PRM-IT V3 Reference Library - A1 Governance and Management Sysem
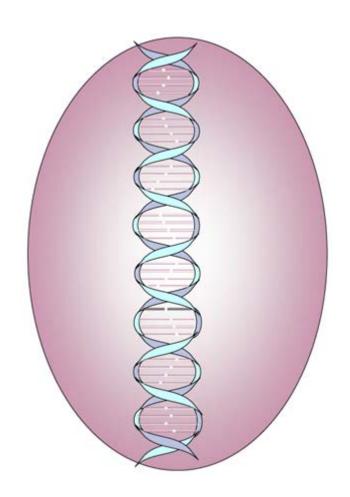
PRM-IT Version 3.0

April, 2008

PRM - IT
IBM Process Reference Model for IT

Sequencing the DNA of IT Management

Table of Contents

Preface

The IBM Process Reference Model for Information Technology (PRM-IT) is a generic representation of the processes involved across the complete IT management domain. It contains a foundational examination of the IT process topic. It is for this reason the graphical image of the DNA double helix over the basic building block of a cell is used.

About this book

This is the third book in the PRM-IT Reference Library. As a reference manual, this book provides the complete description of all aspects of the process category.

Each reference manual begins with a summarization of the category, and then further considers each process in turn and the activities within each process.

Details are provided for:

- The definition of each activity
- Each control, input and output
- The sources and destinations of each control, input, and output (thereby showing the model linkages)

The full IDEF0 diagram for each category and each process is included.

The final page is a breakdown of the PRM-IT node tree for this category.

The PRM-IT Reference Library books

The PRM-IT Reference Library consists of thirteen books. The first book is the *General Information Manual*, it is a brief examination of the subject of IT processes, and provides a tour of the model.

The nine reference manuals are A0 through A8. The *A0 Manage IT* book examines the context of the processes for IT, exploring the key external agents — stakeholders and their interactions with IT. The reference manuals A1 through A8 provide the complete description of all spects of the process categories.

The reference manual *IDEFØ Diagrams* presents the full model in IDEFØ notation, and *IDEFØ Node Tree* shows the ordered list of process categories, processes, and activities.

The final book, the *Glossary*, contains the definition of every process interface object for the model and provides references to where the objects are used.

PRM-IT Reference Library	
■ General Information	■ A6 Operations
■ A0 Manage IT	■ A7 Resilience
■ A1 Governance and Management System	■ A8 Administration
■ A2 Customer Relationships	■ IDEFØ Node Tree
■ A3 Direction	■ IDEFØ Diagrams
■ A4 Realization	■ PRM-IT Glossary
■ A5 Transition	

Intended audience

An understanding of the full range of the processes relevant to IT in any business is of value to those within the IT function responsible for the specification, creation, and delivery of IT services (whether at the CIO or IT executive level), and who consider the direction and overall management of IT. Or, individuals who work within any of its competencies, needing to interface with other parts of the IT value chain or value net.

Equally, the stakeholders in the business of this IT capability will benefit from greater insight into how IT serves them. This insight will enable them to better influence IT decisions and activities, to their ultimate benefit.

Next steps

PRM-IT is a powerful management tool for purposes of investigating and identifying areas for improvement. PRM-IT also provides a proven starting-point for the design and implementation of new and upgraded IT management capabilities.

IBM IT consultants, architects, and specialists in global services who, working from this common base, are equipped with a full range of methods, techniques, and tools to assist its customers achieve their purposes.

[A1] Governance and Management System

Description

Purpose

The Governance and Management System process category defines a structure of relationships and processes to direct and control the IT undertaking. These processes must establish the capability to achieve the information technology (IT) goals. The governance and management system must add value by balancing *risk versus return* across IT and all processes.

The category defines, establishes, operates, and improves upon a management framework for conducting IT activities. The *management framework* outlines, as an example, the management model, guiding principles, methods, organization design, information framework, process structure, policies and practices to guide the IT organization towards its stated goals. Once the management framework is defined and implemented, a continuous evaluation process will be executed to make possible better decision making by executives on whether the business model is succeeding or should be modified to achieve the objectives better.

Governance considers and sets the fundamental direction for the management framework. Governance is a decision rights and accountability framework for directing, controlling, and executing IT endeavors in order to determine and achieve desired behaviors and results. Governance involves defining the management model and creating the governing or guiding principles. This includes:

- Who makes directing, controlling, and executing decisions, and defines the ultimate authority (final arbiter)
- How the decisions will be made, and the procedures for escalation and arbitration
- What information will be required to make the decisions
- The frequency of decision making must be executed or revisited
- The required decision making mechanisms
- How exceptions will be handled
- How decisions will be communicated to the concerned parties
- How the results of the implemented governance should be reviewed and improved

Rationale

The Governance and Management System process category ensures that a framework is in place to integrate processes, technologies, people, and data in a manner consistent with the IT goals. This category also monitors the framework against the broader enterprise goals and quality metrics. When specific goals and quality metrics are consistently unmet, decisions will be made regarding the overall framework and whether it will be modified or restructured to ensure future success.

