organization’s future direction.

Quality Criteria

Use the following criteria to check the quality and completeness of the core and optional tasks within the Production phase.

Core Tasks

- ❑ Has the organization's effectiveness with its new systems been evaluated against the initial readiness measurements?
- ❑ Has a system or process been implemented to maintain the Production System (PM.080) and respond to users' requests?

Optional Tasks

- ❑ Has the system performance of the post-production system been measured?
- ❑ Has feedback from the users been solicited and acted upon with regard to the implementation, Production System (PM.080), or support?
- ❑ Have the necessary legacy systems been decommissioned and required data backed up for future reference?
- ❑ Have business or technical opportunities been addressed with regard to the enterprise's future direction?

APPENDIX

A

AIM Work Breakdown Structure

This appendix provides a listing of the work breakdown structure (WBS) for AIM.

How to Read the Work Breakdown Structure

Each WBS is composed of five elements: phases, activities, milestones, tasks and deliverables. Each element is indicated graphically, as shown in the following legend:

A	**Definition**	Phase
A.PL.PLAN	**Project Planning**	Activity
A.BP	**Business Process Architecture**	Activity / Process
A.BP.010	Define Business and Process Strategy	Task
A.PL.END	♦End Project Planning	Milestone

Phases are indicated by large, bold type (row one above). Each phase has an ID, which is a single letter indicating its sequence in the development approach.

Activities are indicated by medium-size bold type (row three above). Each activity has an ID which indicates the types of tasks and milestones which it groups. PJM activities contain an activity ID that indicates the **category** of tasks within the activity (row two above):

PLAN	Planning tasks
CTRL	Control tasks
COMP	Completion tasks

Planning, control and completion tasks are part of the Project Management Method (PJM). The middle part of the activity ID indicates **process**, for execution tasks, or repeats the category, for all other tasks.

Milestones are indicated by small type, and are preceded by a diamond. Milestones indicate significant project events.

Tasks are indicated by small type. Each task ID on the WBS contains the following:

<phase ID>.<process ID>.<sequence number>

Each task belongs to a process. You can look up task guidelines by process as follows:

Execution -- refer to appropriate process chapter in the AIM *Process and Task Reference.*	
BP	Business Process Architecture
RD	Business Requirements Definition
BR	Business Requirements Mapping
TA	Application and Technical Architecture
MD	Module Design and Build
CV	Data Conversion
DO	Documentation
TE	Business System Testing
PT	Performance Testing
AP	Adoption and Learning
PM	Production Migration

Project Management -- refer to PJM *Process and Task Reference.*	
CR	Control and Reporting
WM	Work Management
RM	Resource Management
QM	Quality Management
CM	Configuration Management

Deliverables are indicated with their corresponding tasks. You can find guidelines on deliverable contents and format, by process, in either this AIM *Method Handbook*, or the PJM *Process and Task Reference*, as shown above.

AIM Approach Work Breakdown Structure

The following is a listing of the AIM work breakdown structure.

ID	Task Name	Deliverable
A	**Definition**	
A.PL.PLAN	**Project Planning**	
A.PL.BEG	◆ Begin Project Planning	
A.CR.010	Establish Scope, Objectives, and Approach	Scoping Project Management Plan [*CR.010, initial*]
A.CR.020	Define Control and Reporting Strategies, Standards and Procedures	Control and Reporting Strategies, Standards, and Procedures [*initial*]
A.CR.030	Establish Management Plans	Project Management Plan [*CR.010, initial complete*]
A.WM.010	Define Work Management Strategies, Standards, and Procedures	WM Strategies, Standards and Procedures [*initial*]
A.WM.020	Establish Workplan	Workplan [*initial*]
A.WM.030	Establish Finance Plan	Finance Plan [*initial*]
A.RM.010	Define Resource Management Strategies, Standards, and Procedures	Resource Management Strategies, Standards, and Procedures [*initial*]
A.RM.020	Establish Staffing and Organization Plan	Staffing and Organization Plan [*initial*]
A.RM.025	Create Project Orientation Guide	Project Orientation Guide [*initial*]
A.RM.030	Implement Organization	Prepared Organization [*initial*]
A.RM.040	Establish Physical Resource Plan	Physical Resource Plan [*initial*]
A.RM.050	Establish Infrastructure	Prepared Infrastructure [*initial*]
A.QM.010	Define Quality Management Strategies, Standards, and Procedures	Quality Management Strategies, Standards, and Procedures [*initial*]
A.CM.010	Define Configuration Management Strategies, Standards, and Procedures	Configuration Management Strategies, Standards, and Procedures [*initial*]
A.PL.END	◆ End Project Planning	
A.BP	**Business Process Architecture**	
A.BP.BEG	◆ Start Definition Phase Execution	
A.BP.010	Define Business and Process Strategy	Business and Process Strategy
A.BP.020	Catalog and Analyze Potential Changes	Change Catalog
A.BP.030	Determine Data Gathering Requirements	Data Gathering Requirements
A.BP.040	Develop Current Process Model	Current Process Model
A.BP.050	Review Leading Practices	Leading Practices Review
A.BP.060	Develop High-Level Process Vision	High-Level Process Vision
A.BP.070	Develop High-Level Process Designs	High-Level Process Designs
A.RD	**Business Requirements Definition**	
A.RD.010	Identify Current Financial and Operating Structure	Current Financial and Operating Structure
A.RD.020	Conduct Current Business Baseline	Current Business Baseline

ID	Task Name	Deliverable
A.TA	**Application and Technical Architecture**	
A.TA.010	Define Architecture Requirements and Strategy	Architecture Requirements and Strategy
A.TA.020	Identify Current Technical Architecture	Current Technical Architecture Baseline
A.TA.030	Develop Preliminary Conceptual Architecture	Preliminary Conceptual Architecture
A.MD	**Module Design and Build**	
A.MD.010	Define Application Extension Strategy	Application Extension Strategy
A.CV	**Data Conversion**	
A.CV.010	Define Data Conversion Requirements and Strategy	Data Conversion Requirements and Strategy
A.DO	**Documentation**	
A.DO.010	Define Documentation Requirements and Strategy	Documentation Requirements and Strategy
A.DO.020	Define Documentation Standards and Procedures	Documentation Standards and Procedures
A.DO.030	Prepare Glossary	Glossary
A.TE	**Business System Testing**	
A.TE.010	Define Testing Requirements and Strategy	Testing Requirements and Strategy
A.PT	**Performance Testing**	
A.PT.010	Define Performance Testing Strategy	Performance Testing Strategy
A.AP	**Adoption and Learning**	
A.AP.010	Define Executive Project Strategy	Executive Project Strategy
A.AP.020	Conduct Initial Project Team Orientation	Oriented Project Team
A.AP.030	Develop Project Team Learning Plan	Project Team Learning Plan
A.AP.040	Prepare Project Team Learning Environment	Project Team Learning Environment
A.AP.050	Conduct Project Team Learning Events	Skilled Project Team
A.AP.060	Develop Business Unit Managers' Readiness Plan	Business Unit Managers' Readiness Plan
A.AP.070	Develop Project Readiness Roadmap	Project Readiness Roadmap
A.AP.080	Develop and Execute Communication Campaign	Communication Campaign
A.EX.END	◆ End Definition Phase Execution	
A.CT.CTRL	**Phase Control**	
A.CT.BEG	◆ Begin Phase Control	
A.CT.SUM	Phase Control	
A.CT.RES	Unallocated Reserve	
A.CT.END	◆ End Phase Control	
A.CO.COMP	**Phase Completion**	
A.CO.BEG	◆ Begin Phase Completion	
A.CR.080	Secure Client Phase Acceptance	Client Phase Acceptance
A.RM.080	Release Staff	Released Staff

ID	Task Name	Deliverable
A.RM.090	Release Physical Resources	Released Physical Resources
A.QM.050	Perform Quality Assessment	Quality Report
A.CM.060	Audit Key Deliverables	Audited Phase Baseline
A.CO.END	◆ End Phase Completion	
B	**Operations Analysis**	
B.PL.PLAN	**Phase Planning**	
B.PL.BEG	◆ Begin Phase Planning	
B.PL.SUM	Review and Revise Project Plans	
B.PL.END	◆ End Phase Planning	
B.BP	**Business Process Architecture**	
B.BP.BEG	◆ Start Operations Analysis Phase Execution	
B.BP.080	Develop Future Process Model	Future Process Model
B.RD	**Business Requirements Definition**	
B.RD.030	Establish Process and Mapping Summary	Process and Mapping Summary
B.RD.040	Gather Business Volumes and Metrics	Business Volumes and Metrics
B.RD.050	Gather Business Requirements	Business Requirements Scenarios
B.RD.060	Determine Audit and Control Requirements	Audit and Control Requirements
B.RD.070	Identify Business Availability Requirements	Business Availability Requirements
B.RD.080	Identify Reporting and Information Access Requirements	Master Report Tracking List
B.BR	**Business Requirements Mapping**	
B.BR.010	Analyze High-Level Gaps	High-Level Gap Analysis
B.BR.020	Prepare Mapping Environment	Configured Mapping Environment
B.BR.030	Map Business Requirements	Mapped Business Requirements
B.BR.040	Map Business Data	Mapped Business Data
B.BR.050	Conduct Integration Fit Analysis	Integration Fit Analysis
B.BR.060	Create Information Model	Information Model
B.BR.070	Conduct Reporting Fit Analysis	Master Report Tracking List
B.BR.080	Test Business Solutions	Business Mapping Test Results
B.BR.090	Confirm Integrated Business Solutions	Confirmed Business Solutions
B.TA	**Application and Technical Architecture**	
B.TA.040	Define Application Architecture	Application Architecture
B.TA.050	Define System Availability Strategy	System Availability Strategy
B.TA.060	Define Reporting and Information Access Strategy	Reporting and Information Access Strategy
B.TA.070	Revise Conceptual Architecture	Conceptual Architecture

ID	Task Name	Deliverable
B.MD	**Module Design and Build**	
B.MD.020	Define and Estimate Application Extensions	Application Extension Definition and Estimates
B.DO	**Documentation**	
B.DO.040	Prepare Documentation Environment	Documentation Environment
B.DO.050	Produce Documentation Prototypes and Templates	Documentation Prototypes and Templates
B.PT	**Performance Testing**	
B.PT.020	Identify Performance Test Scenarios	Performance Test Scenarios
B.PT.030	Identify Performance Test Transaction Models	Performance Test Transaction Models
B.AP	**Adoption and Learning**	
B.AP.090	Develop Managers' Readiness Plan	Managers' Readiness Plan
B.PM	**Production Migration**	
B.PM.010	Define Transition Strategy	Transition Strategy
B.EX.END	◆ End Operations Analysis Phase Execution	
B.CT.CTRL	**Phase Control**	
B.CT.BEG	◆ Begin Phase Control	
B.CT.SUM	Phase Control	
B.CT.RES	Unallocated Reserve	
B.CT.END	◆ End Phase Control	
B.CO.COMP	**Phase Completion**	
B.CO.BEG	◆ Begin Phase Completion	
B.CR.080	Secure Client Phase Acceptance	Client Phase Acceptance
B.RM.080	Release Staff	Released Staff
B.RM.090	Release Physical Resources	Released Physical Resources
B.QM.050	Perform Quality Assessment	Quality Report
B.CM.060	Audit Key Deliverables	Audited Phase Baseline
B.CO.END	◆ End Phase Completion	

C Solution Design

C.PL.PLAN	**Phase Planning**	
C.PL.BEG	◆ Begin Phase Planning	
C.PL.SUM	Review and Revise Project Plans	
C.PL.END	◆ End Phase Planning	
C.BP	**Business Process Architecture**	
C.BP.BEG	◆ Start Solution Design Phase Execution	
C.BP.090	Document Business Procedures	Business Procedure Documentation
C.BR	**Business Requirements Mapping**	
C.BR.100	Define Application Setups	Application Setup Documents
C.BR.110	Design Security Profiles	Security Profiles

ID	Task Name	Deliverable
C.TA	**Application and Technical Architecture**	
C.TA.080	Define Application Security Architecture	Application Security Architecture
C.MD	**Module Design and Build**	
C.MD.030	Define Design Standards	Design Standards
C.MD.040	Define Build Standards	Build Standards
C.MD.050	Create Application Extensions Functional Design	Application Extensions Functional Design
C.MD.060	Design Database Extensions	Database Extensions Design
C.MD.070	Create Application Extensions Technical Design	Application Extensions Technical Design
C.MD.080	Review Functional and Technical Designs	Approved Designs
C.CV	**Data Conversion**	
C.CV.020	Define Conversion Standards	Conversion Standards
C.CV.030	Prepare Conversion Environment	Conversion Environment
C.CV.040	Perform Conversion Data Mapping	Conversion Data Mapping
C.CV.050	Define Manual Conversion Procedures	Manual Conversion Procedures
C.CV.060	Design Conversion Programs	Conversion Program Design
C.CV.070	Prepare Conversion Test Plans	Conversion Test Plans
C.TE	**Business System Testing**	
C.TE.020	Develop Unit Test Script	Unit Test Script
C.TE.030	Develop Link Test Script	Link Test Script
C.TE.040	Develop System Test Script	System Test Script
C.TE.050	Develop Systems Integration Test Script	Systems Integration Test Script
C.PT	**Performance Testing**	
C.PT.040	Create Performance Test Scripts	Performance Test Scripts
C.PT.050	Design Performance Test Transaction Programs	Perform Test Transaction Program Designs
C.PT.060	Design Performance Test Data	Performance Test Data Design
C.PT.070	Design Test Database Load Programs	Performance Test Database Load Program Designs
C.AP	**Adoption and Learning**	
C.AP.100	Identify Business Process Impact on Organization	Business Process Organizational Impact
C.AP.110	Align Human Performance Support Systems	Human Performance Support Systems
C.AP.120	Align Information Technology Groups	Aligned IT Groups
C.AP.130	Conduct User Learning Needs Analysis	User Learning Needs Analysis
C.AP.140	Develop User Learning Plan	User Learning Plan
C.EX.END	◆ End Solution Design Phase Execution	

ID	Task Name	Deliverable
C.CT.CTRL	**Phase Control**	
C.CT.BEG	◆ Begin Phase Control	
C.CT.SUM	Phase Control	
C.CT.RES	Unallocated Reserve	
C.CT.END	◆ End Phase Control	
C.CO.COMP	**Phase Completion**	
C.CO.BEG	◆ Begin Phase Completion	
C.CR.080	Secure Client Phase Acceptance	Client Phase Acceptance
C.RM.080	Release Staff	Released Staff
C.RM.090	Release Physical Resources	Released Physical Resources
C.QM.050	Perform Quality Assessment	Quality Report
C.CM.060	Audit Key Deliverables	Audited Phase Baseline
C.CO.END	◆ End Phase Completion	
D	**Build**	
D.PL.PLAN	**Phase Planning**	
D.PL.BEG	◆ Begin Phase Planning	
D.PL.SUM	Review and Revise Project Plans	
D.PL.END	◆ End Phase Planning	
D.TA	**Application and Technical Architecture**	
D.TA.BEG	◆ Start Build Phase Execution	
D.TA.090	Define Application and Database Server Architecture	Application and Database Server Architecture
D.TA.100	Define and Propose Architecture Subsystems	Architecture Subsystems Proposal
D.TA.110	Define System Capacity Plan	System Capacity Plan
D.TA.120	Define Platform and Network Architecture	Platform and Network Architecture
D.TA.130	Define Application Deployment Plan	Application Deployment Plan
D.TA.140	Assess Performance Risks	Performance Risk Assessment
D.TA.150	Define System Management Procedures	System Management Procedures
D.MD	**Module Design and Build**	
D.MD.090	Prepare Development Environment	Development Environment
D.MD.100	Create Database Extensions	Custom Database Extensions
D.MD.110	Create Application Extension Modules	Module Source Code
D.MD.120	Create Installation Routines	Installation Routines
D.CV	**Data Conversion**	
D.CV.080	Develop Conversion Programs	Conversion Programs
D.CV.090	Perform Conversion Unit Tests	Unit-Tested Conversion Programs
D.CV.100	Perform Conversion Business Object Tests	Bus Object-Tested Conversion Programs
D.CV.110	Perform Conversion Validation Tests	Valid-Tested Conversion Programs
D.DO	**Documentation**	
D.DO.060	Publish User Reference Manual	User Reference Manual

ID	Task Name	Deliverable
D.DO.070	Publish User Guide	User Guide
D.DO.080	Publish Technical Reference Manual	Technical Reference Manual
D.DO.090	Publish System Management Guide	System Management Guide
D.TE	**Business System Testing**	
D.TE.060	Prepare Testing Environments	Testing Environments
D.TE.070	Perform Unit Test	Unit-Tested Modules
D.TE.080	Perform Link Test	Link-Tested Modules
D.TE.090	Perform Installation Test	Tested Installation Routines
D.TE.100	Prepare Key Users for Testing	Prepared Key Users
D.TE.110	Perform System Test	System-Tested Applications
D.TE.120	Perform Systems Integration Test	Integration-Tested System
D.PT	**Performance Testing**	
D.PT.080	Create Performance Test Transaction Programs	Performance Test Transaction Programs
D.PT.090	Create Test Database Load Programs	Performance Test Database Load Programs
D.PT.100	Construct Performance Test Database	Performance Test Database
D.PT.110	Prepare Performance Test Environment	Performance Test Environment
D.PT.120	Execute Performance Test	Performance Test Results
D.PT.130	Create Performance Test Report	Performance Test Report
D.AP	**Adoption and Learning**	
D.AP.150	Develop User Learningware	User Learningware
D.AP.160	Prepare User Learning Environment	User Learning Environment
D.PM	**Production Migration**	
D.PM.020	Design Production Support Infrastructure	Production Support Infrastructure Design
D.PM.030	Develop Transition and Contingency Plan	Transition and Contingency Plan
D.EX.END	◆ End Build Phase Execution	
D.CT.CTRL	**Phase Control**	
D.CT.BEG	◆ Begin Phase Control	
D.CT.SUM	Phase Control	
D.CT.RES	Unallocated Reserve	
D.CT.END	◆ End Phase Control	
D.CO.COMP	**Phase Completion**	
D.CO.BEG	◆ Begin Phase Completion	
D.CR.080	Secure Client Phase Acceptance	Client Phase Acceptance
D.RM.080	Release Staff	Released Staff
D.RM.090	Release Physical Resources	Released Physical Resources
D.QM.050	Perform Quality Assessment	Quality Report
D.CM.060	Audit Key Deliverables	Audited Phase Baseline
D.CO.END	◆ End Phase Completion	