Value

- Integrates and coordinates the workings of IT
- Enables informed and effective decision making
- Establishes responsibility for the implementation of a set of coherent, integrated capabilities that enables IT
- Optimizes strategic, tactical, and operational effectiveness of IT
- Ensures continuous improvement

Controls

- Business Management System
- Business Strategy
- Environment Information (From: outside the model)
- IT Budget (From: A8 A81 A813)
- IT Strategy (From: A3 A31 A315)

Inputs

- Business Input (From: outside the model)
- Underpinning Contracts (From: A8 A82 A823)
- IT Financial Reports (From: A8 A81 A813 A814 A815)
- Compliance Plans and Controls (From: A7 A71 A714)
- IT Research Guidance (From: A3 A32 A325)
- IT Portfolio (From: A3 A36 A365)
- Architecture Baselines and Roadmaps (From: A3 A33 A334)
- Market Analysis (From: A2 A22 A222)

Outputs

- IT Governance and Management System Results (To: outside the model)
- IT Management Ecosystem (To: A2 A21 A211 A22 A221 A23 A231 A24 A241 A25 A251 A26 A261 A27 A271 A3 A31 A311 A32 A321 A33 A331 A34 A341 A342 A343 A35 A351 A36 A361 A37 A371 A4 A41 A411 A42 A421 A43 A431 A44 A441 A45 A451 A5 A51 A511 A52 A521 A53 A531 A54 A541 A55 A551 A6 A61 A611 A62 A621 A63 A631 A64 A641 A65 A651 A66 A661 A67 A671 A7 A71 A711 A712 A713 A72 A721 A73 A731 A74 A741 A75 A751 A76 A761 A8 A81 A811 A82 A821 A83 A831 A84 A841 A85 A851)

Processes

This process category is composed of these processes:

- A11 IT Governance and Management System Framework
- A12 IT Governance and Management System Capabilities
- A13 IT Governance and Management System Operation
- A14 IT Governance and Management System Evaluation

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Figure 1. Governance and Management System Diagram

[A11] IT Governance and Management System Framework

Purpose

The purpose of the IT Governance and Management System Framework process is to lay the foundation for building the governance and management of an IT organization or undertaking, taking into account such factors as vision, values, goals, and overall business objectives. Further, it establishes guiding principles (or a management philosophy) based on those factors.

This framework plays a key role in aligning the IT entity with the overall approach of the business. To be effective, the IT management system must focus on cultural as well as business aspects. This process does not identify the priorities of the business, but rather the approach to operating the various IT projects and processes in a coordinated fashion, that will manage their progress and health.

Outcomes

As a result of the successful implementation of this process:

- Clear, unambiguous objectives and roadmaps for the overall IT Governance and Management System are set
- Overall IT governance meets the objectives provided by the owning business
- The IT management system aligns with the overall business management system
- Management system directions are transformed into a functional, workable, and implementable management system

Scope

The framework for IT will be established within an overall governance and management framework set by the business. It adds IT-relevant characteristics to relevant aspects of the business framework and any items unique to IT undertakings.

Includes

- Specifying:
  - Management models
  - Guiding principles
  - Policies and standards
  - Measurement and control approaches, such as CIO dashboard, balanced scorecard
  - Quality management approaches
- Defining critical success factors
- Generating a list of decision areas and issues, and selecting decision options based on guiding principles, values, and assumptions
- Responding to any identified gaps between the current baseline and the desired framework
- Communicating direction

Excludes

- Identifying gaps between the current governance and management baseline and the desired framework (IT Governance and Management System Evaluation)

◆ Priorities and decisions on the business results of IT (Portfolio Management)

◆ IT strategy for the business (IT Strategy)

Controls

■ Regulations and Standards

External official rules (typically driven by government) that call for business compliance, as well as established good practice standards from formal and informal bodies. Includes:

- Generally accepted accounting principles
- Legal requirements, such as Sarbanes-Oxley and its COSO (Framework for Financial Management)

■ Business Management System

The management system in place to govern the workings of the overall business.

■ Business Strategy

The business strategy stated in terms of strategic intent, roadmap, drivers, objectives and policies.

■ IT Strategy (From: A3 A31 A315)

A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

Inputs

■ External Models and Practices

External information from the industry (from individual enterprises, from academia, and from industry watchers) describing models, practices, and trends in IT management system topics.

■ Market Analysis (From: A2 A22 A222)

A document that evaluates the current service requirements, market segmentation, current customer profiles, and the current typical IT service provider scope to discern general trends and directions in the current IT service marketplace.

■ Underpinning Contracts (From: A8 A82 A823)

Content of contracts with suppliers, including terms and conditions, service level agreements (SLAs), among others. Covers both the actual contract itself, and information about it that is available as input for supplier evaluation and to other internal processes, such as financial management.

Information Technology Infrastructure Library (ITIL) defines underpinning contract as "a contract between an IT service provider and a third party. The third party provides goods or services that support delivery of an IT service to a customer. The underpinning contract defines targets and responsibilities that are required to meet agreed service level targets in an SLA."[1]

■ Compliance Plans and Controls (From: A7 A71 A714)

The authoritative and comprehensive statement of:

- The items for which compliance is required
- The means (policies, data specifications, procedures, techniques, tools) to achieve compliance

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1. ITIL V3 Glossary

- The definition of required compliance metrics and reports by which conformance will be able to be demonstrated for required scrutiny

It will be the major vehicle for communications and guidance on compliance efforts.

- IT Service Provider Value Profile (From: A31 A313)

A model of the offerings and services desired by the business, incorporating value provided by the IT Business. Expresses in a form that profiles the IT Business as an IT Service Provider in the style (and with the required attributes) desired by the business. An example of suitable styles is provided by the Commodity, Utility, Partner, Enabler model.

- Architecture Baselines and Roadmaps (From: A3 A33 A334)

Provides an agreed, published statement of the required architecture at a moment in time. Includes statements to assist in selection and evaluation of appropriate implementations of specified architecture building blocks.

- IT Research Guidance (From: A3 A32 A325)

Guidance and recommendations about which trends and innovations should or should not be adopted. In other words, a summary of overall research results.

- IT Quality System Reports (From: A14 A144)

Reports specifically focused on the quality management system used within IT and indicating its conclusions on the effectiveness of, and any need for improvement in, the overall quality management system.

- IT Governance and Management System Evaluation (From: A14 A144)

An assessment of the overall performance of the IT Management and Governance System against the targets set in the IT Management System Framework and in the IT Governance Model, and an identification of possible process improvement areas.

- IT Governance and Management Audit Results (From: A14 A143)

The findings, conclusions, and recommendations of any audit (formal or informal, internal or external) carried out into any or all of the IT Governance and Management System.