ID	Task Name	Deliverable
E	**Transition**	
E.PL.PLAN	**Phase Planning**	
E.PL.BEG	◆ Begin Phase Planning	
E.PL.SUM	Review and Revise Project Plans	
E.PL.END	◆ End Phase Planning	
E.CV	**Data Conversion**	
E.CV.BEG	◆ Start Transition Phase Execution	
E.CV.120	Install Conversion Programs	Installed Conversion Programs
E.CV.130	Convert and Verify Data	Converted and Verified Data
E.TE	**Business System Testing**	
E.TE.130	Perform Acceptance Test	Acceptance Test Results
E.AP	**Adoption and Learning**	
E.AP.170	Conduct User Learning Events	Skilled Users
E.PM	**Production Migration**	
E.PM.040	Prepare Production Environment	Production Environment
E.PM.050	Set Up Applications	Configured Applications
E.PM.060	Implement Production Support Infrastructure	Production Support Infrastructure
E.PM.070	Verify Production Readiness	Production-Ready System
E.PM.080	Begin Production	Production System
E.EX.END	◆ End Transition Phase Execution	
E.CT.CTRL	**Phase Control**	
E.CT.BEG	◆ Begin Phase Control	
E.CT.SUM	Phase Control	
E.CT.RES	Unallocated Reserve	
E.CT.END	◆ End Phase Control	
E.CO.COMP	**Phase Completion**	
E.CO.BEG	◆ Begin Phase Completion	
E.CR.080	Secure Client Phase Acceptance	Client Phase Acceptance
E.RM.080	Release Staff	Released Staff
E.RM.090	Release Physical Resources	Released Physical Resources
E.QM.050	Perform Quality Assessment	Quality Report
E.CM.060	Audit Key Deliverables	Audited Phase Baseline
E.CO.END	◆ End Phase Completion	
F	**Production**	
F.PL.PLAN	**Phase Planning**	
F.PL.BEG	◆ Begin Phase Planning	
F.PL.SUM	Review and Revise Project Plans	
F.PL.END	◆ End Phase Planning	
F.AP	**Adoption and Learning**	
F.AP.BEG	◆ Start Production Phase Execution	
F.AP.180	Conduct Effectiveness Assessment	Effectiveness Assessment

ID	Task Name	Deliverable
F.PM	**Production Migration**	
F.PM.090	Measure System Performance	System Performance Assessment
F.PM.100	Maintain System	Maintained Prod Environment
F.PM.110	Refine Production System	Refined Prod Environment
F.PM.120	Decommission Former Systems	Decommissioned Systems
F.PM.130	Propose Future Business Direction	Business Direction Recommendations
F.PM.140	Propose Future Technical Direction	Technical Direction Recommendations
F.EX.END	◆ End Production Phase Execution	
F.CT.CTRL	**Phase Control**	
F.CT.BEG	◆ Begin Phase Control	
F.CT.SUM	Phase Control	
F.CT.RES	Unallocated Reserve	
F.CT.END	◆ End Phase Control	
F.CO.COMP	**Project Completion**	
F.CO.BEG	◆ Begin Project Completion	
F.CR.080	Secure Client Phase Acceptance	Client Phase Acceptance
F.RM.080	Release Staff	Released Staff
F.RM.090	Release Physical Resources	Released Physical Resources
F.QM.050	Perform Quality Assessment	Quality Report
F.CM.060	Audit Key Deliverables	Audited Phase Baseline
F.CM.070	Conclude Configuration Management	CM Production Readiness
F.CO.END	◆ End Project Completion	

APPENDIX

B

AIM Roles

This appendix gives a brief description of each role, highlighting the main responsibilities of the role.

Role Descriptions

Adult Learning Specialist

The adult learning specialist is an individual with expertise in the education of adult learners. This project role assists in custom training engagements by developing client-specific curriculum plans and instructional designs.

Application Specialist

The application specialist provides knowledge and guidance regarding application functionality. This project role also supports and provides interpretation for tools, templates and methods. FastForward projects include an Oracle application specialist in each application included in the engagement.

Assessment Specialist

The assessment specialist provides the client with expertise in developing and administering assessments. The assessment specialist assists the client in generating an assessment that is best suited to the unique needs of the client's organization. This project role provides expertise in the use of the Oracle Survey Tool. The assessment specialist has an understanding of sampling techniques, survey development and administration, and data analysis and reporting.

Bid Manager

The bid manager prepares the bid, negotiation, and award. This project role assists in the hand over of materials and information accumulated during the bid to the project manager at the start of the project.

Business Analyst

The business analyst should be familiar with the business area that the system covers and the terminology and practices.

The business analyst performs many activities that define the scope of the project. They examine the client's business and define what the system should do. They obtain information from existing documentation, when available. The business analyst identifies interviewees who might be representative client staff, management, and

technical support staff. The business analyst obtains information by conducting interviews, working sessions, and site visits. These analysis activities determine the technical, interfacing, and operational requirements and constraints.

The business analyst must understand the business objectives and requirements in order to document the analysis The business analyst creates the business models and business requirement scenarios, gathers and translates business functionality into object models, and models the requirements at the subsystem level, creating the most appropriate analysis model level.

The business analyst conducts reviews of the findings with client management and the staff.

Business Line Manager

The business line manager participates in interviews and working sessions providing information about business objectives and ways in which the units operate and respond to events in order to achieve those objectives. The business line manager hosts site visits with staff in order to collect information. Additionally, this project role is responsible for allocating staff time to provide detailed information about the day-to-day business.

Also, this project role describes problems the business unit faces and requirements for the computer system.

The business line manager should review the content of the analysis documentation to make sure it accurately describes the business and requirements.

The business line manager role should be filled by someone who will manage one of the business units that uses the system.

Client Executive

The client executive participates in the strategic decisions regarding implementation and project strategy and defines business performance expectations and metrics. The client executive also appoints steering committee members and is involved in measurement of business results.

Client Project Manager

The client project manager is responsible for the daily management of the client's contractual commitments to the project. This project role must understand the client's business objectives for the project to form the basis for resolving problems, conflicts of interest, and making compromises.

The client project manager obtains physical resources such as space accommodation, office equipment, computer equipment, and materials. The client project manager assists in the availability of users and endeavors to gain user commitment.

Additionally, this project role assists in the allocation of client time to the project. The client project manager introduces the consulting staff to the other client staff. This project role monitors the project's performance, progress against milestones, appropriateness of work, quality of work, and seeks to resolve any problems with work or relationships between the development and business staff.

The client project manager assists in obtaining user review and signoff of deliverables. This role usually performs intermediate and phase-end acceptance.

Client Staff Member

The client staff member reports directly to either the project manager or client project manager.

This project role may be responsible for technical support of the client's systems. The client staff member may provide information about existing systems with which the new system is to interface or replace. This project role provides information about any IS standards with which the project must comply, supports the business' software systems, and takes over support of the system during production.

Finally, a client staff member may participate in training programs for the system initially as consumers and later, possibly as providers.

Communications Specialist

The communications specialist assists the client in developing the communication model and standards for the project team, and the communication campaign to involve, inform and generate buy-in from the stakeholders throughout the client organization.

This project role provides expertise in the selection of the communication channels that are most compatible with the organization's culture and the stakeholders' preferred sources of information. This project role's expertise also drives the design of the campaign in terms of key messages, timing, repetition, and feedback mechanisms.

Configuration Management Specialist

The configuration management specialist with direction from the project manager plans, establishes, and controls the Configuration Management process on the project, with these responsibilities:

- develops, documents, and implements Configuration Management plans and procedures
- establishes project baselines and determines the content of project releases
- makes sure that no unauthorized changes are made to a project baseline
- enforces Configuration Management procedures across all project processes
- establishes the Configuration Management Repository and assists in the adequate maintenance and protection against damage or loss
- recommends improvements, offers implementation advise and supports the changes.

Database Administrator

The database administrator installs and configures database software for the development environment; creates the various databases required during the development life-cycle (for example, the data dictionary, unit testing, system testing, training); and maintains database access controls. Additionally, this project role provides consultation on performance; monitors growth and fragmentation of the development database; and provides database backup and recovery.

Database Designer

The database designer produces the Logical and Physical Database Designs. This project role reviews the module designs to provide efficient access to the database.

The database designer must understand how to translate application logic into a System Data Model and have a thorough understanding of the System Data Model. The database designer is responsible for producing the System Data Model, the Logical Database Design, and the Physical Database Design.

The database designer reviews the application design to check database access efficiency. Additionally, an understanding of the technical architecture and functionality of the system is required so that trade-offs in the design can be made where different functions place conflicting requirements on the database. The database designer may make design suggestions in order to mitigate conflicts between the application design and the technical requirements.

Developer

The developer understands the requirements from the business analysis and how to meet these requirements using the Technical Architecture and Data Model.

The developer produces application and module designs and generation of modules. This project role interfaces closely with the lead system developer to make sure the database design meets the data requirements of the module functionality and module access data efficiently. The developer may create the object structure, the database object logic, and the test scripts for the database.

The developer also produces partition integration test plans and performs testing of partitions and system. During the various testing activities and the production phase, this project role diagnoses faults and determines corrections.

Developers produce the initial versions of online help text, user reference, and technical reference documents.

Facilitator

The facilitator manages the workshop process and acts as the catalyst for preparation and communication. The facilitator creates the context and not the content of the workshop. This project role has the specific responsibilities of:

- agreeing on the scope of workshop with project manager
- planning the workshop

- becoming familiar with the business area
- interviewing participants to verify their suitability and that any pre-work is complete
- facilitating the workshop to meet the objectives
- reviewing the workshop against the objectives

The facilitator runs mapping and process design sessions and keeps momentum going. Finally, this project role may be responsible for workshop activities, not just mapping and process design.

Human Performance Technologist

The human performance technologist understands the organizational and motivational factors that influence the performance of users. This project role brings expertise in the design of the optimal organization of work and project roles to maximize performance results of users.

This project role assists the client in the following activities:

- defining the new work flows and project roles that are derived from the new business processes and procedures
- identifying the new competency profiles
- assessing the new performance support requirements
- developing the performance support systems and human resource management protocol to meet the expected organizational performance

IS Manager

The IS manager directs the client information systems organization within a business. The IS manager acts as a business line manager for the staff in the IS organization. This project role is responsible for the technical infrastructure of a business; including decisions about purchases, in-house development, and operational maintenance and support. The following information systems staff report directly or indirectly to the IS manager:

- application and technical architect
- technical analyst
- designer

- technical (database, network, system) administrator
- operations staff
- support staff

The IS manager helps define the information systems strategy for a corporation and puts the strategy into practice through standards, policies, practices, and information systems selection processes.

The IS manager is responsible for operating the existing platforms within a business. The IS manager participates in the verification and approval of the final operating infrastructure management and architecture.

Key User

The key user participates in workshops and is empowered by the project sponsor to refine and prioritize requirements. This project role provides information about their business objectives and the ways in which their units operate and respond to events in order to achieve those objectives. The key user describes the problems they face and requirements for the computer system.

The key users write the initial user guide.

Network Administrator

The network administrator manages and administers the network. This includes making sure that the network is correctly configured, configuring and maintaining the network environment, and monitoring the performance of the network. The network administrator also acquires tools and establishes procedures to monitor network components to provide for sufficient capacity.

The network administrator provides network consultation and impact assessment to the project team. This project role provides information on data communication solutions deployed throughout the enterprise and makes decisions on network product acquisition and implementation. This project role works with the development team to determine and implement the network hardware requirements of the application. These requirements include designing and implementing components such as cabling, terminals, bridges, and routes. The network administrator makes decisions regarding network infrastructure deployment. In addition, this project role consults with

the development team to determine and implement any foreign host access requirements.

Organizational Development Specialist

The organizational development specialist provides the client with expertise in the human and organizational facets of change. The organizational development specialist develops the Organizational Change Management plan and facilitates an efficient, intelligent transition to the technology-induced change.

Process Modeler

The process modeler specializes in modeling the client's existing business processes and capturing relevant process data.

Project Manager

The project manager represents the project to both the business and IS management. This project role is ultimately held responsible for the success or failure of the project. The project manager must understand the project business objectives and have a clear vision of how to achieve those objectives. The project manager must resolve the conflict among the differing objectives of the various parties to the project.

The project manager primarily faces outwards from the project and handles political conflicts and issues and makes sure they do not impede the project.

The project manager agrees on the scope of the project with the client, makes sure the implementation remains within the agreed upon scope, and guards against scope creep. The project manager should review major deliverables — particularly those from the earlier phases of the project.

The project manager is responsible for comparing the project planning, resourcing, monitoring, and reporting progress against the plan. This project role obtains any physical resources required for the project, recruits staff, and, if necessary, dismisses staff. The project manager is responsible for ensuring that activities are performed in accordance with the Project Management Plan (Quality Plan).

Internal responsibilities of the project manager should be delegated to subordinate team leaders, as documented in the project organization plan.

The project role of implementation project manager is used to distinguish between the two types of projects on a program: focus area or program office and implementation. The responsibilities of the implementation manager are the same as any project manager; however, the implementation project manager is also responsible for the rollout of the baseline solution to the various implementation sites.

In contrast, the program office project manager manages projects tasked with creating a common baseline solution for the implementation project to roll out. Again, the responsibilities of this project role are the same as any project manager.

Project Sponsor

The project sponsor controls the budget and finances the project. This project role is usually a member of senior management. On large, cross-functional projects the project sponsor may be a board member. This project role must have a clear understanding of the project objectives, particularly concerning delivery of the business benefits. The project sponsor empowers the key users to refine and prioritize requirements. The project sponsor is the ultimate arbiter on conflicting business requirements and scope changes. The project sponsor makes sure the project is delivered on time and within budget.

The project sponsor is responsible for ensuring other members of the management share commitment to the project. This project role may provide the resources, particularly staff time, required to make the project a success. The project sponsor usually performs the final approval on the recommendation of the verification coordinator, internal auditor ,and data administrator.

Project Staff Member

The project staff member reports directly to either the project manager or client project manager.

This project role may be responsible for technical support of the client's systems. The project staff member may provide information about existing systems with which the new system is to interface or replace. This project role provides information about any IS standards with which the project must comply, supports the business' software systems, and takes over support of the system during production. Finally, project staff members may participate in training programs for the system initially as consumers and later, possibly as providers.

Project Support Specialist

The project support specialist assists the project manager in the daily management of the project by performing routine or repetitive tasks. On larger projects, this project role may be performed by a project office staff.

Specific duties are delegated by the project manager but will normally include some or all of the following:

- establishing and maintaining the Project Management Plan, project standards, and project procedures
- coordinating and executing effective phase management
- establishing and maintaining the Workplan and Finance Plan
- procuring staff or physical resources for the project
- monitoring and performing analysis of risks, issues, and problems for trends requiring project manager corrective action
- performing coordination and communication functions within the project organization by preparing or maintaining reports, records, logs and other written communications
- collecting progress data from project leaders; and distributing project calendars, meeting agendas
- recording and distributing minutes, decisions, and actions from management meetings
- organizing the Project Library, assigning documents into the library, and maintaining control of documents in the library
- orienting new project members to the project environment, policies and procedures
- coordinating with administrators in client and subcontractor organizations
- preparing project progress reports
- generating routine status information from project records
- maintaining information on project staff such as grade, qualifications, training, parent business unit or subcontractor, telephone and address, project assignment history, and other pertinent information

- establishing project baselines and determining the content of project releases
- establishing change control so that no unauthorized changes are made to a project baseline
- developing, documenting, and implementing Configuration Management plans and procedures, enforce Configuration Management procedures across all project processes
- establishing the Configuration Management Repository and assist in the maintenance and protection against damage or loss
- verifying that the standards and procedures which have been defined for the project in the Project Management Plan are implemented
- verifying and tracking that quality reviews and quality audits are conducted as required

For applications implementation projects, the project support specialist also performs deliverable and template version management, gathers and checks out deliverables, assigns document names and records new documents into the library. This project role also provides some advice regarding process integration, and provides deliverable status.

Quality Auditor

The quality auditor conducts quality audits of the project to include a review of the Project Management Plan. This project role should be filled by a project role independent of the project staff in the consulting organization. The quality auditor needs training in the audit process. This project role prepares for, conducts, and reports on the quality audit or audits undertaken, following up on any actions raised.

Quality Manager

The quality manager, with guidance from the project manager, plans and prescribes all matters affecting quality of a project. This project role makes sure that the specific quality requirements defined in the contract and Project Management Plan are achieved. The quality manager also makes sure the standards and procedures which have been defined for the project in the Project Management Plan are implemented and quality reviews and quality audits are conducted as required.

Steering Committee Member

The steering committee guides the overall project review, adopts the recommendations, and provides sponsorship for implementing the changes. The steering committee includes senior management and a consulting director. Regular meetings should be held to review progress and resolve outstanding issues.

The steering committee members are responsible for the program approach buy-in, funding, issue resolution, and signoff.

Subject Matter Specialist

The subject matter specialist provides detail about the scope of the increment. This project role works closely with the information analyst to define the information requirements and provide valuable input for the data access requirements and assists in the validation of the source system data. The subject matter specialist may provide user input during the design of the end-user layer and queries and reports. They are also involved in the tool evaluation and selection tasks. The subject matter specialist may support the training and user acceptance activities and should provide client support for other users.