Outputs

- IT Governance Framework (To: A112 A113 A114 A12 A121 A14 A142 A143)

The guiding principles, the statements of intent, and the objectives that together shape and set the direction for the implementation of IT governance.

- IT Management System Framework (To: A12 A122 A123 A124 A125 A126 A13 A132 A133 A14 A142 A143)

The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for managing the overall IT function.

- IT Quality Management Framework (To: A12 A121 A122 A123 A124 A125 A126)

The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for quality management across the overall IT function.

Activities

This process is composed of these activities:

- A111 Define IT Governance Framework
- A112 Define IT Management Goals
- A113 Establish IT Management Policies
- A114 Establish IT Management Practices

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NODE: **A11**　　TITLE:　　**IT Governance and Management　System Framework**　　CURRENT PAGE:

Figure 2. A11 IT Governance and Management System Framework

[A111] Define IT Governance Framework

Description

Creates the principles and tenets for the governance of IT, setting the direction for how governance capabilities will be established as an integral part of the overall IT Management Ecosystem. The IT Governance Framework will be constrained and controlled by the overall scheme of governance from the business as well as regulations, standards, compliance controls, and external models and practices.

Controls

- Business Strategy

  The business strategy stated in terms of strategic intent, roadmap, drivers, objectives and policies.

- IT Strategy (From: A3 A31 A315)

  A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

- Regulations and Standards

  External official rules (typically driven by government) that call for business compliance, as well as established good practice standards from formal and informal bodies. Includes:

  - Generally accepted accounting principles
  - Legal requirements, such as Sarbanes-Oxley and its COSO (Framework for Financial Management)

Inputs

- Business Governance Capabilities

  The charters, structures, roles and responsibilities, decision making mechanisms and measurement capabilities, which are used for governance across the overall business within IT.

- IT Governance and Management Audit Results (From: A14 A143)

  The findings, conclusions, and recommendations of any audit (formal or informal, internal or external) carried out into any or all of the IT Governance and Management System.

- External Models and Practices

  External information from the industry (from individual enterprises, from academia and from industry watchers) describing models, practices and trends in IT management system topics.

- Compliance Plans and Controls (From: A7 A71 A714)

  The authoritative and comprehensive statement of:

  - The items for which compliance is required
  - The means (policies, data specifications, procedures, techniques, tools) to achieve compliance
  - The definition of required compliance metrics and reports by which conformance will be able to be demonstrated for required scrutiny

  It will be the major vehicle for communications and guidance on compliance efforts.

- IT Management System Practices (From: A114)

  High-level practices that have been defined in detail for the management system of the IT endeavor. Once these have been put in place (that is, made operational), they represent an implementation of the policies.

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- IT Management System Policies (From: A113)

  High-level courses of action and guiding principles for the IT function that are required in order for it to achieve its goals.

- IT Management System Goals (From: A112)

  Statements of purpose to direct the management system of the IT endeavor, and which reflect and support the overall goals of the Business.

Outputs

- IT Governance Framework (To: A112 A113 A114 A12 A121 A14 A142 A143)

  The guiding principles, the statements of intent, and the objectives that together shape and set the direction for the implementation of IT governance.

[A112] Define IT Management Goals

Description

Establishes the fundamental tenets, aims, and fundamental directions of the IT Management System. These will usually address a range of topics, such as customer service, financial measures, productivity, quality, turn around times, contribution to the community, among others.

Controls

- IT Governance Framework (From: A11 A111)

  The guiding principles, the statements of intent, and the objectives that together shape and set the direction for the implementation of IT governance.

- Business Strategy

  The business strategy stated in terms of strategic intent, roadmap, drivers, objectives and policies.

- Business Management Policies

  Policies of the Business that have a bearing on the IT function. They include fundamentals such as statements of the core values of the business through explicit policies, which must be followed (for example, in external relations).

- IT Strategy (From: A3 A31 A315)

  A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

Inputs

- Business Goals

  Goals of the Business.

- Market Analysis (From: A2 A22 A222)

  A document that evaluates the current service requirements, market segmentation, current customer profiles, and the current typical IT service provider scope. The purpose is to discern general trends and directions in the current IT service marketplace.

- IT Service Provider Value Profile (From: A31 A313)

  A model of the offerings and services desired by the business, which incorporates the value provided by the IT Business. The model should express, in a form that profiles the IT Business as an IT Service Provider, and in the style (and with the required attributes) desired by the business. An example of suitable styles is provided by the Commodity, Utility, Partner, and Enabler model.

Outputs

- IT Quality Management Goals (To: A113 A114)

    The goals, specifically related to quality management, which will drive the implementation and operation of quality management approaches for the IT function.

- IT Management System Goals (To: A111 A113 A114)

    Statements of purpose to direct the management system of the IT endeavor, and which reflect and support the overall goals of the Business.

[A113] Establish IT Management Policies

Description

Identifies and creates clearly articulated courses of action and guiding principles that direct policies in shaping and influencing the development, deployment and operation of the IT Management System. These policies mandate behaviors and achievements with regard to IT goals, values, priorities, and key performance measurements.

Controls

- IT Governance Framework (From: A11 A111)

    The guiding principles, the statements of intent, and the objectives that together shape and set the direction for the implementation of IT governance.

- Regulations and Standards

    External official rules (typically driven by government) that call for business compliance, as well as established good practice standards from formal and informal bodies. Includes:

    - Generally accepted accounting principles

    - Legal requirements, such as Sarbanes-Oxley and its COSO (Framework for Financial Management)

- Business Management Policies

    Policies of the Business that have a bearing on the IT function. They include fundamentals such as statements of the core values of the business through explicit policies, which must be followed (for example, in external relations).

- IT Strategy (From: A3 A31 A315)

    A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

Inputs

- IT Quality Management Goals (From: A112)

    The goals, specifically related to quality management, which will drive the implementation and operation of quality management approaches for the IT function.

- IT Management System Goals (From: A112)

    Statements of purpose to direct the management system of the IT endeavor, and which reflect and support the overall goals of the Business.

- Market Analysis (From: A2 A22 A222)

    A document that evaluates the current service requirements, market segmentation, current customer profiles, and the current typical IT service provider scope. The purpose is to discern general trends and directions in the current IT service marketplace.

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- IT Service Provider Value Profile (From: A31 A313)

  A model of the offerings and services desired by the business, which incorporates the value provided by the IT Business. The model should express, in a form that profiles the IT Business as an IT Service Provider, and in the style (and with the required attributes) desired by the business. An example of suitable styles is provided by the Commodity, Utility, Partner, and Enabler model.

- Compliance Plans and Controls (From: A7 A71 A714)

  The authoritative and comprehensive statement of:

  - The items for which compliance is required
  - The means (policies, data specifications, procedures, techniques, tools) to achieve compliance
  - The definition of required compliance metrics and reports by which conformance will be able to be demonstrated for required scrutiny

  It will be the major vehicle for communications and guidance on compliance efforts.

- External Models and Practices

  External information from the industry (from individual enterprises, from academia and from industry watchers) describing models, practices and trends in IT management system topics.

- IT Quality System Reports (From: A14 A144)

  Reports specifically focused on the quality management system used within IT and indicating its conclusions on the effectiveness of, and any need for improvement in, the overall quality management system.

- IT Governance and Management System Evaluation (From: A14 A144)

  An assessment of the overall performance of the IT Management and Governance System against the targets set in the IT Management System Framework and in the IT Governance Model, and an identification of possible process improvement areas.

Outputs

- IT Quality Management Policies (To: A114)

  High-level courses of action and guiding principles for the IT function that are required in order for it to achieve its quality management goals.

- IT Management System Policies (To: A111 A114)

  High-level courses of action and guiding principles for the IT function that are required in order for it to achieve its goals.

[A114] Establish IT Management Practices

Description

Identifies and specifies the ways and means for the operation of the IT Management System that embodies the IT management system policies. Such practices specify the methods employed to implement policies.

At a business level they will normally represent standard ways of operating that need to be followed by the whole company.

Other influences, and in some cases constraints, to the selection and design of IT Management System Practices can come externally, from standard or best practice. Depending on the relationships with suppliers, certain contractual terms can also dictate the practices that must be employed.

This activity will operate in conjunction with the *establish the process framework* activity that is part of each content-specific IT process. As an example, practices will be established within specific disciplines such as the handling of changes and problems, or planning capacity requirements.

Controls

- IT Management System Goals (From: A112)

  Statements of purpose to direct the management system of the IT endeavor, and which reflect and support the overall goals of the Business.

- IT Quality Management Goals (From: A112)

  The goals, specifically related to quality management, which will drive the implementation and operation of quality management approaches for the IT function.

- IT Governance Framework (From: A11 A111)

  The guiding principles, the statements of intent, and the objectives that together shape and set the direction for the implementation of IT governance.

- Regulations and Standards

  External official rules (typically driven by government) that call for business compliance, as well as established good practice standards from formal and informal bodies. Includes:

  - Generally accepted accounting principles
  - Legal requirements, such as Sarbanes-Oxley and its COSO (Framework for Financial Management)

- IT Strategy (From: A3 A31 A315)

  A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

Inputs

- IT Quality Management Policies (From: A113)

  High-level courses of action and guiding principles for the IT function that are required in order for it to achieve its quality management goals.

- IT Management System Policies (From: A113)

  High-level courses of action and guiding principles for the IT function that are required in order for it to achieve its goals.

- IT Governance and Management System Evaluation (From: A14 A144)

  An assessment of the overall performance of the IT Management and Governance System against the targets set in the IT Management System Framework and in the IT Governance Model, and an identification of possible process improvement areas.

- IT Quality System Reports (From: A14 A144)

  Reports specifically focused on the quality management system used within IT and indicating its conclusions on the effectiveness of, and any need for improvement in, the overall quality management system.

- Compliance Plans and Controls (From: A7 A71 A714)

  The authoritative and comprehensive statement of:

  - The items for which compliance is required
  - The means (policies, data specifications, procedures, techniques, tools) to achieve compliance
  - The definition of required compliance metrics and reports by which conformance will be able to be demonstrated for required scrutiny

  It will be the major vehicle for communications and guidance on compliance efforts.

- External Models and Practices

  External information from the industry (from individual enterprises, from academia and from industry watchers) describing models, practices and trends in IT management system topics.

- Business Management Practices

  Practices dictated by the Business that have a bearing on the equivalent items framed for the IT function.

- Underpinning Contracts (From: A8 A82 A823)

  Content of contracts with suppliers, including terms and conditions, service level agreements (SLAs), among others. Covers both the actual contract itself, and information about it that is available as input for supplier evaluation and to other internal processes, such as financial management.

  Information Technology Infrastructure Library (ITIL) defines underpinning contract as "a contract between an IT service provider and a third party. The third party provides goods or services that support delivery of an IT service to a customer. The underpinning contract defines targets and responsibilities that are required to meet agreed service level targets in an SLA."[2]

- IT Research Guidance (From: A3 A32 A325)

  Guidance and recommendations about which trends and innovations should or should not be adopted. In other words, a summary of overall research results.

- Architecture Baselines and Roadmaps (From: A3 A33 A334)

  Provides an agreed, published statement of the required architecture at a moment in time. Includes statements to assist in selection and evaluation of appropriate implementations of specified architecture building blocks.

Outputs

- IT Quality Management Practices

  High-level practices for quality management that have been defined in detail for the IT function so as to implement its quality policies.

- IT Management System Practices (To: A111)

  High-level practices that have been defined in detail for the management system of the IT endeavor. Once these have been put in place (that is, made operational), they represent an implementation of the policies.