The subject matter specialist may have a broad knowledge of the current state of the computer industry and emerging trends and standards. This project role may be responsible for creating a library of industry standards for a project.

System Administrator

The system administrator is responsible for administering a development system. This project role's responsibilities include ensuring hardware is correctly configured; installing, configuring, and maintaining operating and development software; and ensuring daily backups of the system are performed. The system administrator designs and maintains the system's security; for example, establishing system accounts.

The system administrator provides first-line support for development system problems and makes sure faults are quickly rectified. This project role may perform the set-up and initial maintenance of a production system or advise the client's operational staff on these tasks. The system administrator works with the project team to optimize system performance.

System Architect

The system architect defines the system and technical architectures including the major software components of the system, interfaces, and hardware configuration and software foundation.

The system architect is generally the senior or lead technical designer on the project. This project role must understand the business and technical requirements for the system.

The system architect establishes the application architecture of a newly implemented system. In order to accomplish this, the application architect translates the future vision of the business into an application and data deployment strategy. This strategy includes decisions about centralizing or decentralizing business data and processing; identification of interface points and specific requirements for data transfer and synchronization across the business; critical setup of applications to support the business process mapping; strategies to support the reporting needs of the business; and other less general requirements that may impact the architecture such as multilingual requirements. The systems architect provides input to more detailed technical design efforts such as interfaces and custom components, to promote compatibility with the overall applications architecture.

The system architect oversees the application architecture activities. This project role reviews and approves the data deployment strategy and decisions. This project role works very closely with the technical architect to make sure the physical layers of the architecture are consistent with, and fully support, the business and information systems vision for the corporation. This synergism may extend all the way from scoping and planning the project through to the final architecture deliverables and client review.

The system architect also produces and maintains the Capacity Plan and reviews all aspects of the design to make sure it performs within any capacity constraints. This project role also performs any benchmarking exercises required to measure the performance of hardware or software. Often, on smaller projects, this project role is undertaken by the staff performing the system architect project role. On projects developing large systems, this project role is likely to be filled by a separate project role who has the specialized skills required for systems sizing and capacity prediction.

The system architect is responsible for architecting the physical components of the database, hardware, and network in support of the application architecture strategic technical architecture and the

increment technical architecture. In order to accomplish this, the system architect needs to design the detailed database, hardware, and network architecture to support the application architecture and deployment strategy. This includes decisions about the physical distribution of processing across client and server machines, capacity planning of the technical infrastructure, detailed design of the layout of databases, and identification and advisement about performance risks. The system architect oversees detailed technical work on interface, system, data acquisition, data access, and metadata design to make sure the detailed work is consistent with the overall technical architecture.

Technical Analyst

The technical analyst poses solutions and technical assumptions and develops data profiles in support of testing.

Technical Writer

The technical writer becomes familiar with the business and technical requirements of the system and how the architecture, design, and modules achieve those objectives. The technical writer specifies, produces, and edits the user, technical, and operational documentation. This project role provides skills in language and presentation.

Tester

The tester develops and executes test script. Testers make sure test scripts are reviewed by the appropriate business analysts prior to test execution. This project role records test results during testing activities and documents test faults in the problem log. Testers update test scripts due to approved change requests or software faults that were not anticipated in the original development. When problems are resolved after re-testing, testers update the problem log.

Tool Specialist

The tool specialist provides knowledge and guidance regarding specific tool functionality. This project role also supports and provides interpretation for the tool capabilities and customization and design of the end-user layer.

Trainer

The trainer defines the training requirements, prepares a training plan, produces training material, and delivers courses.

The trainer is responsible for working with the client to develop and deliver the necessary project team training during a FastForward project. Within the scope of a FastForward project this resource is not responsible for developing or delivering the end-user training.

An external trainer may be needed to assist the key users in training end users.

User

The user is a member of the client's staff who actually uses the production system. This project role acts as a consumer of the training program and reports problems about the production system. The users are involved in testing in the later stages of development and assist the key users in performing the pre-production validation.

Glossary

24x7 A period or window of service availability that covers 24 hours day, seven days a week.

3GL see THIRD-GENERATION PROGRAMMING LANGUAGE.

4GL see FOURTH-GENERATION PROGRAMMING LANGUAGE.

A

ABT see APPLIED BUSINESS TECHNOLOGY.

Acceptance The approval, typically by a client or user, of a project deliverable.

Access Control The ability to manage which users or groups of users may have the privilege to retrieve, create, update, or delete data held in a repository, such as a relational database.

Activation A logical event corresponding to the enabling of one high level business function at one site for one business unit. Each activation represents a discrete unit of work that we can predict and measure.

Actuals Information gathered during a project concerning the actual amount of time, finances or resources expended on a task.

Administration Server The machine from which a user, typically an administrator, runs programs that maintain and update an Oracle Applications database. For example, AutoInstall and AutoPatch are both run on this machine to install, upgrade, or update the database, which may reside on another machine (the database server).

Advocate An individual who supports the project within the client environment, without being involved in the project's implementation. An advocate may be a formal or informal leader within the organization.

Agent A generic term for a party which is responsible for the execution and completion of a process step. An agent may be an organizational unit, a functional unit, a business system, an employee role, an external system, or an external party such as a customer or supplier.

Agent Channel A horizontal division on a process flow diagram that indicates which agent performs which particular functions within the process being modeled.

AIM see APPLICATION IMPLEMENTATION METHOD.

Adragogy The field of adult-centered learning.

Applet A Java program that is downloaded to a desktop client from a web server, and run within a Java-enabled web browser or appletviewer.

Appletviewer A program that runs a Java applet or application.

Application A collection of program modules that work together to support a set of related business functions; see also MODULE.

Application Extension A collective term referring to any of several custom program approaches to a business requirement that is not satisfied by Oracle Applications, including modification of base Oracle Application code, custom extensions or configurable extensions; see also CUSTOMIZATION.

Application Servers Machines that reside in a middle tier, between desktop clients and a high-end, or back-end, tier. Desktop clients send their requests to application servers, which process the request by sending it to another server, such as the database server. In this manner, the desktop clients never connect directly to the database server. The forms server and web server are types of application servers; see also TIER.

Application Environment (Oracle) A complete application installation along with other utilities used for business mapping, design, build, testing, or training. Usually, an application environment includes setups and test data to support business modeling, and procedures exist to recover to controlled starting points after sessions are complete.

Application Fit A recorded match between some aspect of a business requirement and the capability or features of the application system that satisfies the requirement.

Application Functional Configuration (Oracle) The definition of key architectural setup parameters in an application instance or product group to reflect the financial and operating environment of the business organizations that transact within that application instance or product group.

Application Gap A recorded variance between some aspect of a business requirement and the capability or features of the application system that are necessary to satisfy the requirement.

Application Implementation Method (AIM) A method that comprises a flexible approach for implementing Oracle Applications.

Application Instance A unique set of application tables and processes. Note that two instances of the same version of an application may share one set of program modules but they will not share the same set of application tables.

Application Interface A mechanism used to transfer data between applications. A data flow between applications is always implemented as a set of one or more application interfaces; see also NEAR REAL-TIME INTERFACE and REAL-TIME INTERFACE.

Application Process An indication of the sequential execution of a series of system functions, possibly including manual functions as well; see also MANUAL FUNCTION, SYSTEM FUNCTION, and SYSTEM PROCESS.

Application System An automated collection of business functions, entities, modules, technology platforms, and documentation that performs a specified set of business functions; see also BUSINESS SYSTEM, MODULE, PLANNED RESPONSE SYSTEM, and SYSTEM FUNCTION.

Applications Distributed Interface (Oracle) An interface between similar or dissimilar Oracle Applications products that have data stored in multiple separate databases. The databases may or may not be resident at multiple sites (data centers). The corollary of this is that applications distributed interfaces may exist at a single site.

Applications Interface (Oracle) An interface between similar or dissimilar Oracle Application products that have data stored in the same database. The interface may or may not be supported within the standard package products.

Applied Business Technology (ABT) A company that manufactures tools to profile, estimate, and plan projects. Oracle Services has a global licensing agreement with ABT. Oracle Method makes use of Project Workbench, Methods Architect, and Project Bridge Modeler as its worldwide methods and project management software standard; see also PROJECT BRIDGE MODELER and PROJECT WORKBENCH.

Approach A variation or subset of a method, packaged in order to efficiently support the delivery of a service; see also TECHNIQUE.

Arm's Length Transaction An inter-company transaction that is treated as a third party transaction.

Assessment The process of determining the value, extent, or significance of pre-determined topics for investigation. Methods may include surveys (questionnaires, interviews), observation, testing, and content analysis.

Attribute 1. Any detail that serves to qualify, identify, classify, quantify, or express the state of an entity; any description of a *thing of significance*. 2. A database object that links or relates the values of two dimensions. For example, you might define an attribute that relates the Sales District dimension to the Region dimension so that you can select data for sales districts according to region.

Audience A group of information recipients who possess similar communication and organizational attributes, e.g. content needs, communication styles, work emphases, etc. In a communication intervention, the audience is not passive, in that it shares the work of the project through tow-way communication and direct involvement in the design and implementation of the project process.

AutoText Entry Microsoft Word allows you to store frequently used text, graphics, and other items and quickly insert them into documents. These stored items are referred to as AutoText entries. If you store text and graphics as AutoText entries, you can retrieve them by clicking a button, typing a few keystrokes, or choosing a command. Components of the Deliverable Templates are stored as AutoText entries in global templates used to store boilerplate text; see also BOILERPLATE TEXT.

B

Background Process A non-interactive process that runs in an operating system environment and performs a task.

Backup and Recovery Strategy A storage and recovery strategy that protects against business information loss resulting from hardware, software, or network faults.

Bandwidth The amount of data that can be sent through a network connection, measured in bits per second (BPS). The speed and capacity of a network depend on both bandwidth and latency; see also LATENCY.

Base Language The language used for seed data of products that do not support multiple languages. (Multiple language products include FND, AK, AS, AX, and AZ).

Baseline 1. A starting point or condition against which future changes are measured. 2. A named set of object versions which fixes a configuration at a particular point in time. A baseline normally represents a milestone or key deliverable of a project; see also CURRENT BUSINESS BASELINE.

Bid and Proposal Management (BPM) Specifies the process, tasks, responsibilities, and deliverables regarding how business opportunities are qualified and responded to, eventually leading to the issue of an authorized bid to a client.

Billable Project Expenses The project expenses that are billable to a client; see also PROJECT EXPENSES.

Billable Utilization The utilization that is billable to a client; see also UTILIZATION.

Black Box Test A test of all or part of an application system based upon fulfilling business requirements or meeting functional specifications. A black box test does not require an understanding of the actual code under test. A system test is usually a black box test.

Boilerplate Text Prewritten collection of words, sentences, headings, and formatting in a template that you can modify to suit a specific need; see also AUTOTEXT ENTRY.

Bottom-Up Estimate A task-level estimate derived by calculating the estimating factors critical to completion of each task; see also ESTIMATING FACTOR.

BPM see BID AND PROPOSAL MANAGEMENT.

BPR see BUSINESS PROCESS REENGINEERING.

BRS see BUSINESS REQUIREMENTS SCENARIO.

Browser see WEB BROWSER.

Budget A plan for determining in advance the expenditure of time, money, etc.

Business An enterprise, commercial entity, or firm in either the private or public sector, concerned with providing products or services to satisfy customer requirements.

Business Aim A statement of business intent measured subjectively; for example, to move up market, or to develop a sustainable level of growth; usually strategic or tactical with a 3-5 year horizon.

Business Area The set of business processes within the scope of a project.

Business Constraint Any external, management, or other factor that restricts a business or system development in terms of resource availability, dependencies, timescales, or some other factor.

Business Data Mapping Verification that the underlying table structures and attributes will support business processes.

Business Function Something an enterprise does, or needs to do, in order to achieve its objectives; see also APPLICATION SYSTEM, BUSINESS PROCESS, MANUAL FUNCTION, and SYSTEM FUNCTION.

Business Function Model A representation of all the business functions within a defined scope. A wide range of techniques is available for modeling business functions; see also FUNCTION DECOMPOSITION and FUNCTION HIERARCHY.

Business Goal A statement of business intent.

Business Location A uniquely identifiable geographic location, site, or place from which one or more business units may wholly or partly operate.

Business Model A model or collection of models representing the definition of key components of a business. Components may include models of processes, objectives, functions, and information; see also BUSINESS PROCESS MODEL, ENTITY RELATIONSHIP DIAGRAM, and FUNCTION HIERARCHY.

Business Object A physical or logical object of significance to a business; for example, a sales order, department, assembly, item, balance, or invoice. A business object is analogous to a class in object-oriented terminology.

Business Objective Business conditions which, if met, will solve the business problem statement. Well-defined objectives are measurable and often relate directly to business processes and deliverables; see also PROBLEM STATEMENT.

Business Organization Any part of a business treated for any purpose as a separate unit within the parent business organization; for example, a department, division, or subsidiary; see also BUSINESS UNIT.

Business Organization Type A classification of a business organization into one of several functional categories. Each business organization type has a distinct set of business requirements. All the business organizations of a certain type will typically require similar applications and system capabilities. A given site may house one or more business organization types. Since business organizations may be related in a hierarchy, a high level business organization may be composed of several business organizations of different types. For the purposes of application architecture analysis and design, it is generally useful to decompose the hierarchy of business organizations until it is composed of atomic organization types; see also CUSTOMER SERVICE, DISTRIBUTION, FINANCE, HUMAN RESOURCES, INFORMATION SYSTEMS, MANUFACTURING, MARKETING, PLANNING, RESEARCH AND DEVELOPMENT, and SALES.

Business Priority A statement of the level or urgency of important business needs.

Business Process The complete response that a business makes to an event. A business process entails the execution of a sequence of one or more process steps. It has a clearly defined deliverable or outcome. A Business Process is defined by the business event that triggers the process, the inputs and outputs, all the operational steps required to produce the output, the sequential relationship between the process steps, the business decisions that are part of the event response, and the flow of material and / or information between process steps; see also BUSINESS FUNCTION, BUSINESS PROCESS MODEL, and EVENT RESPONSE.

Business Process Model The collection of process flow diagrams that comprise the complete set of business processes within the application scope; see also PROCESS FLOW DIAGRAM.

Business Process Reengineering (BPR) The activity by which an enterprise reexamines its goals and how it achieves them, followed by a disciplined approach of business process redesign. A method that supports this activity.

Business Requirement A formal statement that describes application features necessary to support a business process step.

Business Requirements Mapping An activity that describes the business requirements for a business process in business language, optionally compares the current solution for a business requirement to a proposed solution and specifies details for the type and nature of the solution in a descriptive format. The deliverable can also be used as a record of key decisions, or as a placeholder in anticipation of additional detailed design documentation.

Business Requirements Scenario (BRS) A formal statement of the detailed business requirements for a business process, the source of these requirements, how these requirements will be satisfied (either by the application, manual process steps, workarounds or other application solutions), and what prototyping steps must be taken to prove the designs.

Business Rule A rule under which an organization operates. A policy or decision that influences the process step.

Business Solution Testing A technique by which management agrees that business requirements will be satisfied if the application and other tools perform as specified by process designs.

Business System A combination of people and automated applications organized to meet a particular set of business objectives; see also APPLICATION SYSTEM and PLANNED RESPONSE SYSTEM.

Business Unit Part of an organization treated for any purpose as a separate entity within the parent organization. Examples include a department or distribution center; see also BUSINESS ORGANIZATION.

Business View 1. A frequently used subset of information, readily intelligible to users and defined in business terms, derived from definitions held in an entity model. It is based on one entity and can encompass renamed attributes from the base entity or any other entity. 2. A custom-tailored presentation of the data in one or more tables. A business view can be thought of as a "stored query."

C

Cartridge A software component that, when linked with other cartridges, forms a complete software solution. Cartridges are "wrappers" around a program. The program may be written in any programming language, such as C, C++, or Java. The wrapper enables the program to interface with other cartridges on the same machine or across a network. Cartridges may be used in many places: the Oracle ConText Cartridge is an example of a data cartridge (residing on the database tier), while the Oracle Forms Load Balancing Cartridge is an example of an application cartridge (residing on the application tier).

Cascade Method Model of communication that begins at the top by having managers inform their direct reports, who then inform their direct reports, etc. so that information cascades down the organizational hierarchy until all stakeholders have received the necessary information. Effective in building commitment and cooperation among stakeholders, as most individuals prefer to receive information from their supervisors.

CASE see COMPUTER-AIDED SYSTEMS ENGINEERING.

Case Method the presentation of real or fictional situations or problems to learners to analyze, to discuss, and to recommend actions to be taken. Used to develop critical thinking skills and to gain new perceptions of concepts and issues.

CASE Tools A set of integrated Computer-Aided Systems Engineering (CASE) and application development tools that assist in software development, for example, analyzing business requirements, designing applications, generating application code, etc.

Certificate File A certificate file contains the identity of a "trusted source" that the desktop client uses to guarantee the authenticity of a JAR file. Information contained within the certificate file allows the desktop client to decrypt the digital signature of a JAR file. If the identity can be confirmed, the desktop client assumes the JAR file is safe to download and execute; see also DIGITAL SIGNATURE.

CDM see CUSTOM DEVELOPMENT METHOD.

Change A deviation from a currently established baseline.

Change Effort Any activity consciously undertaken by an enterprise, business unit, or individual, that will result in critical change in one or more areas of the organization, for example, new technology implementation; see also ORGANIZATIONAL EFFORT.

Change Management 1. The complete set of processes employed on a project to make sure that changes are implemented in a visible, controlled and orderly fashion. 2. The activity, or set of activities, undertaken to govern systematically the effects of organizational change. 3. A Focus Area Group within Program Management that incorporates all necessary Oracle Method processes to develop an integrated approach to change as part of a Program's Baseline Solution. 4. The management and control of organizational change, and its effects on staff, during a project. It includes key issues such as the impact of change on staff tasks, staff capabilities, retraining, cultural change and communication between the project team and staff in the organization.