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2. ITIL V3 Glossary

[A12] IT Governance and Management System Capabilities

Purpose

The purpose of the IT Governance and Management System Capabilities process is to define, establish, and deploy an ecosystem for governing and managing an IT organization (or undertaking) in order that IT undertakings proceed within the philosophies and controls set by the parent business. It recognizes that this is not a one-off undertaking, but will be exercised at any time to create capability adjustments both small and large-scale.

Outcomes

As a result of the successful implementation of this process:

- The desired scope for governance is established over a defined set of key decisions, with clear assignment of decision rights and accountability to appropriate organization units and roles.
- A management system that is consistent with the direction of information technology and with the enterprise as a whole, and is in control of all IT activities.
- The management system is both effective and efficient, ensuring the integrated and coordinated workings of IT.
- A set of coherent, integrated capabilities that enable and empower IT activities is established

Scope

This process uses a simple model of a management system to illustrate the activities, and their key inputs and outputs, which will start with the directional frameworks and build a functioning management ecosystem. Many other models of a management system exist; the one used here can be summarized as follows:

- Governance aspects dictate the overall shape of the capabilities
- There are four main components in a management system: process, organization, (management) information, tools
- A management system is made effective by equipping it with measurement and control capabilities, built from aspects of all the components listed in item two

Includes

- ◆ Defining information technology management system requirements and key indicators
- ◆ Building capabilities to realize the specified management models
- ◆ Creating instruments that conform to policies and standards, such as:
  - Methods
  - Measurement and control capabilities
  - Quality management system
  - Continual improvement techniques
- ◆ Organization design in relation to IT, such as:
  - Structure, behaviors, enablers
  - Roles and responsibilities definitions
  - Process structure

    – Implementation or change transition plans, including schedule

Excludes

- ◆ Development of IT solutions for management system needs these compete for resources alongside other needs (Portfolio Management)

Controls

- ■ IT Quality Management Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for quality management across the overall IT function.

- ■ IT Management System Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for managing the overall IT function.

- ■ IT Governance Framework (From: A11 A111)

  The guiding principles, the statements of intent, and the objectives that together shape and set the direction for the implementation of IT governance.

- ■ IT Strategy (From: A3 A31 A315)

  A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

- ■ IT Budget (From: A8 A81 A813)

  The planned IT funding broken down in relevant ways, such as activities and milestones per period, to reflect the contents of the IT plan.

Inputs

- ■ External Models and Practices

  External information from the industry (from individual enterprises, from academia and from industry watchers) describing models, practices and trends in IT management system topics.

- ■ Architecture Baselines and Roadmaps (From: A3 A33 A334)

  Provides an agreed, published statement of the required architecture at a moment in time. Includes statements to assist in selection and evaluation of appropriate implementations of specified architecture building blocks.

- ■ IT Research Guidance (From: A3 A32 A325)

  Guidance and recommendations about which trends and innovations should or should not be adopted. In other words, a summary of overall research results.

- ■ IT Quality System Reports (From: A14 A144)

  Reports specifically focused on the quality management system used within IT and indicating its conclusions on the effectiveness of, and any need for improvement in, the overall quality management system.

- ■ IT Governance and Management System Evaluation (From: A14 A144)

  An assessment of the overall performance of the IT Management and Governance System against the targets set in the IT Management System Framework and in the IT Governance Model, and an identification of possible process improvement areas.

- IT Governance and Management Audit Results (From: A14 A143)

  The findings, conclusions and recommendations of any audit (formal or informal, internal or external) carried out into any or all of the IT Governance and Management System.

- IT Portfolio (From: A3 A36 A365)

  A central repository containing all the IT resources and assets, projects, and services controlled and managed by the IT organization, departments, and functions.

Outputs

- IT Governance Capabilities (To: A122 A123 A124 A125 A126 A13 A131 A132 A133 A14 A141 A142 A143 A144)

  The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

  - Governance structures and charters
  - Decision rights and their assignment to roles
  - Decision-making processes and procedures for a specified list of decisions
  - Metrics and indicators for the aspects of IT management under governance

- IT Management System Capabilities (To: A13 A131 A132 A133 A14 A141 A142 A143 A144)

  The foundational constituents of the IT Management Ecosystem. The elements explicitly identified are:

  - Process
  - Organization
  - Management information
  - Tools and systems
  - Measurement and control instruments

- IT Quality System Capabilities (To: A13 A131 A132 A133 A14 A141 A142 A143 A144)

  The foundational components for the operation of the IT quality management system. The elements explicitly identified here are:

  - Process
  - Organization
  - Information
  - Tools, mechanisms and systems

Activities

This process is composed of these activities:

- A121 Establish IT Governance Capabilities
- A122 Establish IT Process Capabilities
- A123 Establish IT Organizational Capabilities
- A124 Establish IT Management Information Capabilities
- A125 Establish IT Operational Environment Capabilities
- A126 Establish IT Measurement and Control Capabilities

PROJECT:	PRM-IT V3	MODEL COMMENTS:
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NODE: **A12** TITLE: **IT Governance and Management System Capabilities** CURRENT PAGE:

Figure 3. A12 IT Governance and Management System Capabilities

[A121] Establish IT Governance Capabilities

Description

Builds the decision making and accountability mechanisms and capabilities. It establishes the preferred behaviors to support those items which ensure the desired level of governance is achieved. The activity will work on aspects such as:

- Define governance structures and charters
- Define roles and responsibilities within the structures
- Define the processes to be followed within the structures
- Define the metrics and decision making mechanisms for governance
- Define governance tools, such as models, dashboards, and standards

Controls

- IT Governance Framework (From: A11 A111)

  The guiding principles, the statements of intent, and the objectives that together shape and set the direction for the implementation of IT governance.

- IT Quality Management Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for quality management across the overall IT function.

- IT Strategy (From: A3 A31 A315)

  A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

- IT Budget (From: A8 A81 A813)

  The planned IT funding broken down in relevant ways, such as activities and milestones per period, to reflect the contents of the IT plan.