Change Management Repository A system for maintaining configuration items. It provides other services such as version control, access control and information storage and retrieval which support the configuration management process.

Change Readiness A measure of an organization's state of readiness to realize change successfully; involves a consideration of an organization's high-impact leverage points for change, as well as any change impediments.

Change Request 1. A request for a change to the required behavior of a system, usually from a user as a result of reviewing current behavior. 2. The mechanism by which a change is requested, investigated, resolved and approved; see also IMPACT ANALYSIS.

Character Set A set of encoded binary values that represents the letters, numerals, and punctuation marks of a language, or of a group of languages that use similar written symbols. For example, the WE8ISO8859P1 character set can be used by English and many other languages that use a Latin-based alphabet and Arabic numerals. Terminals and printers handle text data by converting these encoded values to characters. A character set may also be called a codeset.

Class 1. A class refers to the delivery training to students on a certain topic(s). Usually, training is provided regarding Oracle applications such as bill of materials, work in process, etc. Training may also be provided regarding job policy and procedures, help desk operations, etc. 2. A description of a set of objects that share the same attributes, operations, methods, relationships, and semantics. A class may use a set of interfaces to specify collections of operations it provides to its environment. (UML 1.1 Semantics)

Class Session A class session consists of delivering a class to a specific set of students at a particular place and time.

Client A general term for the computer in a client/server configuration that requests services, data, or processing. The computer supplying the services, data, or processing is the server.

Client/Server A type of technical architecture that links many personal computers or workstations (clients) to one or more large processors (servers). Clients generally manage the user interface, possibly with some local data. Servers usually manage multiple-access databases, including ensuring data integrity and other invariants.

Client/Server Configuration A configuration in which one or several servers perform database processing or other functions for applications that are run on clients.

Coaching A technique of apprenticeship whereby the coach demonstrates and observes learners as they try to complete tasks and provides hints, help, and feedback as needed.

Codeset see CHARACTER SET.

Column A means of implementing an item of data within a table. It can be in character, date, or number format, and be optional or mandatory.

Common Business Function A business function that appears in more than one place in a hierarchy.

Communication Agent An individual who implements a communication activity, such as a communication event, who acts as a communication resource, information resource or channel.

Communication Campaign A series of activities undertaken to achieve the communication objectives for a particular audience.

Communication Event Those activities within the deployment of a communication campaign that are discrete and time-bound, such as a presentation, launch of a kiosk, or video conference.

Company A commercial business; see also BUSINESS.

Company Base Hardware Configuration The actual hardware configuration that supports the company base configuration; see also COMPANY BASELINE.

Company Baseline The Company Baseline is the supported configuration of hardware, software, bug patches, modifications, operating systems, etc. that is part of a common set of business systems for the entire enterprise. There may be lower level of Company Baselines such as a Latin America Baseline that is a subset of the Company Baseline.

Compensable Factors Aspects of a job that contribute to its level of compensation.

Competency Underlying and enduring characteristic of an individual that causes or predicts effective or superior performance in a job or activity.

Competency Model A set of underlying and enduring characteristics (such as skills and knowledge) of an individual that are required to perform a job effectively.

Completion Criteria Standards or rules which determine completion of a task to an acceptable level of quality.

Computer-Aided Systems Engineering (CASE) The combination of graphical, dictionary, generator, project management, and other software tools to assist computer development staff engineer and maintain high-quality systems, within the framework of a structured method.

Computer-Based Training Instructional technology with computer and software programs for individualized learning. The programs are designed to interface with the user in such a way as to simulate an encounter between a learning agent and a learner, for computer-assisted or -based learning; for example, the programs are configured to deliver instruction and evaluate learner progress; may include mechanisms that adapt the program to learner characteristics as the program progresses

Computer Network An interconnected group of computers.

Conceptual Architecture A high level model of an enterprise's business application that identifies the organizational and geographical deployment of the most critical application systems and the technology components required to support them. This model provides the direction for the detailed enterprise technical architecture analysis. It should reflect the vision of the client senior executive management for the future direction of the information systems in the enterprise.

Concurrent Manager A process manager that coordinates the processes generated by users' requests to run various data-intensive programs. An Oracle Applications product group can have several concurrent managers.

Concurrent Process A task run by a concurrent manager. A concurrent process runs simultaneously with interactive functions and other concurrent processes.

Concurrent Processing Server An Oracle Applications server that runs time-consuming, non-interactive tasks in the background. This server resides at the database tier of the internet computing architecture.

Concurrent Queue A list of concurrent requests awaiting completion. Each concurrent manager has its own queue of pending requests.

Concurrent Request A request issued to the concurrent processing server when you submit a non-interactive task, such as running a report.

Conference Room Pilot (CRP) A system test in an environment set up to simulate the future production environment.

Configuration A named set of configuration items. Configurations are used to hierarchically organize configuration items in order to facilitate their management; see also CONFIGURATION ITEM.

Configuration Change The implementation of one or more change requests which leaves the configuration in an internally consistent state; see also IMPACT ANALYSIS.

Configuration Item A deliverable or deliverable component which is placed under configuration management.

Configuration Management The process of managing hardware, software, data, and any other documentation needed during the development, testing, and implementation of information systems.

Congruence Model Organization model, based on open systems theory, that stresses the interdependence between systems and the ripple effect of inputs across systems. Views strategy as driven by organization context (inputs) -- company history, resources, the firm's environment, that require organizational transformation to maintain correspondence or balance between the interrelated systems.

Constraint see BUSINESS CONSTRAINT and BUSINESS RULE.

Consulting Grade Level A grade level assigned to Oracle Services consulting resources used to calculate the cost of a resource's labor; 1-Administrative Assistant to 10-Regional Vice President.

Context Diagram A high-level diagram, indicating the major functional components and major internal and external interdependencies of a system.

Contingency Work effort allotted in a workplan for all unforeseen but possible occurrences of additional work.

Contribution Margin see MARGIN AMOUNT and MARGIN PERCENTAGE.

Controlled Document A document which constitutes or represents a project deliverable for approval internally or by the client, and is subject to change control.

Controls Environmental information that affects what is possible; constraints or limits.

Conversion Execution An example of a Conversion Execution would be where open orders are converted from a legacy system to Oracle Order Entry in one region on a given date. Other regions may go live with Order Entry on a different date requiring other order entry Conversion Executions.

Conversion Fit Analysis A formal statement of subsystems and entities converted into the new applications database.

Core Tasks. The minimum set of tasks necessary to complete an Oracle Applications implementation or migration project.

Core Business Process A major, driver process that affects or influences business objectives. The set of business processes identified in association with the objectives represent the "core processes" of the business area.

Corporate Repository Location of a collection of documentation, customizations, modifications, or enhancements designed to alleviate the recreation of successfully completed work.

Corporation A group of businesses acting as part of a single legal entity.

Cost The amount allotted or spent to acquire, deliver or produce anything, for example, the cost of labor to deliver consulting services, the amount spent on incidental costs to deliver consulting services, the amount spent on hardware, software, etc.

CPM see CRITICAL PATH METHOD NETWORK.

CPU Support Identification (CSI) A number assigned to each Oracle customer. The number is required in order to use the Support hotline or RTSS. Associated with the CSI number is the client's name, RDBMS version, supported products, operating system, telephone, area code, and Technical contracts.

Critical Path Method (CPM) Network A network diagram that shows tasks, their dependency links, and their critical path.

Critical Success Factor (CSF) A business event, dependency, product, or other factor that, if not attained, would seriously impair the likelihood of achieving a business objective.

CRP see CONFERENCE ROOM PILOT.

CSF see CRITICAL SUCCESS FACTOR.

CSI see CPU SUPPORT IDENTIFICATION.

CT see CUSTOM TRAINING.

Current Business Baseline The set of business process and function models representing the current application system that supports the business area; see also BUSINESS AREA, BUSINESS PROCESS MODEL, and BUSINESS FUNCTION MODEL.

Custom Code Coding added to a packaged application or module generated by a CASE tool to implement functionality that the application or generator has not provided; see also CUSTOM EXTENSIONS.

Custom Development Method (CDM) A structured method for full life-cycle custom development projects; see also LINE OF BUSINESS.

Custom Extensions Custom modules that extend the functionality of packaged applications without modifying the base functionality; see also CUSTOM CODE.

Custom Support System A custom-built information system conceived, developed, and managed at the enterprise level. It provides a service to one or more sites or business units. Such systems are designed to be generic, flexible, and independent of the particular service sites. Examples of custom support systems are: enterprise data warehouses, data registry propagation systems, and distributed application data transport systems.

Custom Training (CT) An organizational change management area providing organizations with training programs designed to meet specific training needs identified through a preliminary training needs assessment. Custom training seeks to re-skill a work force to optimize performance with new technology.

Customer Service The business organization that 1. manages returns and repairs of products that may or may not have been purchased from the enterprise originally; 2. responds to customer complaints about service or products; see also BUSINESS ORGANIZATION TYPE.

Customization A change made to the standard Oracle software which implements a solution to a gap.

Cut-Over Transition to a new application system in a live, production mode of operation.

D

Data Cleansing The transformation of data in its current state to a pre-defined, standardized format using packaged software or program modules.

Data Conversion The movement of data from a legacy system or application to a replacement application or subsystem.

Data Definition The specification of a data element to be maintained. The specification includes datatype, size, and rules about processing: for example, derivation, and validation; see also BUSINESS RULE.

Data Definition Language (DDL) A subset of SQL used to create, alter, drop, and otherwise change definitions of tables, views, and other database objects.

Data Dictionary 1. A part of a database that holds definitions of data elements, such as tables, columns, and views. 2. A set of database tables and views that contains administrative information about users, data storage, and privileges. It is created and maintained automatically.

Data Integration The movement of data between two co-existing systems. The interfacing of this data may occur once every hour, once a day, etc.

Data Integrity Testing Verification that converted data is accurate and functions correctly within a single subsystem or application.

Data Migration The movement of data from one database to another database – but not necessarily to a working application or subsystem tables.

Data Model A representation of the specific information requirements of a business area; see also ENTITY RELATIONSHIP MODEL.

Data Partitioning A technique to improve application performance or security by splitting tables across multiple locations.

Data Profile A description of the business conditions that are needed to test the application system.

Data Registry The master copy of the data associated with a business object. Several databases may share access to a common data registry to provide consistency and eliminate redundant entries across multiple applications and databases. An example of a data registry would be a shared customer master. All updates and changes would be made to the customer master data registry and are then propagated to subscribing sites. All systems requiring customer information would interface with the customer data registry.

Data Registry Interface An interface that transfers data registry data between similar or dissimilar applications.

Data Replication The copying of data to and from sites to improve local service response times and availability; frequently employed as part of a backup and recovery strategy.

Data Transfer The physical movement of data between applications, perhaps across sites.

Data Transformation The process of redefining data based on some predefined rules. The values are redefined based on a specific formula or technique.

Data Translation The process of redefining data in a manner differing between its original representation and its final representation.

Database A collection of data, usually in the form of tables or files, under the control of a database management system. The term can also refer to the software used to create, store, and manage this data-for example, the Oracle9.5i Server.

Database Architecture The collective application and database instances that comprise the complete system.

Database Function A callable routine executed within a database server environment.

Database Index A mechanism to locate and access data within a database. An index may quote one or more columns and be a means of enforcing uniqueness on their values.

Database Instance One set of database management processes and an allocated area in memory for managing those processes. Typically, a database instance is associated with one database. Note that a database instance may process data for one or more applications. There is always a one-to-one correspondence between an ORACLE instance and a system global area (SGA).

Database Management System (DBMS) A software environment that structures and manipulates data, and provides data security, recovery, and integrity.

Database Object A logical entity created and stored in a database. Tables, views, synonyms, indexes, sequences, stored procedures, and triggers are all examples of database objects.

Database Package An Oracle database object comprised of PL/SQL code allowing execution of code at the server based on specific events or triggers.

Database Server A software server on which the database holding Oracle Applications data resides. The database server processes SQL requests from other machines, such as forms servers and concurrent processing servers. The database server executes on a hardware platform server.

Database Schema see ORACLE ID.

Database Space The amount of disk space used by a set of database objects.

Dataflow A named flow of information between business functions, datastores, and external entities represented as an arrow on a dataflow diagram; see also BUSINESS FUNCTION, DATASTORE, and EXTERNAL ENTITY.

Dataflow Diagram A diagram representing the use of data by business functions; see also DATAFLOW, DATASTORE, EXTERNAL ENTITY, and PROCESS.

Dataflow Diagramming A technique for expressing the significant dataflows of a business system.

Datastore A temporary or permanent storage concept for logical data items used by specified business functions and processes.

DB2 An SQL-based database management system.

DDL see DATA DEFINITION LANGUAGE.

Decision A point in a process flow where there is a choice of possible paths. The outcome of the decision determines which path the flow follows.

Decision Point The diagrammatic representation, on a process flow diagram, of a decision which results in the subsequent execution of one of two or more alternative sequences of process steps. The decision is actually made during the execution of the previous process step. The decision point is shown after that step for diagrammatic convenience.

Decision Support System (DSS) An application primarily used to consolidate, summarize, or transform transaction data to support analytical reporting and trend analysis.

Deliverable Something a project must produce in order to meet its objectives. A deliverable must be tangible and measurable.

Deliverable Component A part or section of a deliverable. A deliverable component may be the output of a task step.

Deliverable Guideline A detailed description of a deliverable that includes: detailed description, usage, audience, and distribution, format guidelines, control, template, and samples; see also DELIVERABLE.

Deliverable Management The process of managing the creation, review, modification, and distribution of deliverables provided to a client. Software may be included as one of the managed deliverables.

Deliverable Template A tool designed to aid in production of a deliverable; a template that gives the format and structure of a deliverable; see also DELIVERABLE.

Delivery Vehicle The mechanism for producing or implementing something. For example, SQL* Forms is a vehicle to produce computer programs.

Demonstration Product Group A product group that includes predefined transaction data for Oracle Applications products. It is used primarily for system testing and user training. See also PRODUCT GROUP.

Dependency 1. An indication that one task cannot begin until another task has ended, or progressed to a certain specified level of completion; see also PREDECESSOR and SUCCESSOR. 2. A relationship between two modeling elements, in which a change to one modeling element (the independent element) will affect the other modeling element. (UML 1.1 Semantics)

Dependent Product An Applications product that is not licensed, but whose files are shared in part by a fully installed Applications product. A dependent product is also known as a shared product.

Deployment The total set of activities associated with the production implementation of a set of applications in specific location(s) at a particular point in time.

Desktop Client A computer that sends user requests to the forms server and handles responses such as screen updates, pop-up lists, graphical widgets, and cursor movements.

Detailed Deliverable A deliverable whose structure originated from a high level deliverable, but that contains significantly more detail; see also DELIVERABLE and HIGH-LEVEL DELIVERABLE.

Development Life-Cycle A complete process of developing computer systems.

Digital Signature A means of guaranteeing the authenticity of a program or collection of data, such as a JAR file. It is typically an encrypted message that contains the identity of the code's author. See also certificate file.

Distributed Concurrent Processing See PARALLEL CONCURRENT PROCESSING.

Distributed Directory Structure Applications product files installed in more than one file system (for example, when there is insufficient disk space in a single file system for all Applications product files).

Distributed Database A database that is physically located on more than one computer processor. It is connected via some form of communications network. An essential feature of a true distributed database is that users or programs work as if they had access to the whole database locally.

Distributed Processing The ability to have several computers working together in a network, where each processor runs different activities for a user, as required.

Distribution A high-level business function responsible for configuring the firmware parts of inventory, housing finished goods inventory (FGI), and shipping finished goods to customers or to internal sites; often synonymous with a business organization; see also BUSINESS ORGANIZATION TYPE.

Distribution Management Distribution management is the process to manage the release and distribution of software in a controlled manner. This includes the kitting of software, documentation, patches and other components. It involves initial releases and subsequent patch tapes, upgrades and new releases. It also includes providing the organizational challenges of obtaining release approval from the Company Baseline Review Board (CBRB).

DSS see DECISION SUPPORT SYSTEM.

E

EBF see ELEMENTARY BUSINESS FUNCTION.

EF see ESTIMATING FACTOR.

Effort The amount of work, measured in person-hours, to perform a task.

Electronic Performance Support Systems An integrated electronic environment easily accessible by users and structured to provide immediate, individualized, on-line access to information, software, guidance, advice, assistance, data, images, tools, assessments, and monitoring systems to permit users to perform their jobs with a minimum of support and intervention by others.

Electronic Performance Support Tool Software designed to improve employee productivity by supplying immediate on-the-job access to integrated information, learning opportunities, and expert consultation with scope and sequence controlled by the user.

Element A thing of significance about which information is recorded; a component at the most useful, basic level.

Element Type Any element held in the repository is classified as a particular type. Examples of element type are entity, attribute, program module, process, table, diagram, and text. Occurrences or instances of these are called elements.

Elementary Business Function (EBF) A business function which if started, must either complete successfully or, if it cannot complete successfully, must undo any effects that it has had up to the point of failure. An elementary business function changes a business's data from one consistent state to another; see also FUNCTION HIERARCHY and COMPOSITE BUSINESS FUNCTION.

End User see USER.

Enterprise A group of departments, divisions, or companies which make up an entire business.

Enterprise Support Systems The set of all computer-based systems, documents, and procedures used in support of business enterprise operations.

Enterprise Technical Architecture (ETA) A series of rules, guidelines, and principles used by an organization to direct the process of acquiring, building, modifying, delivering, and integrating Information Technology resources throughout the enterprise. These resources can include equipment, software, business processors, protocols, standards, methodologies, IT organizational structures and more.

Entity A thing of significance, whether real or imagined, about which information needs to be known or held. It is implemented in a database as one or more tables.