Inputs

- IT Governance and Management Audit Results (From: A14 A143)

  The findings, conclusions and recommendations of any audit (formal or informal, internal or external) carried out into any or all of the IT Governance and Management System.

- IT Governance and Management System Evaluation (From: A14 A144)

  An assessment of the overall performance of the IT Management and Governance System against the targets set in the IT Management System Framework and in the IT Governance Model, and an identification of possible process improvement areas.

- External Models and Practices

  External information from the industry (from individual enterprises, from academia and from industry watchers) describing models, practices and trends in IT management system topics.

- Architecture Baselines and Roadmaps (From: A3 A33 A334)

  Provides an agreed, published statement of the required architecture at a moment in time. Includes statements to assist in selection and evaluation of appropriate implementations of specified architecture building blocks.

- IT Operational Environment Capabilities (From: A125)

  The mechanisms (for example: methods, systems, procedures) which, when implemented in the context provided by the management system process, organization and information, provide the operational capabilities for the IT Management System.

- IT Management Information Capabilities (From: A124)

  The informational aspects of the capabilities the IT function will be managed. These include the specification of the entities, attributes, and relationships of IT management information, both for the fundamental resources (such as hardware) and for the control information, like process measurements.

- IT Organizational Capabilities (From: A123)

  The structure, behaviors, and enablers for the organization dimension of the IT management system. Includes:

  - IT Roles and Responsibilities
  - IT Organization Unit Structures and Relationships
  - Motivational schemes, such as incentives
  - Implementation of enablers (such as Communities of Practice)

- IT Process Capabilities (From: A122)

  The models and further elaborations of the processes within IT and of their interactions with processes operated by stakeholders. The development of the capabilities progresses through several levels of elaboration, from specification and reference to operational and finally to implemented. They include:

  - Activities
    - Decision pointsWorkflows, including
    - Policy impacts
    - Sequencing
    - Parallelization
  - Role mapping (to activities)

Outputs

- IT Governance Capabilities (To: A122 A123 A124 A125 A126 A13 A131 132 A133 A14 A141 A142 A143 A144)

  The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

  - Governance structures and charters
  - Decision rights and their assignment to roles
  - Decision-making processes and procedures for a specified list of decisions
  - Metrics and indicators for the aspects of IT management under governance

[A122] Establish IT Process Capabilities

Description

Oversees and controls the creation and setup of the processes needed within the IT endeavor. Works in conjunction with the *establish the framework* activity of each individual process, taking a cross-IT view.

Controls

- IT Governance Capabilities (From: A12 A121)

  The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

  - Governance structures and charters
  - Decision rights and their assignment to roles
  - Decision-making processes and procedures for a specified list of decisions
  - Metrics and indicators for the aspects of IT management under governance

- IT Quality Management Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for quality management across the overall IT function.

- IT Management System Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for managing the overall IT function.

- IT Strategy (From: A3 A31 A315)

  A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

Inputs

- Architecture Baselines and Roadmaps (From: A3 A33 A334)

  Provides an agreed, published statement of the required architecture at a moment in time. Includes statements to assist in selection and evaluation of appropriate implementations of specified architecture building blocks.

- IT Governance and Management System Evaluation (From: A14 A144)

  An assessment of the overall performance of the IT Management and Governance System against the targets set in the IT Management System Framework and in the IT Governance Model, and an identification of possible process improvement areas.

- External Models and Practices

  External information from the industry (from individual enterprises, from academia and from industry watchers) describing models, practices and trends in IT management system topics.

- IT Portfolio (From: A3 A36 A365)

  A central repository containing all the IT resources and assets, projects, and services controlled and managed by the IT organization, departments, and functions.

■ IT Quality System Reports (From: A14 A144)

Reports specifically focused on the quality management system used within IT and indicating its conclusions on the effectiveness of, and any need for improvement in, the overall quality management system.

■ IT Research Guidance (From: A3 A32 A325)

Guidance and recommendations about which trends and innovations should or should not be adopted. In other words, a summary of overall research results.

■ IT Operational Environment Capabilities (From: A125)

The mechanisms (for example: methods, systems, procedures) which, when implemented in the context provided by the management system process, organization and information, provide the operational capabilities for the IT Management System.

■ IT Management Information Capabilities (From: A124)

The informational aspects of the capabilities the IT function will be managed. These include the specification of the entities, attributes, and relationships of IT management information, both for the fundamental resources (such as hardware) and for the control information, like process measurements.

■ IT Organizational Capabilities (From: A123)

The structure, behaviors, and enablers for the organization dimension of the IT management system. Includes:

• IT Roles and Responsibilities

• IT Organization Unit Structures and Relationships

• Motivational schemes, such as incentives

• Implementation of enablers (such as Communities of Practice)

Outputs

■ IT Process Capabilities (To: A121 A123 A124 A125 A126)

The models and further elaborations of the processes within IT and of their interactions with processes operated by stakeholders. The development of the capabilities progresses through several levels of elaboration, from specification and reference to operational and finally to implemented. They include:

• Activities

• Workflows, including

  ◆ Decision points

  ◆ Policy impacts

  ◆ Sequencing

  ◆ Parallelization

• Role mapping (to activities)

[A123] Establish IT Organizational Capabilities

Description

Establish the basic structure covering roles, responsibilities, accountability, processes, among others, that make up an effective organization. Works in conjunction with the *establish the framework* activity of each individual process, taking a cross-IT view.

Controls

- IT Governance Capabilities (From: A12 A121)

  The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

  - Governance structures and charters
  - Decision rights and their assignment to roles
  - Decision-making processes and procedures for a specified list of decisions
  - Metrics and indicators for the aspects of IT management under governance

- IT Quality Management Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for quality management across the overall IT function.

- IT Management System Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for managing the overall IT function.

- IT Strategy (From: A3 A31 A315)

  A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

- IT Budget (From: A8 A81 A813)

  The planned IT funding broken down in relevant ways, such as activities and milestones per period, to reflect the contents of the IT plan.

Inputs

- IT Process Capabilities (From: A122)

  The models and further elaborations of the processes within IT and of their interactions with processes operated by stakeholders. The development of the capabilities progresses through several levels of elaboration, from specification and reference to operational and finally to implemented. They include:

  - Activities
  - Workflows, including
    - Decision points
    - Policy impacts
    - Sequencing
    - Parallelization
  - Role mapping (to activities)

- Architecture Baselines and Roadmaps (From: A3 A33 A334)

  Provides an agreed, published statement of the required architecture at a moment in time. Includes statements to assist in selection and evaluation of appropriate implementations of specified architecture building blocks.

- IT Governance and Management System Evaluation (From: A14 A144)

  An assessment of the overall performance of the IT Management and Governance System against the targets set in the IT Management System Framework and in the IT Governance Model, and an identification of possible process improvement areas.

- External Models and Practices

  External information from the industry (from individual enterprises, from academia and from industry watchers) describing models, practices and trends in IT management system topics.

- IT Research Guidance (From: A3 A32 A325)

  Guidance and recommendations about which trends and innovations should or should not be adopted. In other words, a summary of overall research results.

- IT Portfolio (From: A3 A36 A365)

  A central repository containing all the IT resources and assets, projects, and services controlled and managed by the IT organization, departments, and functions.

- IT Quality System Reports (From: A14 A144)

  Reports specifically focused on the quality management system used within IT and indicating its conclusions on the effectiveness of, and any need for improvement in, the overall quality management system.

- IT Operational Environment Capabilities (From: A125)

  The mechanisms (for example: methods, systems, procedures) which, when implemented in the context provided by the management system process, organization and information, provide the operational capabilities for the IT Management System.

- IT Management Information Capabilities (From: A124)

  The informational aspects of the capabilities the IT function will be managed. These include the specification of the entities, attributes, and relationships of IT management information, both for the fundamental resources (such as hardware) and for the control information, like process measurements.

Outputs

- IT Organizational Capabilities (To: A121 A122 A124 A125 A126)

  The structure, behaviors, and enablers for the organization dimension of the IT management system. Includes:

  - IT Roles and Responsibilities
  - IT Organization Unit Structures and Relationships
  - Motivational schemes, such as incentives
  - Implementation of enablers (such as Communities of Practice)

[A124] Establish IT Management Information Capabilities

Description

Creates and maintains the informational aspect of the capability that is required for the management of the IT function. Works in conjunction with the *establish the framework* activity of each individual process, taking a cross-IT view. It considers aspects such as:

- Information required for the management system to operate
- Ownership and responsibilities for such information
- Data relationships, schema, and other models
- Data currency and life cycle

Controls

- IT Governance Capabilities (From: A12 A121)

  The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

  - Governance structures and charters

  - Decision rights and their assignment to roles

  - Decision-making processes and procedures for a specified list of decisions

  - Metrics and indicators for the aspects of IT management under governance

- IT Management System Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for managing the overall IT function.

- IT Quality Management Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for quality management across the overall IT function.

- IT Strategy (From: A3 A31 A315)

  A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

Inputs

- IT Organizational Capabilities (From: A123)

  The structure, behaviors, and enablers for the organization dimension of the IT management system. Includes:

  - IT Roles and Responsibilities

  - IT Organization Unit Structures and Relationships

  - Motivational schemes, such as incentives

  - Implementation of enablers (such as Communities of Practice)

- IT Process Capabilities (From: A122)

  The models and further elaborations of the processes within IT and of their interactions with processes operated by stakeholders. The development of the capabilities progresses

through several levels of elaboration, from specification and reference to operational and finally to implemented. They include:

- ◆ Activities

- ◆ Workflows, including
    - Decision points
    - Policy impacts
    - Sequencing
    - Parallelization

- ◆ Role mapping (to activities)

- IT Research Guidance (From: A3 A32 A325)

    Guidance and recommendations about which trends and innovations should or should not be adopted. In other words, a summary of overall research results.

- Architecture Baselines and Roadmaps (From: A3 A33 A334)

    Provides an agreed, published statement of the required architecture at a moment in time. Includes statements to assist in selection and evaluation of appropriate implementations of specified architecture building blocks.

- IT Governance and Management System Evaluation (From: A14 A144)

    An assessment of the overall performance of the IT Management and Governance System against the targets set in the IT Management System Framework and in the IT Governance Model, and an identification of possible process improvement areas.

- External Models and Practices

    External information from the industry (from individual enterprises, from academia and from industry watchers) describing models, practices and trends in IT management system topics.

- IT Portfolio (From: A3 A36 A365)

    A central repository containing all the IT resources and assets, projects, and services controlled and managed by the IT organization, departments, and functions.

- IT Quality System Reports (From: A14 A144)

    Reports specifically focused on the quality management system used within IT and indicating its conclusions on the effectiveness of, and any need for improvement in, the overall quality management system.

- IT Operational Environment Capabilities (From: A125)

    The mechanisms (for example: methods, systems, procedures) which, when implemented in the context provided by the management system process, organization and information, provide the operational capabilities for the IT Management System.

Outputs

- IT Management Information Capabilities (To: A121 A122 A123 A125 A126)

    The informational aspects of the capabilities the IT function will be managed. These include the specification of the entities, attributes, and relationships of IT management information, both for the fundamental resources (such as hardware) and for the control information, like process measurements.

[A125] Establish IT Operational Environment Capabilities

Description

Oversees and controls the creation and maintenance of the requisite capabilities (systems, tools, mechanisms) for the delivery of the services of the IT function. The capabilities bring together the process, organization, and information elements into practical, usable abilities and mechanisms.

Works in conjunction with the *establish the framework* activity of each individual process, taking a cross-IT view. Examples of such capabilities would include:

- Application and infrastructure development methods
- The means by which management communications are disseminated and acted upon.