Entity Integrity Rules The rules that specify valid values or combination of values for attributes of an entity. These may include unique identifiers, domains, and multi-attribute validation rules; see also BUSINESS RULE and REFERENTIAL INTEGRITY CONSTRAINT.

Entity Relationship Diagram (ERD) A diagram that pictorially represents entities, the relationships between them and the attributes used to describe them; see also ATTRIBUTE, ENTITY, and RELATIONSHIP.

Entity Relationship Model A type of data model. Part of the business model that consists of many Entity Relationship Diagrams; see also DATA MODEL.

Entity Test A detailed test of certain key data elements of a business entity that is being converted or interfaced from one system to another.

Environment File A command file that sets environment variables. Only servers running UNIX or Open VMS use these files. Windows NT servers use the Windows registry instead.

Environment Variable A variable maintained by the UNIX shell that can be referenced by any program running within the shell. Environment variables hold values used by many Oracle programs and utilities. On Windows NT, a string consisting of environment information, such as a drive, path, or filename, associated with a symbolic name. Use the System option in the Control Panel or the set command from the Windows NT command prompt to define environment variables.

ERD see ENTITY RELATIONSHIP DIAGRAM.

Ergonomics The use of good design techniques that emphasize ease-of-use.

Estimate A preliminary calculation of the time and cost of work to be undertaken. The *construct* option calculates estimates using bottom-up, percent adjustment, or top-down techniques in Project Bridge Modeler; see also BOTTOM-UP ESTIMATE, PERCENT ADJUSTMENT ESTIMATE, WORK ESTIMATE, and TOP-DOWN ESTIMATE.

Estimated Function Point Count 7 Function Points per System Entity + 5 Function Points per System Function.

Estimating Factor (EF) A metric that describes an important project characteristic, used to estimate either the amount of effort that project tasks will take, or project risk or complexity. The best EFs are those that represent counts (number of users, objects); see also BOTTOM-UP ESTIMATE.

Estimating Formula A formula that uses estimating factors to derive an estimate for a task.

Estimating Guideline Text which describes in detail how a task is estimated.

Estimating Model The combination of estimating factors and estimating formulas necessary to completely estimate a route.

ETA see ENTERPRISE TECHNICAL ARCHITECTURE.

Event 1. An occurrence in a business's environment to which that business must respond; see also BUSINESS SYSTEM and EVENT RESPONSE. 2. An occurrence or happening of significance to a task or program, such as the completion of an asynchronous input/output operation. 3. A transaction or other activity that affects the records in a file.

Event Mechanism A permissible way in which an event is recognized. For instance, a Customer Order may be entered into the system if received by fax, phone, mailed-in purchase order or internet-facilitated, but not by markings on a scratch pad.

Event Response An event and the business process which responds to that event; see also APPLICATION SYSTEM, BUSINESS SYSTEM, and EVENT.

Executive Information System (EIS) A reporting application targeted for use by executives. Usually such applications have extremely user-friendly, graphical interfaces with a small local datastore derived from connection to a data warehouse. It is often used synonymously with decision support system.

Expense The amount of money allotted or spent to cover incidental costs (for example, travel and living) or the cost of something (hardware, software, etc.) to deliver consulting services.

Export Utility An Oracle Database Server utility used to write database data to operating system files external to the database. These files can then be used with the Import utility to read the data back into the same database or into a different one.

Expense Reimbursement Expenses for reimbursement by the client either allotted or received.

Extension Enhancements to an Oracle Applications system made to fit the needs of a specific user community.

Extensibility (CASE Dictionary) It is often useful to add new elements, properties, and associations into the Dictionary. This is achieved by a facility known as user extensibility.

External Business Function A business function that is outside the scope of the application system, that acts as a source or recipient of dataflows.

External Entity An entity that is outside the scope of application system, that acts as a source or recipient of dataflows. An external entity might be a person, a business unit, another application system, or any other thing that might provide or receive information from a function within the application system; see also ENTITY.

External Equity Measure of the fairness of a job's compensation when compared to the labor market as a whole within the region, profession, or industry; see also INTERNAL EQUITY.

External Process Step A process step that is performed by an agent outside the business area; see also INTERNAL PROCESS STEP and PROCESS STEP.

F

Fee A charge, compensation, or payment for a service or product.

Feedback Response, including corrections, additions, and approval, elicited from users, stakeholders, sponsors, and others, to any deliverable or deliverable component.

Feedback Session A meeting organized to present work in progress in order to gain feedback; see also FEEDBACK.

FH see FUNCTION HIERARCHY.

Field A means of implementing an item of data within a file. It can be in character, date, number, or other format and be optional or mandatory.

File Transfer Protocol (FTP) The physical movement of data files between applications, often across sites.

Finance A high-level business function that handles accounting and financial functions of a company; for example, corporate, division, and subsidiary headquarters; often synonymous with a business organization; see also BUSINESS ORGANIZATION TYPE.

Financial Organization A business organization that performs one or more financial business functions. The data is segregated for organizational management or security. When mapped onto Oracle Applications, a financial organization is required to have a defined set of books. This concept is more general than the set of books. It is replacing the set of books as the key financial application functional configuration parameter in releases of Oracle Applications starting with 10.6.

Flexfield A user-definable field in an Oracle Application that is made up of segments. Each segment has a name you assign and a set of valid values.

Focus Area (Project) 1. A group of associated Oracle Method processes that produce program level deliverables during the Baseline Solution Development stage. 2. A scoped area of the client organization with common responsibilities and information requirements. The focus area provides the scope for incremental development efforts and may be referred to as the INCREMENT. The focus area can overlap business functions or may reside in a specific business function.

Focus Group A small group selected to provide opinions and responses to topics or issues presented in a group setting; an assessment technique.

Foreign Key One or more columns in a relational database table that implement a many-to-one relationship that the table in question has with another table or with itself.

Form 1. A program for viewing or entering information. Normally it refers to a rectangular area of the screen, which has the appearance of a paper form, through which you can view or manipulate information in a database. 2. A logical collection of fields, regions, and graphical components that appears on a single screen. Oracle Applications forms resemble paper forms used to run a business. Data is entered by typing information into the form.

Formal Build Construction of an information system by the well established steps of specify, code, test, and correct.

Format The type of data that an attribute or column may represent; for example, character, date, number, sound, or image.

Forms Client A Java applet that runs on a desktop client and provides the user interface and interaction with a forms server.

Forms Metrics Server A machine that manages and distributes requests from forms clients among multiple forms servers; see also LOAD BALANCING and METRICS SERVER.

Forms Server A type of application server that hosts the Oracle Forms Server engine. It mediates between the desktop client and the database, providing input screens to the desktop client and creating or changing database records based on user actions.

Fourth-Generation Programming Language (4GL) A language that manipulates high-level objects, such as screen items and database tables, by declaring what is to be done to them rather than procedurally describing how it is to be done, as in 3GLs.

FPE see FUNCTION POINT ESTIMATE.

FTP see FILE TRANSFER PROTOCOL.

Function see BUSINESS FUNCTION, ELEMENTARY BUSINESS FUNCTION, and SYSTEM FUNCTION.

Function Decomposition A technique for modeling business functions by decomposing a single business function into a number of lower level business functions, and then progressively decomposing these until the appropriate level of detail is reached. Function decomposition gives rise to functions arranged in groups or hierarchies known as a business function hierarchy; see also ELEMENTARY BUSINESS FUNCTION, FUNCTION HIERARCHY AND COMPOSITE BUSINESS FUNCTION.

Function Dependency The dependency of one function's commencement upon the completion of another function.

Function Dependency Diagram A visual means of recording dependencies between business functions.

Function Hierarchy A grouping of elementary business functions into one or more hierarchical levels. Typically the highest level corresponds to the company organization, and the middle level corresponds to a grouping of available application functions; see also BUSINESS FUNCTION and FUNCTION DECOMPOSITION.

Function Label A unique ID, within an application system, used for a business function.

Function Name A short, succinct sentence, starting with a verb, describing a business function; see also FUNCTION LABEL.

Function Point Analysis (FPA) A technique used to estimate system size. Using Function Point Analysis, you can calculate system size based on the number of functional element types in the system you are building, as adjusted by its general system characteristics and your technology productivity factor.

Function Point Estimate (FPE) An estimate of work effort produced using Function Point Analysis or an equivalent method.

Functional Currency The principle currency used to record most business transactions and maintain accounting data while working within a particular Oracle Application set of books.

G

Gantt Chart A scheduling tool used to display the status of a project's tasks. A Gantt chart shows each task's duration as a horizontal line. The ends of the lines correspond to the task's start and end dates.

Gap A gap is a relationship between a requirement and an application function where the standard application function will not meet the requirement.

Gap Analysis 1. The process of determining, documenting, and approving the variance between business requirements and system capabilities in terms of packaged application features and technical architecture. 2. The process of determining and evaluating the variance or distance between two items properties being compared. 3. The process of determining and documenting the variance between a business vision and the existing processes and organization.

General Education Course A course that educates the project team or users in fundamental business concepts. It exposes attendees to new business approaches practiced in industry and provides them with a common understanding of relevant business issues.

Generator A mechanism for transforming the specification of a module into executable program code, also known as a code generator.

Generator Template A skeleton or outline program from which a generator can reuse common elements; for example, boilerplate information, window sizes, *OK* and *Quit* buttons.

Gigabyte (GB) A unit of memory or disk space equal to 1,073,741,824 bytes. One Gigabyte is equal to 1,024 Megabytes. Often rounded to 1,000,000,000 bytes.

Goal see BUSINESS GOAL.

Grade Level Relative ranking of jobs based on their difficulty or sphere of responsibility, rather than their job content; see also JOB CLASSIFICATION.

Graphical User Interface (GUI) An interface used with personal computers and workstations that allows the user to access fields and regions of the screen with a pointing device, typically a mouse. The acronym is pronounced "goo-ee".

Group Interview Any session where users, stakeholders, or sponsors collectively discuss the requirements, priorities, design, or implementation of a business solution system; see also FEEDBACK and WORKSHOP.

Guideline Text that provides instructions and advice for performing a task and suggests possible approaches.

GUI See GRAPHICAL USER INTERFACE.

H

Hardware Node A computer on a network; for example, clients and servers.

Hardware Platform The actual physical hardware that supports one or more software server processes.

Help Desk A support system designed to assist end users with technical and functional questions and problems.

Helptext see METHOD HELPTEXT.

High-Level Deliverable A deliverable that specifies a framework into which further details can be added; see also DELIVERABLE, DETAILED DELIVERABLE, and INITIAL DELIVERABLE.

HRIS see HUMAN RESOURCE INFORMATION SYSTEM.

HTML See HYPERTEXT MARKUP LANGUAGE.

HTTP See HYPERTEXT TRANSFER PROTOCOL.

HTTP Listener A program on a web server that accepts and processes incoming HTTP requests from web browsers.

Human Performance Support Any process, tool and system that reinforces or encourages the execution of a particular behavior or set of behaviors to meet performance goals.

Human Performance Support Systems an integrated collection of all performance support components (infrastructure, processes, protocols, procedures, tools and practices) for a given group or organization, designed to reinforce or encourage the execution of prescribed behaviors within the group.

Human Performance Technology The field of expertise within organizational development/behavior to set up performance management systems in support of meeting performance expectations.

Human Resources The high-level business function involving the management of human resources and payroll functions of a company; often synonymous with a business organization; see also BUSINESS ORGANIZATION TYPE.

Human Resource Allocation Determining the number and type of job functions and staffing levels appropriate to organizational goals.

Human Resource Planning Forecasting the labor force needs (hiring, termination) for the organization.

Hypertext Markup Language (HTML) A simple language used to format documents, predominantly for viewing with a web browser. Portions of text or images, called hypertext, can be associated with other documents.

Hypertext Transfer Protocol (HTTP) The TCP/IP-based network protocol used to transmit requests and documents between a web server and a web browser.

I

Impact Analysis The process of understanding the complete effect of a particular change; see also CHANGE REQUEST.

Implementation Questionnaire A tool you use to collect business and system information during a business baseline interview. It consists of a pre-built set of questions organized by business function that are to be supplemented by the analyst with relevant company terms and other characteristics before use in driving the interview.

Import Utility An Oracle Database Server utility used to read operating system files written by the Export utility. You use it to restore data into a database.

Index see DATABASE INDEX.

Information Access Model A model that depicts access to key process and organization information for reporting or security purposes.

Information Flow Model A model that visually depicts information flows in the business between business functions, business organizations and applications.

Information Model A model of the information needed to support a business or other activity. Requirements are typically defined as lists of detailed items as well as summarized data from business transactions, such as orders and purchases, and master records, such as customers and vendors. How frequently this information must be made available is also part of the requirement. Information requirements (the what and when) are turned into functional specifications (the how) of an information system by systems analysts. The information is defined as a collection of data elements that are obtained by running query and report programs against a particular database or group of databases. The data and information that is stored in the databases in the first place is also derived from the information requirements; see also DATA MODEL.

Information Systems (IS) A system for managing and processing information, usually computer-based. Also, a functional group within a business that manages the development and operations of the business' information systems.

Information Services Strategy Planning Method (ISSPM) A method that aligns information technology priorities with business strategies and defines the approach to take to achieve those goals.

Information Warehouse see DATA WAREHOUSE.

Initial Deliverable A deliverable is *initial* if it is intended to be updated later. An initial deliverable is usually preliminary and its content changeable by a later task when more information is known.

Initialization Parameters Parameters defined in an initialization file that configure an Oracle Database Server. The parameters affect how the database performs.

Input Process-Output (IPO) A technique is a generic modeling tool that was designed for framing complete process specifications by identifying: inputs, rules, process step descriptions, tools, and outputs.

Installation The loading of an instance of an application system that is complete, tested, operational, and ready. An installation includes all necessary software, hardware (including terminals, networks, etc.) and documentation, and includes all required data; see also APPLICATION SYSTEM.

Instance 1. An entity to which a set of operations can be applied and which has a state that stores the effects of the operations (UML 1.1 Semantics); see also DATABASE INSTANCE.

Integration Fit Analysis A statement of fit and gaps for integration points between unique applications and installations of the same application.

Integration Test A sequence of steps or set of procedures to verify the inter-operability of various system components; see also SYSTEMS INTEGRATION TEST.

Inter-Company Transaction A transaction between two legal entities that share common ownership, for example, under the same holding company. The two companies usually have an account relationship (for example, an inter-company suspense or clearing account) that facilitates inter-company accounting.

Internal Equity Measure of the fairness of a job's compensation when compared to similar jobs within the same organization.

Internal Concurrent Manager A concurrent manager process that monitors, controls, and dispenses requests to all other concurrent manager processes.

Interface 1. A linkage between systems which can be either automated (via software programs) or procedural (manual). 2. A declaration of a collection of operations that may be used for defining a service offered by an instance. (UML 1.1 Semantics).

Interface Programs A set of programs that systematically link two or more systems to each other.

Internal Process Step A process step that is performed within the business area; see also EXTERNAL PROCESS STEP and PROCESS STEP.

Internet Computing Architecture An Internet-based framework that provides communication in a multi-tier architecture. Also known as the *Internet Computing Model*.

Intranet A network of computers that are internal to a company. A company's intranet is basically a local extension to the globally-distributed Internet, which is a global inter-connected network of computers and smaller computer networks.

Inventory Organization A fundamental Oracle manufacturing and distribution application functional configuration parameter. The inventory organizations are derived by mapping inventory or manufacturing business organizations onto Oracle Applications. Typically they will be manufacturing plants, warehouses, divisions, or departments.

IPO see INPUT-PROCESS-OUTPUT.

IS see INFORMATION SYSTEMS.

ISSPM see INFORMATION SERVICES STRATEGY PLANNING METHOD.

Issue A situation or concern which requires a resolution. Some issues, if not addressed, could adversely impact the success of a project.

IT see ITERATED TASK.

Item Master The master list of all items available for transaction within a product group containing Oracle manufacturing applications. It is also a key application functional configuration parameter.

Iterated Task (IT) A task that is repeated once for each iteration in order to increase the quality of the deliverable to a desired level or to add more detail to the deliverable. Iterated tasks are shown as discrete in the workplan; see also TASK, ITERATION, and ONGOING TASK.

Iteration Indicates the number of times or degree to which a task or task group should be repeated, in order to either increase the quality of the task / group deliverables to a desired level, to add sufficient level of detail, or to refine and expand them on the basis of user feedback. A task or group may be "singly iterated" (the expectation is that it will be performed without repetition in the project), or "multiply iterated" (it will be performed successively, multiple times), resulting in a single deliverable for each task (note this is not true for multiply instantiated tasks). For multiple iterations, it is important for planning purposes to give notes on the number of times or the degree to which a task or group should be iterated, based on experience; see also ITERATIVE BUILD and ITERATIVE DEVELOPMENT.

Iterative Build Iterative construction of an information system by means of a cycle of code (or generate), test, review, starting from a prioritized (MoSCoW) list of requirements and guided by user feedback; see also MOSCOW LIST.

Iterative Development The application of a repeating cycle of the same or similar activities performed on the same piece of functionality that improves or grows into completion through the iterations.

J

JAR (Java Archive) File A collection of Java classes compressed into a single file for faster download to a desktop client.

Java A computing language used, among other things, to produce programs that can be downloaded and run on a desktop client using a web browser. It is also used to produce platform-independent programs that run on a server, either interactively or when invoked through a request from a web browser; see also APPLET and SERVLET.

Java Class Components of a Java program that define objects and operations performed on objects. In the Architecture and Installation manuals, *Java class* also identifies an operating system file that contains a program or part of a program written in Java.

Java Database Connectivity (JDBC) A Java programming interface that enables Java programs to execute SQL statements and access databases, such as the Oracle Database Server.

Java Virtual Machine An interpreter that translates a compiled Java program, called bytecode, to machine code. JVM makes Java portable, because each operating system's JVM translates bytecode to instructions that the microprocessor can execute. An appletviewer or Java-enabled web browser has an internal JVM that allows it to execute applets or applications written in Java.

JDBC see JAVA DATABASE CONNECTIVITY.

Jintitator A browser plug-in that runs a Java applet or application.

Job Analysis Process of obtaining information about jobs; may involve content analysis, interviews, observation, questionnaires, diaries.

Job Classification Process of using job descriptions to organize jobs within a given organization into classes on the basis of duties and responsibilities. Persons within the same job classification are thought to be equally qualified for all other positions within that class; see also GRADE LEVEL.

Job Content Duties and responsibilities of a particular position; see also JOB STRUCTURE.

Job Description Written description of a job; typically includes job title, summary of major responsibilities, authority and accountability (including reporting relationships), traits or attributes important to the job, and description of tasks.

Job Design/Redesign Creating or adjusting job content to meet new requirements (dictated by new organizational objectives and/or technology-induced change effort); some jobs may be absorbed by other departments or disappear.

Job Enlargement Adding additional but similar duties to a job; also called *Horizontal Loading*.

Job Enrichment Adding more responsibility or authority to a job; also called *Vertical Loading*.

Job Evaluation Analyzing the content of a job to determine level or grade and commensurate compensation.

Job Incumbent Person currently performing the job.

Job Inventory List of tasks presented to job incumbents to verify whether they perform these tasks and to answer qualifying questions about them.

Job Performance Demonstration of skills or competence in a job; sometimes measured by productivity.

Job Structure Duties and responsibilities of a particular position; see also JOB CONTENT.

Job-Person Matching Analyzing skills profiles and worker specifications to determine the best fit between workers and jobs.

JVM see JAVA VIRTUAL MACHINE.

K

Key A way of accessing something. Any set of columns used for retrieval of rows from a table; see also COLUMN and UNIQUE IDENTIFIER.

Key Deliverable A key deliverable represents the culmination, end result, or major milestone of activities performed during a Phase. A major deliverable that is usually reviewed with the client, signed off, and placed under change control. Key deliverables should not be confused with deliverables produced by core tasks. Core tasks produce the minimum set of deliverables needed for every project; key deliverables represent the end result and define the end of each phase. However, not every key deliverable is created for every project. For example, an integration-tested system will only exist on projects where interfaces are constructed; see also DELIVERABLE.

Key Performance Indicator (KPI) A significant measure used on its own, or in combination with other key performance indicators, to monitor how well a business is achieving its quantifiable objectives.

Key Resource A person with a wide range of skills or experiences who can be effective in many types of tasks, or is critical to the completion of a specific task.

KPI see KEY PERFORMANCE INDICATOR.

KSAO Knowledge, skills, aptitudes, and orientation (attitudes, values, etc.).

L

Labor Cost see COST.

Labor Cost Rate The rate (internal cost) for each consulting grade level for delivering services to a client.

Labor Fee see FEE.

Labor Fee Rate The rate (price) for each consulting grade level charged for delivering services to a client.

LAN See LOCAL AREA NETWORK.

Latency In networking, the amount of time it takes a packet of data to travel from a source to its destination. Latency is imposed on the network by devices that delay the forwarding of network packets. The speed and capacity of a network depend on both bandwidth and latency; see also BANDWIDTH.

Leaf Function An function that is not decomposed at the bottom of a function hierarchy. It may be a leaf function because definition is incomplete; see also ATOMIC FUNCTION.

Learner Any individual engaged in acquiring new skills, attitudes, or knowledge, whether with a specified sequence of instruction (intentional) or a random assortment of stimuli (incidental).

Learning Styles psychological traits that determine how individual learners and cultural groups of learners may perceive, interact with, and respond to learning environments.

Learningware Instructional material created to facilitate learning, including paper-based, technology-based and instructor-led media; in OCM, instructional material generated from a custom training curriculum plan, designed to re-skill individuals within the IS department, end-user, and management communities during a new technology implementation.

Legacy Application Interface A heterogeneous interface between Oracle Applications and a pre-existing and preserved legacy system.

Legacy System An existing system repository of information and processes.

Legal Entity A high level business organization that operates within the bounds of a specific set of legal requirements (including currency), typically pertaining to tax regulations and reporting requirements

Line of Business (LOB) Each service within Oracle Services is a line of business. For example, Custom Development, Application Implementation, and Business Process Reengineering are all lines of business.

Link Test A test to identify errors in linked modules of an application system. Link testing is an extension of module testing carried out on a number of levels of detail. Examples include, linked modules of a program, linked programs of a functional area or subsystem, and linked subsystems of the complete application system. The link test is usually a white box test; see also MODULE INTEGRATION TEST.

Live Implementation process has ended and the solution is put into production.

Load Balancing Distributing tasks to the server that is least busy when several servers are handling the same workload. For example, the Oracle Forms Load Balancing Cartridge has a single coordinator (the Metrics Server) that monitors load information from other forms servers and determines which server currently has the lightest load. Upon receiving a request from a forms client, the Forms Metrics Server can balance the processing load by instructing the forms client to connect to the forms server that has the lightest load. This server is called the *least loaded host*.

LOB see LINE OF BUSINESS.

LOCAL Under Windows NT, an environment setting that identifies the network alias of an ORACLE instance running on the local machine or on another networked machine. This variable overrides any setting for ORACLE_SID and causes the Net8 software to manage the connection request; see also ORACLE_SID and TWO_TASK.

Local Area Network A limited-distance, high-speed, data communications network that allows various data processing resources to be connected and shared. A LAN is a network contained within a single physical site (one or more buildings), as opposed to a WAN; see also WIDE AREA NETWORK.

Local Currency The denomination of currency used for transactions in a particular local finance business location.

Localization 1. An enhancement or modification necessary to support specific site requirements not addressed by the base configuration hardware and software. It is developed by and purchased from Oracle. These site specific requirements generally satisfy a government or regulatory agency requirement, although localizations are not limited to this purpose. 2. Modules that extend Oracle Applications to meet the unique business requirements of one or more geographic regions.

Localization Approval The agreement to modify the company standard software and hardware configuration relative to the site requirements.

Localization Tape A tape containing localization programs to be installed to the applications software.

Location see BUSINESS LOCATION.

Logical Application Architecture A complete map of the application instances required to support the applications architecture.

Logical System Design The task of designing a system to support business needs without making final decisions regarding the physical implementation. The same logical design should be appropriate for many physical implementations using; for instance, different versions of a database management system.

Look and Feel The appearance and behavior of a system facility as perceived by the end user. This includes the data, layout, and user interaction through menus, buttons, text editing, and other devices.

M

Management The process of planning, controlling, and completing the execution of an undertaking.

Manual Function A business function that is not system-assisted; see also BUSINESS FUNCTION.

Manufacturing A high-level business function responsible for manufacturing or assembling products; often synonymous with a business organization; see also BUSINESS ORGANIZATION TYPE.

Mapping A technique for establishing application fit to business requirements, identifying gaps and proposing initial solutions. Also a technique to define the relationship between objects; see also APPLICATION FIT and MATRIX DIAGRAM.

Mapping Scenario A plan for and record of business solution testing including: business processes involved in the test, the business conditions that are needed to test the application system, definition of test script execution, support tools required during execution of the test, and a record of test actions; see also BUSINESS SOLUTION TESTING.

Mapping Team A group of people responsible for the modeling, design or mapping for a particular business process.

Margin Amount The difference between the costs (labor, expenses, and overhead) and revenue plus expense reimbursements expressed as a currency amount.

Margin Percentage The ratio between the margin amount and costs, expressed as a percentage.

Marketing A high-level business function responsible for marketing functions within a company; often synonymous with a business organization; see also BUSINESS ORGANIZATION TYPE.

Matrix Diagram A spreadsheet diagram where the axes represent two associated types of elements of interest to information systems developers. A matrix diagram used to express a mapping.

MB see MEGABYTE.

Mechanism 1. A particular technique or technology for delivering a function. Examples might be a telephone, a computer, or an electronic mail service. 2. Resources that enable or facilitate the step / sequence in a test scenario.

Megabyte (MB) A unit of memory or disk space equal to 1,048,576 bytes (1024 x 1024). Often rounded to one million bytes.

Method 1. A system of doing things and handling ideas. A method establishes a network of common tasks, a vocabulary, a set of common processes, estimates, and guidelines for delivering services. 2. The implementation of an operation. It specifies the algorithm or procedure that effects the results of an operation (UML 1.1 Semantics).

Method HelpText The automated form of Oracle Method's handbooks included with every route. This may be accessed directly from the Windows™ desktop or from within Project Bridge Modeler or Project Workbench; also called online help.

Metrics Server A software server that manages and distributes requests from forms clients among multiple forms servers; see also LOAD BALANCING.

MI see MULTIPLY INSTANTIATED TASK.

MIPS (Millions of Instructions Per Second) a measure of computer processing capacity.

MLS see MULTIPLE LANGUAGE SUPPORT.

MO see MULTIPLY OCCURRING TASK.

Module A logical program unit. Examples include: forms, reports, user exits, C programs, PL / SQL procedures, and database triggers; see also SUPPORTING MODULE.

Module Integration Test A test of related modules in an application system using scenario test specifications.

Module Network A technical diagram of modules in an application system that expresses the possible execution paths of business transactions.

Module Process Test Model A detailed testing model for the development and execution of testing. It is identical to the System Process Test Model, with the addition of module references.

Module Test A procedure or sequence of steps that determines whether a module functions properly in isolation from other system components, and conforms to project standards.

MoSCoW List Must have, Should have, Could have, Won't have — a way of classifying and prioritizing requirements or facilities for inclusion in an information system. This mechanism is used in timeboxed development where the scope may need to be redefined according to the rate of progress. The Must have is vital and hence must be developed or included; the Should have is important, but not vital; the Could have is nice to have, but not really important; and finally the Won't have is not developed or included; see also TIMEBOX.

MRC see MULTIPLE REPORTING CURRENCY.

MSOB see MULTIPLE SETS OF BOOKS ARCHITECTURE.

MTEWA Machines, tools, equipment, and work aids used to perform a task.

Multiple Language Support (MLS) Oracle Applications MLS allows the use of multipule simultaneous character sets, and provides translated messages, help files, and seed data for languages other than American English.

Multiple Organization Architecture (Multi-Org) A single installation of any Oracle Applications product to support any number of organizations or different sets of books. The data contained in product schemas is for all organizations and is partitioned by the ORG_ID column in tables.

Multiple Reporting Currency (MRC) An Oracle Applications feature that allows you to create, maintain, and report on accounting records at the transaction level in more than one functional currency.

Multiple Sets Of Books Architecture (MSOB) An older Oracle Applications mechanism for implementing an organization or group of organizations that shares a common Accounting Flexfield structure, calendar, and functional currency. With MSOB architecture, you must define at least one set of books for each business location. This architecture is no longer supported by Oracle Corporation. MSOB architecture is superseded by the newer Multiple Organization Architecture; see also MULTIPLE ORGANIZATION ARCHITECTURE.

Multiply Instantiated Task (MI) A task that may be performed at various times during a project, such as status reports or healthchecks, or a task that is partitioned on a project plan, for example, by multiple teams or functional areas.

Multiply Occurring Task (MO) A task that is repeated at specific, known times during a project. A multiply occurring task is similar to a multiply instantiated task, except the specific occurrences of the task can be planned at the method level. Each occurrence has specific task dependencies which determine when it occurs.

Multi-Tier Architecture A computing model in which various functions are distributed among multiple levels, or tiers, of machines. Typically there are at least three such tiers: desktop clients issuing user requests, back-end servers used for database processing and other intensive tasks, and a middle tier that mediates connections between the two; see also INTERNET COMPUTING ARCHITECTURE.

N

National Language Support (NLS) Oracle Applications NLS allows the use of various character sets and provides translated messages, help files, and seed data for languages other than American English.

Near Real-Time Interface An application interface that supports asynchronous transfer of data between applications. It transfers data with a sufficiently small time delay so as to leave the interfaced applications in states that are very close to synchronized.

Net8 The Oracle product that enables network connectivity between a client machine and the Oracle8 Database Server. Net8 manages communication sessions between these machines by opening and closing sessions and by packaging and sending SQL statements and data responses. Prior to the Oracle8 Database Server release, Net8 was called SQL*Net.

NLS see NATIONAL LANGUAGE SUPPORT.

Node A single computer, group of computers, or mechanism for handling some communication traffic through a particular point on a computer network.

Non-Billable Project Expenses The project expenses that are not billable to a client; see also PROJECT EXPENSES.

Non-Billable Utilization The utilization that is not billable to a client; see also UTILIZATION.

Non-Revenue Entity A legal entity that performs services on behalf of another entity. Such services are usually performed in exchange for an inter-company service fee.

Normalization A step-by-step process of analyzing the data to be represented in order to eliminate data redundancy. It produces either entity or table definitions that have:

- no multi-value attributes or columns
- the same kind of values assigned to all occurrences of any given attribute or column
- a unique name
- uniquely identifiable rows

Null The state of a data item indicating no value. Null is not equivalent to zero.

O

O see ONGOING TASK.

Object Orientation (OO) The perspective that systems should be constructed from objects, which themselves may be aggregations of smaller objects.

Object Technology (OT) The technology, programming languages, development tools, databases, and so on, introduced to support object-oriented systems development.

Objective A statement of business intent that may be measured quantifiably.

OC see ORGANIZATIONAL COMMUNICATIONS.

OCM see ORGANIZATIONAL CHANGE MANAGEMENT.

ODS see OPERATIONAL DATASTORE.

OLAP see ON-LINE ANALYTICAL PROCESSING.

OM see ORACLE METHOD.

Ongoing Task (O) A task that occurs continuously throughout a project, rather than at a specific known time. Ongoing task are shown as continuous on the workplan; see also TASK, PHASE and ITERATED TASK.

On-Line Analytical Processing (OLAP) On-line retrieval and analysis of data to reveal business trends and statistics not directly visible in the data directly retrieved from a data warehouse. Also know as multi-dimensional analysis.

OO see OBJECT ORIENTATION.

Open Systems Organizational systems that are influenced by and interact with their environment.

Operating System The computer software that performs basic tasks such as allocating memory and allowing computer components to communicate.

Operational Datastore (ODS) A data warehouse that is a repository for near real-time operational data rather than long term trend data.

Optional Tasks Additional tasks that may need to be completed during an implementation or migration due to specific project circumstances.

ORACLE_HOME An environment setting that specifies the top directory for Oracle Database Server program files.

Oracle ID An account on a database, comprised of a database username and password.

Oracle Method (OM) Oracle Services' integrated service methodology which consists of workplans, handbooks, and templates used to provide enterprise business system solutions.

ORACLE Schema see SCHEMA.

Oracle Server The database management system used by Oracle Applications. The term refers in general to the product files or the ORACLE instances created using these files.

Oracle Server Manager An Oracle Database Server utility that allows DBAs to start, stop, monitor, and maintain databases.

Oracle Services An Oracle Corporation business organization that provides professional services.

ORACLE_SID An environment setting that identifies an ORACLE instance running on the current machine. See also TWO_TASK and LOCAL.

Oracle Survey Tool A customizable database of questions used by Organizational Change Management to generate surveys, data analyses, and graphical reports for assessments.

ORACLE User ID A username and password used to access an ORACLE instance.

Organization see BUSINESS ORGANIZATION.

Organization Type see BUSINESS ORGANIZATION TYPE.

Organization Unit An element that represents part of the structure of a business. An organizational unit can represent an entire business, a group or department within the business, a person within a group or department or a role; see also AGENT, BUSINESS UNIT, and AGENT CHANNEL.

Organizational Change Management (OCM) An Oracle Services line of business providing change management expertise to organizations seeking to manage the human and organizational factors involved with implementing new technology. Organizational change management includes five service areas: organizational effectiveness assessments, organizational communications, human performance and development, leadership development, and custom training; see also ORGANIZATIONAL EFFECTIVENESS ASSESSMENTS, ORGANIZATIONAL COMMUNICATIONS, and CUSTOM TRAINING.

Organizational Communications (OC) A Organizational Change Management area that assists organizations in developing and implementing communication and feedback programs that seek to optimize information and buy-in while minimizing resistance to change and promoting a unified vision and open communication among levels of the organization.

Organizational Culture The shared constructs (concepts, modes of thinking, views of itself and others) of an organization.

Organizational Effectiveness The qualitative state at which the organization is functioning to meet its goals. Includes quality of organizational communication, relevance of the performance support system, ability of executives to manage to objectives, core competencies and skills, etc.

Organizational Effort Any activity or set of activities implemented systematically by an organization to achieve a particular goal.

Organizational Readiness The state of an organization's potential to manage change successfully. Involves a consideration of an organization's high-impact leverage points for change, as well as any change impediments.

Organizational Structure The arrangement of jobs into groups, departments, or business units within a given organization.

OT see OBJECT TECHNOLOGY.

Outsourcing The practice of appointing an external organization to provide any or all of the services of the IS department or any other internal service department.

Overhead The operating expenses associated with delivering services, such as rent, light, heat, taxes and non-billable utilization.

Overhead Factor A rate multiplier associated with a category of overhead, e.g., Corporate, Division, or Practice; see also OVERHEAD.

P

Parallel Concurrent Processing In a UNIX environment, distribution of concurrent processes among multiple concurrent processing servers. Also called DISTRIBUTED CONCURRENT PROCESSING.

Parameter A value passed to a command. A parameter can be a file specification, a symbol, or word understood by the program.

Partition A discrete part of the total functionality that is developed in a project. A partition may be a single module, but more often it will be an entire sub-system. A partition may be related to a business area. Partitioning a system also implies a partitioning of the project that develops the system. A separate team develops each partition; see also MODULE, and BUSINESS AREA.

Password An identification word associated with a username that the user must supply to access an ORACLE instance or an Oracle Applications system.

PAT see PERFORMANCE ASSURANCE TEST.

Payment Milestone A significant project event at which time a payment is due. Payment milestones can be progress points, dates, the completion of a task or the production of a deliverable.

Payment Terms The terms and conditions upon which payments will be received from a client.

PBM see PROJECT BRIDGE MODELER.

PCM see PRACTICE MANAGEMENT.

PDF see PORTABLE DOCUMENT FORMAT.

Percentage Adjustment Estimate Total estimate adjusted for organizational factors.

Performance Assurance Test (PAT) A project concerned with simulating an implemented business system for the purposes of predicting its likely performance.

Performance Management Establishing and monitoring performance criteria / standards that contribute to organizational objectives; typically involves goal-setting, measurement, feedback, rating / appraisal, rewards and recognition, and career development.

Performance Support Practice An established or customary set of actions that reinforces or encourages the execution of a particular behavior or set of behaviors, for example, performance review, to meet performance goals.

Performance Support System An integrated collection of all performance support components (infrastructure, processes, protocols, procedures, tools and practices) for a given group or organization, designed to reinforce or encourage the execution of prescribed behaviors within the group.

Performance Support Tool An instrument, such as a performance review form or formula for the calculation of bonuses, that is designed to meet the objectives of a given performance support practice or system.

Performance Technology The field of expertise within organizational development / behavior to set up performance management systems in support of meeting performance expectations.

PGM see PROGRAM MANAGEMENT METHOD.

Phase A chronological grouping of tasks in an approach. Services are delivered by phase in order to reduce project risk. Each phase allows a checkpoint against project goals, and measurement against quality criteria to be made.

Phase Completion The project management tasks which conclude and secure client sign-off of a phase.

Phase Control The project management tasks which execute concurrently with phase execution, and perform project monitoring, directing, and reporting functions during a phase.

Phase Execution The method execution tasks performed during a project phase.

Phase Management The project management tasks required to plan, control and complete the execution of a project phase.

Phase Planning The project management tasks which update project plans and procedures for a phase and secure additional resources necessary to execute that phase.

Physical Application Architecture A complete map of the database instances, their sites, and the application instances and Oracle Ids that they support. This will incorporate aspects of the logical architecture, and the high level designs for security and interfaces.

Pilot An initial project which will serve as a model or template for future projects.

PJM see PROJECT MANAGEMENT METHOD.

Plan A scheme, method or design for the attainment of some objective or to achieve something.

Planned Response System The entire set of business processes in a business area that respond in a predetermined way to a known set of events; see also APPLICATION SYSTEM and EVENT.

Planning (M&D) A high-level business function responsible for manufacturing and distribution planning for one or more manufacturing and distribution business units; often synonymous with a business organization; see also BUSINESS ORGANIZATION TYPE.

Platform Specific computer hardware, as in the phrase "platform-independent." It may also refer to a specific combination of hardware and operating system and any additional software required by the platform to execute applications code, connect to other platforms across a network, and provide services to other platforms (for example, printing, processing, data storing, etc.). It is also used to refer to support software for a particular activity. Sun SPARC Solaris and DEC Alpha Windows NT are examples of platforms. Some Oracle Applications functionality is platform-specific, meaning its behavior may differ on other platforms.

PL/SQL A procedural extension of SQL that provides programming constructs such as blocks, conditionals, and functions.

Policy A guiding principle, typically established by senior management, which is adopted by an organization or project to influence and determine decisions.

Portable Document Format (PDF) A file format developed by Adobe Systems. PDF files are *snapshots* of formatted document files and may contain formatted text, graphics, color, and images that are viewable, navigable, and printable on multiple platforms. Use the free program Adobe Acrobat Reader to view a PDF file.

Position Ranking Method of comparing whole jobs to one another to rank them in a hierarchy.

Practice Management (PCM) Specifies the process, tasks, and responsibilities regarding the management of a consulting practice. Specifically, this includes client management, project portfolio management, and staff training, recruitment, and growth.

Pre-Sales Cycle The series of activities that occur before the application was selected.

Predecessor A task that precedes another task and is related to it by a task dependency; see also SUCCESSOR.

Prerequisite Something needed by a task, which is produced by a previous task or an external source; see also DELIVERABLE.

Primary Functional Currency The currency you use to record transactions and maintain your accounting data within Oracle Applications.

Primary Set of Books A financial reporting entity in which you conduct business.

Problem A perceived variance between the expected and observed ability of an item to fulfill its defined purpose.

Problem Report The mechanism by which a problem is recorded, investigated, resolved, and verified.

Problem Statement A concise phrase, motto, or goal-oriented explanation of the motivation behind buying a new application system.

Pro*C An Oracle precompiler product that allows developers of C programs to embed standard database calls to an ORACLE database in C programs.

Procedure A written set of steps that specifies how to carry out a business function. If the business function is system-assisted, its corresponding procedure will indicate how the application system carries out that business function; see also APPLICATION SYSTEM and BUSINESS FUNCTION.

Process 1. The sequential execution of functions triggered by one or more events. 2. A discipline or sub-project that defines a set of tasks related by subject matter, required skills and common dependencies. A process usually spans several phases in an approach. Examples are: Data Conversion, Testing, Documentation; see also BUSINESS PROCESS and SYSTEM PROCESS.

Process Analysis A component of a business requirements scenario that facilitates quantitative analysis and measurement of each process step and compares the current to the proposed process in order to sell change to management and to key business people and systems users.

Process Characteristics Attributes that describe a process and how it works including descriptive narrative for its steps, tools required, skill levels required, controls, and performance measures.

Process Flow The passing of execution of a process from one process step to the next. It may include the passing of information or materials from the first step to the second.

Process Flow Diagram A diagram which shows the triggering event(s), sequential flow of process steps, decision points, and deliverable or outcome of a single process.

Process Label A unique reference, within an application system, for a process.

Process Modeling A structured approach used to identify, define, and document the activity performed by a business to produce business deliverables.

Process Narrative A reduction of a new business process design down to a job-level description, thereby defining how the work gets done and laying a foundation for development of a user guide, role-based user training and user certification or other types of readiness testing. One process narrative should be written for each business process; see also ROLE-BASED TRAINING.

Process Owner The agent with overall responsibility for a complete business process; could be the customer of the process, or the supplier (person or organization charged with fulfilling the request).

Process Research A technique used in testing the feasibility of a process model and gathering facts. The approach involves answering implementation questionnaires, reviewing current process documentation, gathering statistics regarding volumes or frequencies, understanding policy statements and measures of performance, interviewing key users to ascertain critical factors for success.

Process Step An instance of the execution of a function as a step in performing a process. In a fully-analyzed business process model, all process steps are instances of elementary business functions. A business process step is normally composed of a series of procedure steps, where tools such as application screens, reports and inquiries are used. Once a process steps begins, all of its procedure steps must be completed in order to achieve an accurate and quality output. Business requirements are defined at the process steps level, while job definitions are at the procedure level.

Product Group Each separate application instance of Oracle Application Object Library in an Oracle database. A product group may contain any number of Oracle Applications products in addition to the single instance of Oracle Application Object Library.

Production Environment The database, equipment, documentation, and procedures used in support of live business operations.

Productivity Measured comparison of the quantity and/or quality of outputs and the quantity of resources required to produce them.

Productivity Metrics Measure by which acceptable performance will be evaluated; may include a time limit, accuracy tolerance, proportion of correct responses required, and/or qualitative standards.

Profile Option An Oracle Applications control switch that a user can set to govern some aspect of system processing or user interface.

Program 1. A set of coded instructions that a computer executes or interprets to perform an automated task. 2. A interrelated group of projects that are either being run concurrently or sequentially and that share a system goal. Individual projects may have different goals, however the combined set of projects will have a program goal.

Program Library The physical location, typically a networked server, used as a shared repository for all program information produced during the life of a program. Contents include issue logs, meeting minutes, status reports, deliverable documents, working papers, project plans, standards, tools, and configured software deliverables. The library is designed to facilitate access to all archived program and project deliverables by all members of a program.

Program Management Method (PGM) Part of Oracle Method designed to provide value-added management, infrastructure, and control to successfully manage complex enterprise-wide implementations of Oracle technology. PGM emphasizes commonality and reusability for management and control processes, execution processes, and hard and soft deliverables.

Program Office A project executed under the sponsorship of program management that establishes commonality and reuse across multiple projects within a program.

Project A set of work processes, tasks with associated deliverables and resources executed over a specific period of time with predetermined budget and business objectives.

Project Bridge Modeler (PBM) Applied Business Technology tool used to build the project planning and estimating system. PBM allows project managers to select, edit, combine, and create project workplans or routes, that best fit the needs of the client.

Project Completion The third and final part of the PJM project life-cycle. The satisfactory conclusion of the project and settlement of all outstanding issues prior to hand over of the project deliverables to the client.

Project Earned Value A measure of the value of completed tasks in a project. There are various ways of measuring the value of a task. These include percentage on commencement, percentage on completion, and amount at milestone.

Project Execution The second part of the PJM project life-cycle. The carrying out of project plans determined during planning for a method approach. Project execution also encompasses elements of control which analyze project performance and take corrective action as needed.

Project Expenses Funds allocated or spent to cover incidental or non-labor costs of a project.

Project Infrastructure The framework for storing, maintaining, and referencing all implementation deliverables and supporting materials including office space, software tools, and standards.

Project Library 1. A system for storing, organizing and controlling all documentation produced or used by the project. 2. The physical location of all deliverables for a single project, plus administrative and support materials. An administrative office to which all members of a team have access.

Project Life-Cycle The organization of a project according to its three major parts: planning, execution, and completion.

Project Management Method (PJM) A method which defines how a project is managed when executed according to the requirements of Oracle Method.

Project Milestone A significant project event.

Project Objectives The set of criteria for measuring a project's success.

Project Office The management of the project library for a specific project.

Project Partition Part of a project usually representing a coherent set of facilities to be developed by a single developer, commonly organized and managed as a sub-project.

Project Planning The first part of the PJM project life-cycle. The definition of a project with respect to scope, quality, time and cost. Project planning also determines the appropriate organization of resources and responsibilities to execute a project.

Project Schedule A list of tasks to be carried out presented against a timetable for their completion.

Project Timeline A specification of work to be carried out together with the number of resources needed to achieve a target duration; see also PROJECT SCHEDULE.

Project Workbench (PMW) Applied Business Technology tool used to schedule, track, and analyze your project. PMW provides work breakdown structures based on the routes selected in Project Bridge Modeler and provides the capability to manage these plans.

Project Workplan A specification of the work to be performed for a project, expressed as a set of interdependent tasks with project resources allocated over time.

Property Any detail that serves to qualify, identify, classify, quantify, or express the state of an element in a repository.

Prototype A facsimile of an end product used to demonstrate a concept rapidly, check feasibility, or gain acceptance.

Prototyping The construction of a partial system to demonstrate some aspect or aspects of the intended system behavior in order to gain user acceptance or to establish technical feasibility.

Publish and Subscribe A data communication paradigm for implementing the data flow between two or more applications. An event in a source application causes the application to 'publish' a data object or message to the potentially interested applications who individually opt to 'subscribe' to the data object or message. The subscription of the interested applications to the data object or message causes a state change in the applications. Contrast Request-Reply.

PMW see PROJECT WORKBENCH.

Q

Quality Audit An audit used to assess the adherence of the project team to plans, procedures, and standards.

Quality Management The means of implementing quality policy. On a particular project this is achieved through quality planning; quality assurance; quality control; and quality improvement.

Quality Review A review used to assess the quality of a deliverable in terms of fitness for purpose and adherence to defined standards and conventions.

Questionnaire A written or electronic survey instrument comprised of a series of questions, designed to measure a specific item or set of items.

R

RBT see ROLE-BASED TRAINING.

RDBMS see RELATIONAL DATABASE MANAGEMENT SYSTEM.

Real-Time Interface An application interface that supports synchronous transfer of data between applications.

Real-Time Support System (RTSS) An electronic information system accessible by Oracle and the client.

Real-Time System A system in which events control actual mechanisms. Real-time systems often control machinery (for example, a control system for an aircraft) and are often time- or safety-critical; see also EVENT.

Record In a non-relational database system, a record is an entry in a file, consisting of individual elements of information, which together provide full details about an aspect of the information needed by the system. Individual elements are held in fields and all records are held in files. An example of a record might be an employee. Every detail of the employee for example, date of birth, department code, or full names will be found in a number of fields. In a relational system record is an alternate word for row; see also ROW.

Record Type A predetermined set of fields within a file.

Readiness State of a person's, group's or organization's potential to manage change successfully. Involves a consideration of high-impact leverage points for change, as well as any change impediments.

Reference Materials Documents that describe key aspects or samples for the current business. These are normally compiled before the project starts and may have been used during the pre-sales cycle.

Registry An embedded database that holds configuration information for the Windows NT operating system. During installation, Oracle Applications writes data to the registry. You can also edit the registry directly with the Registry Editor (regedt32.exe).

Registry Key A folder that appears in the left pane of the Registry Editor window. A key can contain subkeys and value entries. For example: Environment is a key of HKEY_CURRENT_USER; see also REGISTRY SUBKEY.

Registry Subkey A key within a key. Subkeys are analogous to subdirectories in the registry hierarchy. Keys and subkeys are similar to the section heading in .ini files. However, subkeys can carry out functions. Oracle Applications stores important information about a product group in a registry subkey; see also REGISTRY KEY and REGISTRY.

Regression Test Specific assurance testing on an application system release, after defects have been corrected or enhancements have been completed. Regression testing is required to re-validate an application system, confirming that prior validations have not regressed.

Relational Database Management System (RDBMS) A database management system in which data can be viewed and manipulated in tabular form. Data can be sorted in any order and tables of information are easily related or joined to each other.

Relationship 1. What one entity has to do with another. 2. Any significant way in which two things of the same or different type may be associated.

Release A baseline issued from the CM Repository for delivery to an a destination. The destination may be internal to the project environment, such as for testing, or external, such as to the client.

Remote Procedure Call (RPC) A protocol that allows a client to execute a program on a server. The client sends a message to the server with appropriate arguments, and the server returns a message containing the program's results.

Report An organized display of Oracle Applications information. A report can be viewed online or printed. The content of a report can range from a summary to a complete listing of values.

Reporting Database A database used by reporting applications. Reporting databases are often duplicates of transaction databases used to off-load report processing from transaction databases.

Reporting Functional Currency A currency, other than your primary functional currency, for which you need to generate reports.

Report Review Agent A tool used by Oracle Applications to view concurrent processing files online.

Reporting Set of Books A financial reporting entity that is associated with a primary set of books. It has the same chart of accounts and accounting calendar, but usually a different functional currency.

Repository A mechanism for storing any information about the definition of a system at any point in its life-cycle. Repository services would typically be provided for extensibility, recovery, integrity, naming standards, and a wide variety of other management functions.

Representative Sample A scientifically selected group of individuals, who provide information that allows mathematical inferences to be made about the larger constituency they are chosen to represent.

Request for Proposal The formal mechanism by which a company conveys its business requirements during the search for a new application system. Known as the RFP, this document drives the pre-sales cycle and provides valuable information into the business requirements definition process of the implementation; see also PRE-SALES CYCLE.

Requirement A requirement is a specific, detailed business need which is to be compared with application functionality to determine if the need can be met with the standard Oracle software.

Requirements Scenario A requirements scenario is a formal statement of detailed business requirements for a process, the source of the requirements, how these requirements will be satisfied (either the application, manual procedure, workarounds, or other application solutions) and what prototyping steps must be taken to prove the design.

Requirements Workshop A workshop, usually attended by project sponsor, stakeholders, and developers, to provide a sufficiently detailed definition for a developer to commence build. The definition will be further defined and refined during development, particularly by user reviews; see also USER REVIEW and WORKSHOP.

Research and Development These business organizations are responsible for the research and product development functions within a company; see also BUSINESS ORGANIZATION TYPE.

Resource Any persons, equipment, or material needed to perform a task(s).

Resource Category see CONSULTING GRADE LEVEL.

Resource Database A record of the resources available, primarily human resources, including information about the skills and experiences of the resources.

Respondent In OCM, any individual who provides information in response to a survey, such as a questionnaire or interview.

Responsibility 1. A contract or obligation of a type or class. (UML 1.1 Semantics) 2. A collection of functions within an Oracle Application. Each Applications user is assigned one or more responsibilities to allow them access to Applications forms.

Revenue Income from services labor fees, training fees, licensed product sales and support fees.

Revision The authorized modification to a configuration item.

Rewards and Recognition Means by which individuals are reinforced or compensated for certain behaviors; may be tangible/symbolic, verbal/social, cash/non-cash, immediate or long-term. EX: bonuses, team celebrations, profit-sharing, outstanding contributor awards.

Risk 1. The potential of an adverse condition occurring on a project which will cause the project to not meet expectations. A risk requires management assessment and a strategy for its mitigation. 2. The logical product of the impact of the risk and the likelihood of it occurring.

Role A classification of staff member used on a project. Examples are: analyst, application developer, system architect; see also RESOURCE.

Role-Based Training (RBT) A user training approach that focuses on developing curriculum based on Oracle Application responsibilities (i.e., roles) that have been defined and assigned to users. Application responsibilities tie a user to a menu of functions that can be performed. An RBT curriculum trains a group of users on these specific functions, using client data and highlighting client procedures.

Rollback Segment A set of entries used to undo changes in the database in the event of transaction rollback, crash, or media recovery.

Rollback Tablespace A tablespace created for rollback segments.

Route A variation of a method containing all tasks required in order to deliver a service; a dependency network.

Row An entry in a table that typically corresponds to an instance of some real thing, consisting of a set of values for all mandatory columns and relevant optional columns. A row is often an implementation of an instance of an entity; see also COLUMN and TABLE.

RPC see REMOTE PROCEDURE CALL.

RTSS see REAL-TIME SUPPORT SYSTEM.

Rule of 3-2-1 A rule of thumb used during process research that stresses the importance of "walking the floor" and other practical investigation over conference room interviews. It means that roughly 3 hours of research are normally required for every 2 hours of process design and 1 hour of formal deliverable creation (like creating a BRS using a template or other tool); see also PROCESS RESEARCH and BUSINESS REQUIREMENTS SCENARIO.

S

Sales Business organizations that handle typical sales functions, including generating quotes and sales orders; see also BUSINESS ORGANIZATION TYPE.

Sample A statistically-significant subset selected and analyzed to estimate the characteristics of a larger group or population; a set of individuals within an organization assessed to provide information on the preferences, opinions, attitudes, and practices of the group they represent.

Schema 1. An information model implemented in a database. A schema may be a logical schema, which will define, for example, tables, columns, and constraints, but which may not include any optimization. It may be a physical schema that includes optimization, for example, table clustering. 2. An ORACLE account or ORACLE ID.

Scenario A discrete instance of a system process; see also MAPPING SCENARIO.

Scenario Test Specification A component of a test script which defines the test execution – it is comprised of scenario information, system process information, a series of test steps, and their associated data profiles.

Scope The boundaries of a project expressed in some combination of geography, organization, applications or business functions.

Scope Change A change to project scope. A scope change requires an adjustment to the project workplan, and nearly always impacts project cost, schedule or quality.

Scope Creep The common phenomenon where additional requirements are added after a project has started without reconsidering the resourcing or timescale of the project. Scope creep arises from the misapprehension that such small additions will not affect the project schedule.

Scoping Workshop A workshop, usually attended by the project sponsor and developers, with the objective of defining the boundaries of the scope for an intended project prioritizing requirements within the scope; see also WORKSHOP.

Script 1. A sequence of coded instructions executed or interpreted by computer programs. 2. A prescribed set of steps to follow when testing.

Security Profile A list of role-based security specifications.

Sequence A database object created such as a table used to generate unique keys (sequence numbers).

Server A program or machine that provides resources, such as files, processing, or other information, to other programs or machines, which are called clients. For example, the Oracle Forms Server process runs on a forms server (machine), and the Oracle Database Server (database process) runs on a database server. Server processes may communicate with other programs, such as desktop client processes or other servers. Do not use the term *server* in an unqualified sense. Use *Hardware Server, Applications Server*.

Service 1. Work performed (or offered) by a server. This may mean simply serving simple requests for data to be sent or stored (as with file servers, gopher or http servers, e-mail servers, finger servers, SQL servers, etc.) or a more complex work, such as that of irc servers, print servers, X Windows servers, or process servers. 2. A Windows NT internal software routine that provides support for other applications. The Oracle Database Server, Net8, and Oracle Applications concurrent managers all make use of services.

Servlet A Java program executed on a web server rather than downloaded to a desktop client; see also APPLET.

Set of Books A company or group of companies within Oracle Applications that share a common chart of accounts, accounting calendar, and functional currency. This concept is being superseded by the concept of a financial organization in releases of Oracle Applications starting with 10.6.

SGA see SYSTEM GLOBAL AREA.

Shared Localization A customization to an application product required by more than one country.

Shared Product see DEPENDENT PRODUCT.

Short Name An abbreviation for an Oracle Applications product (such as GL for Oracle General Ledger).

Shut Down The process of stopping an active process, such as an ORACLE instance or a concurrent manager, to make it unavailable.

SI see SINGLY INSTANTIATED TASK.

Signoff Agreement with a client of the successful completion of a project, project phase, or deliverable.

Singly Instantiated Task (SI) A task which occurs once, at a specific time, during a project.

Site A uniquely identifiable geographic location or place from which one or more business organizations may be wholly or partly operating.

Site Based Configuration Specific modifications or enhancements made to the company base configuration to support site requirements. The site base configuration must remain integrated with the company base configuration to maintain integrity of the company base configuration; see also COMPANY BASE HARDWARE CONFIGURATION.

Site Configuration The definition and management of the site base configuration.

Skills Analysis The collection of data from groups and individuals targeted in a specific training situation, to determine the existence and nature of any performance gap(s); used in a skills assessment to determine training needs and develop training goals and objectives to be translated into learningware recommendations.

Skills Database see RESOURCE DATABASE.

Skills Profile Description of the skills held by a particular job incumbent or group of incumbents at a given point in time.

Skills Set Collection of physical or mental capabilities inherent in and available to a given individual.

SmartClient An implementation used with Release 10 to provide client/server access to Oracle Applications. Use of SmartClient is no longer recommended by Oracle Corporation for new implementations.

Software Management (SWM) A program management focus area project that defines and establishes a common software infrastructure for a multi-site implementation. Included items are development environment; software distribution; version control; and software configuration management methodology.

Solution A solution is the resolution of the discrepancy between one or more gaps and one or more standard application functions. A solution make take the form of a procedure, policy or customization.

Source Module A physical program unit. An application system's repository of source code is controlled at the source module level.

SQL see STRUCTURED QUERY LANGUAGE.

SQL*Loader An Oracle Database Server tool used to load unstructured data from operating system files into Oracle Database Server database tables.

SQL*Plus An Oracle program you can use to enter and run SQL commands and PL/SQL blocks that store data in and retrieve data from an ORACLE database.

SQL Script A file containing SQL statements that you run, with a tool such as SQL*Plus, to query or update ORACLE data.

Stakeholder A person, group, or business unit that has a share or an interest in a particular activity or set of activities.

Standard A set of rules for measuring quality. Usually, standards are defined for products deliverables or deliverable components and processes.

Standard Request Submission A standard interface in Oracle Applications that lets you run and monitor concurrent requests.

State A recognizable or definable condition that a system or an object can be in at some point in its life-cycle.

State Transition A valid change of a system or an object from one state to another, modeled on a state transition diagram; see also STATE.

Store A collection of information or materials used in a process.

Storyboard A technique, borrowed from the film industry, for describing screen dialogues. A storyboard consists of an ordered series of pictures illustrating stages of the dialogue. The pictures are annotated with notes about logic and user input.

Structured Query Language (SQL) The ANSI internationally accepted standard for relational database systems, covering not only query but also data definition, manipulation, security, and some aspects of referential and entity integrity.

Subdirectory A directory that is contained within another directory.

Sub-Function A business function that has a parent function.

Sub-Process A process performed entirely within another process.

Successor A task that follows another task and is related to it by a dependency link; see also PREDECESSOR.

Support Profile A section of a test scenario that identifies support tools required during execution of the test.

Supporting Module A module that is not itself an entry point in an application system. Supporting modules are generally shared modules that provide functionality used by multiple primary modules. They are usually not referenced independently in user-oriented documentation. All PL/SQL packages, procedures, and database triggers are examples of supporting modules; see also MODULE.

Swim Lane see AGENT CHANNEL.

Synonym 1. A name assigned to a table or view that may then be used more conveniently for reference. 2. An alternate name for an entity.

Syntax The orderly system by which commands, qualifiers, and parameters are arranged together to form valid command strings.

SYS Username A database user which is automatically created in Oracle Database Servers upon installation and initialization. This user owns the tables and database objects that make up the Oracle data dictionary.

System A named, defined, and interacting collection of procedures and processes, along with the organized deployment of people, machines, various mechanisms, and other resources that carry out those procedures and processes; see also APPLICATION SYSTEM.

System Architecture A representation of the structure of an application system usually confined to essentials.

System Facility A part of an information system that supports an identifiable set of business functions. A facility may be a single module or it may be a whole sub-system.

System Function Something a computer system does in order to support one or more business functions; see also APPLICATION SYSTEM and BUSINESS FUNCTION.

System Global Area (SGA). A reserved section of main memory that provides communication between all database users and the ORACLE background processes.

System Interface The mechanism used to create connectivity between two systems.

System Operations Function A system function that serves to support the continuing operations of the application system. Examples are backup, recovery, audit; see also APPLICATION SYSTEM, SYSTEM FUNCTION, and SYSTEM OPERATIONS PROCEDURE.

System Operations Procedure A step-by-step indication of the way in which an application system executes a system operations function. The system operations guide is a CDM deliverable that is a compilation of all relevant system operations procedures; see also APPLICATION SYSTEM.

System Process The response which an application system makes to an event. It comprises the sequential execution of both manually executed process steps which are instances of manual functions and process steps automatically executed by a computer system which are instances of system functions.

System Process Test Model The overall basis for testing the functional requirements of a system. The system process test model contains scenarios, data profiles, and test specifications, but no module references.

SYSTEM Tablespace Holds data dictionary tables owned by the SYS account. It is created when you install the database.

System Test A project activity that tests an application system over its complete life-cycle, using scripts and associating scenario test specifications into chronological sequences.

System Test Flow A set of steps or a transaction sequence used in system or business process testing.

SYSTEM Username One of two standard usernames automatically created with each database (the other is SYS). This user owns the views created on the data dictionary tables. The SYSTEM username is the preferred username to use when performing database maintenance. See also SYS USERNAME.

Systems Integration Test A project activity that consists of testing related application systems using sequences or scripts from two or more systems which interface.

T

Table The basic unit of storage in a relational database management system, defined by one or more columns of data and a primary key. A table represents entities and relationships.

Table Constraint A set of rules constraining values in a combination of one or more columns of a database table.

Tablespace A logical portion of an ORACLE database used to allocate storage for data and to group related logical structures. For example, one tablespace may contain all of one Oracle Applications product's database tables and indexes.

TAR see TECHNICAL ASSISTANCE REQUEST.

Target Application The primary set of new application modules that are within project scope.

Task A unit of work that done in delivering a service. A task is the smallest trackable item on a project plan, and forms the basis for a work breakdown structure. The minimum elapsed time for a task iteration or instantiation should be one day. The maximum should be two weeks; see also WORK BREAKDOWN STRUCTURE.

Task Dependency The relationship between two tasks where the start or end date of the successor task is constrained by the start or end date of the predecessor task.

Task Dependency Network A network of tasks and task dependencies where each node is a task and each link is a task dependency; see also CRITICAL PATH METHOD (CPM) NETWORK.

Task Group A set of tasks that should be treated similarly. For example, they should be performed at the same time, should be iterated as a group, should be multiply instantiated as a group. A task group is represented on a process flow diagram by enclosing the tasks in a rectangle.

Task Step A discreet step to be done in executing a task.

TCP/IP See TRANSMISSION CONTROL PROTOCOL / INTERNET PROTOCOL.

Technical Architecture The physical hardware, network configuration, and software tools that support the system architecture.

Technical Assistance Request (TAR) Oracle's name for recorded problems. A TAR number is a unique number assigned by WWSUP to track the problem.

Technical Platform Architecture Setup rules, guidelines, and principles that define the structure, functions, and relationships among the hardware, systems software, communications, and network facilities that act as the technical foundation for the business process, information, and application architectures. The technical platform architecture specifies the common or shared facilities and function of the facilities needed to support the applications and data to meet the needs of the business. It supports such established principles as data, devices, and location independence and formal interfaces.

Technique A specific approach to performing a task. A methodical means of handling and communicating complex details.

Temporary Tablespace A tablespace used when a SQL statement requires the creation of temporary segments (for example, the creation of an index).

Test Data Profile Specific test data values for performing a test.

Test Environment A combination of software and possibly hardware that provides a stable environment in which to test newly developed software without elaborate preparation. A test environment might provide test data; data structures; test scripts; automatic test execution; test results recording; and test results analysis.

Test Scenario An instance of an event. A point-in-time sample of the business conditions and processing environment to be tested. Each scenario may include users working in multiple applications, performing online or batch processing being performed.

Test Script A document consisting of a test specification, a test data profile and instructions for performing a test.

Test Specification A set of steps or a transaction sequence used in module; module integration; system; systems integration; or entity testing.

Thin Client 1. A client is considered thin if the personal database and Express Server are installed on the server and all processing occurs on the server. 2. A low-maintenance desktop client, usually without a hard drive, intended for optimal use in a multi-tier architecture environment. In a multi-tier environment, server hardware platforms perform data processing actions instead of the thin client. 3. The client software that is running on the server hardware platform. See also TIER.

Third-Generation Programming Language (3GL) A programming language that uses procedural definitions to carry out tasks, and typically uses record-by-record processing of data. Procedural 3GL language structures include *if....then....else*, *do....while* statements and others.

Third-Party Application Interface A heterogeneous interface between Oracle Applications and the application product of another vendor or an application developed 'in-house'.

Tier A set of hardware platforms that perform similar tasks. For example, client/server is a two-tier architecture, with hardware platforms on the client tier connecting to machines on the server tier. A multi-tier architecture consists of three or more tiers. In Release 11, hardware platforms on the desktop client tier communicate with hardware platforms on the application tier, which in turn, communicate with each other and with the hardware platforms on the database tier.

Timebox A project management technique that fixes the duration and resources of a task, or a set of tasks, and forces the scope of the project to be adjusted based on the time available to complete the task(s). The contingency for under-estimation of the work is provided by a prioritized list of features left out if necessary. The contingency for over-estimation is provided by a prioritized list of features that should be added in if time allows.

Tool Software applications, deliverable templates, or any other utility suggested to facilitate the completion of a particular task.

Top-Down Estimate A high-level work effort estimate. This type of estimate is derived by taking a total project estimate and dividing it among the project's phases, activities, and tasks.

Topical Essay A high-level illustration of how to satisfy a business need. A section of a design document that specifies business needs, major features, terms, and processing overview.

Traceability The ability to trace an application system component to its business requirement.

Train-the-Trainer An approach toward training whereby inside resources take ownership of delivering training to their peers and associates.

Transaction Database A database used primarily by transaction oriented applications.

Transaction Interface An interface that transfers transaction data between similar or dissimilar applications.

Transmission Control Protocol / Internet Protocol (TCP/IP) A popular industry-standard networking protocol used for communication between computers.

Trigger 1. A database object that executes PL/SQL code based on a change to a database table. 2. An Oracle Forms function that is executed based on an event in the forms environment.

TWO_TASK With a UNIX operating system, an environment setting that identifies the network alias of an ORACLE instance running on the local machine or on another networked machine. This variable overrides any setting for ORACLE_SID and causes the Net8 software to manage the connection request. See also ORACLE_SID and LOCAL.

U

Uncontrolled Document A document which is produced once for information only, and is not subject to formal approval or change control.

Unique Identifier Any combination of attributes or relationships that serves, in all cases, to uniquely identify an occurrence of an entity.

Unit Test see MODULE TEST.

Usability That quality of a system that makes it easy to learn, easy to use and encourages the user to regard the system as a positive help in getting the job done.

User A person who uses a system to perform a business function.

User Preferences In many circumstances in computer systems there may be alternate ways a user can influence the behavior of a utility, user interface, or other system process. Typically set by adjusting values in a set of user preferences; for example, in a program generator, preferences may be set for style, performance, user interface behavior, and code standards.

User Review A meeting at which some of the facilities of a system are demonstrated to and reviewed by user. The objective of a user review is to elicit feedback on which to base future development and improvement of the facilities being reviewed.

Utility 1. A program or system function that performs a job for the users, but does not provide or require user interaction (for example, the calculation of interest); see also GENERATOR and TRANSFORMER. 2. A program that performs a job for developers or for administrators (for example, Headstart utilities).

Utilization The amount of time a staff member books to a project accounting system; see also BILLABLE UTILIZATION and NON-BILLABLE UTILIZATION.

V

Vanilla 1. Standard or plain. 2. An ice cream flavor.

Variance The difference between a planned and an actual value; for example, budgeted hours vs. actual hours.

Version The rendering of a configuration item which incorporates all of its revisions starting from a given point.

Version Control A mechanism to manage multiple revisions of files, documents, programs, applications, or other items that undergo change.

View 1. A means of accessing a subset of data in a database. 2. A custom-tailored presentation of the data in one or more tables. A view can be thought of as a *stored query*.

W

Walkthrough Review of work in progress, usually taking the form of a presentation by a developer to an audience of stakeholders or fellow developers who are encouraged to comment and ask questions. The objective is to make sure that work is proceeding in the right direction.

WAN see WIDE AREA NETWORK.

WBS see WORK BREAKDOWN STRUCTURE.

Web Browser A program running on a desktop client used for viewing documents formatted in HTML and running Java applets. A web browser sends requests to a web server using a special protocol (HTTP) to retrieve documents and Java applets.

Web Client see THIN CLIENT and TIER.

Web Server A type of application server that runs an HTTP listener. The term is also used by some in an informal manner to describe the software running the HTTP listener, as in "the Apache web server".

White Box Test A test of all or part of an application system that requires knowledge of the actual code being tested. Module tests are usually white box tests; see also BLACK BOX TEST.

Wide Area Network (WAN) A communications network that connects geographically separated areas; see also LOCAL AREA NETWORK.

Work Breakdown Structure (WBS) An organization of project tasks into a hierarchy for scheduling and reporting progress.

Work Effort see EFFORT.

Work Estimate see ESTIMATE.

Workflow 1. The flow of work, step-by-step, through a process, including inputs required, outputs produced, activities undertaken and decisions made. 2. The movement of documents around an organization for purposes including sign-off, evaluation, performing activities in a process and co-writing. 3. The flow of inputs and outputs linking one job or one task to the next in a work process.

Work Schedule see PROJECT SCHEDULE.

Workshop 1. A meeting attended by users and developers to create a plan, specification or other documentation that can guide the developers in their development tasks. 2. A meeting designed to facilitate interaction and the exchange of information between individuals or groups; see also REQUIREMENTS WORKSHOP, SCOPING WORKSHOP, and USER REVIEW.

Workstep A step within a task that may produce a deliverable component.

Worldwide Support (WWSUP) Oracle's support organization.

World Wide Web (WWW) A hypertext-based system for browsing multimedia documents that uses the Internet as its transport mechanism. In a hypertext system, you navigate among documents by following hyperlinks, which take you to other documents. Often simply referred to as the *Web*. See also HTML and HTTP.

WWSUP see WORLDWIDE SUPPORT.

WWW see WORLD WIDE WEB.