Controls

- IT Governance Capabilities (From: A12 A121)

  The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

  - Governance structures and charters
  - Decision rights and their assignment to roles
  - Decision-making processes and procedures for a specified list of decisions
  - Metrics and indicators for the aspects of IT management under governance

- IT Strategy (From: A3 A31 A315)

  A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

- IT Management System Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for managing the overall IT function.

- IT Quality Management Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for quality management across the overall IT function.

- IT Budget (From: A8 A81 A813)

  The planned IT funding broken down in relevant ways, such as activities and milestones per period, to reflect the contents of the IT plan.

Inputs

- IT Management Information Capabilities (From: A124)

  The informational aspects of the capabilities the IT function will be managed. These include the specification of the entities, attributes, and relationships of IT management information, both for the fundamental resources (such as hardware) and for the control information, like process measurements.

- IT Organizational Capabilities (From: A123)

  The structure, behaviors, and enablers for the organization dimension of the IT management system. Includes:

  - IT Roles and Responsibilities

- • IT Organization Unit Structures and Relationships
- • Motivational schemes, such as incentives
- • Implementation of enablers (such as Communities of Practice)
- ■ IT Process Capabilities (From: A122)

  The models and further elaborations of the processes within IT and of their interactions with processes operated by stakeholders. The development of the capabilities progresses through several levels of elaboration, from specification and reference to operational and finally to implemented. They include:

  - • Activities
  - • Workflows, including
    - ◆ Decision points
    - ◆ Policy impacts
    - ◆ Sequencing
    - ◆ Parallelization
  - • Role mapping (to activities)

- ■ IT Research Guidance (From: A3 A32 A325)

  Guidance and recommendations about which trends and innovations should or should not be adopted. In other words, a summary of overall research results.

- ■ Architecture Baselines and Roadmaps (From: A3 A33 A334)

  Provides an agreed, published statement of the required architecture at a moment in time. Includes statements to assist in selection and evaluation of appropriate implementations of specified architecture building blocks.

- ■ IT Governance and Management System Evaluation (From: A14 A144)

  An assessment of the overall performance of the IT Management and Governance System against the targets set in the IT Management System Framework and in the IT Governance Model, and an identification of possible process improvement areas.

- ■ External Models and Practices

  External information from the industry (from individual enterprises, from academia and from industry watchers) describing models, practices and trends in IT management system topics.

- ■ IT Portfolio (From: A3 A36 A365)

  A central repository containing all the IT resources and assets, projects, and services controlled and managed by the IT organization, departments, and functions.

- ■ IT Quality System Reports (From: A14 A144)

  Reports specifically focused on the quality management system used within IT and indicating its conclusions on the effectiveness of, and any need for improvement in, the overall quality management system.

Outputs

- ■ IT Operational Environment Capabilities (To: A121 A122 A123 A124 A126)

  The mechanisms (for example: methods, systems, procedures) which, when implemented in the context provided by the management system process, organization and information, provide the operational capabilities for the IT Management System.

[A126] Establish IT Measurement and Control Capabilities

Description

Provides the capabilities required to measure and control the key aspects of the IT function's operations to manage them effectively. Works in conjunction with the *establish the framework* activity of each individual process, taking a cross-IT view. In addition, it provides a pattern (template) for quality management that is to be embedded within each process.

Controls

- IT Management System Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for managing the overall IT function.

- IT Quality Management Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for quality management across the overall IT function.

Inputs

- IT Governance Capabilities (From: A12 A121)

  The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

  - Governance structures and charters
  - Decision rights and their assignment to roles
  - Decision-making processes and procedures for a specified list of decisions
  - Metrics and indicators for the aspects of IT management under governance

- IT Operational Environment Capabilities (From: A125)

  The mechanisms (for example: methods, systems, procedures) which, when implemented in the context provided by the management system process, organization and information, provide the operational capabilities for the IT Management System.

- IT Management Information Capabilities (From: A124)

  The informational aspects of the capabilities the IT function will be managed. These include the specification of the entities, attributes, and relationships of IT management information, both for the fundamental resources (such as hardware) and for the control information, like process measurements.

- IT Organizational Capabilities (From: A123)

  The structure, behaviors, and enablers for the organization dimension of the IT management system. Includes:

  - IT Roles and Responsibilities
  - IT Organization Unit Structures and Relationships
  - Motivational schemes, such as incentives
  - Implementation of enablers (such as Communities of Practice)

- IT Process Capabilities (From: A122)

  The models and further elaborations of the processes within IT and of their interactions with processes operated by stakeholders. The development of the capabilities progresses through several levels of elaboration, from specification and reference to operational and finally to implemented. They include:

- Activities
- Workflows, including
  - Decision points
  - Policy impacts
  - Sequencing
  - Parallelization
- Role mapping (to activities)

■ IT Research Guidance (From: A3 A32 A325)

Guidance and recommendations about which trends and innovations should or should not be adopted. In other words, a summary of overall research results.

■ IT Governance and Management System Evaluation (From: A14 A144)

An assessment of the overall performance of the IT Management and Governance System against the targets set in the IT Management System Framework and in the IT Governance Model, and an identification of possible process improvement areas.

■ External Models and Practices

External information from the industry (from individual enterprises, from academia and from industry watchers) describing models, practices and trends in IT management system topics.

■ IT Portfolio (From: A3 A36 A365)

A central repository containing all the IT resources and assets, projects, and services controlled and managed by the IT organization, departments, and functions.

■ IT Quality System Reports (From: A14 A144)

Reports specifically focused on the quality management system used within IT and indicating its conclusions on the effectiveness of, and any need for improvement in, the overall quality management system.

Outputs

■ IT Measurement and Control Capabilities

Capabilities to provide the appropriate measurements and controls to the IT function's undertakings. Examples include:

- Adecision right (manager approval step in a process)
- Abusiness event log
- Amonitor on configuration parameter
- Arecord of employee training

■ IT Quality System Capabilities (To: A13 A131 A132 A133 A14 A141 A142 A143 A144)

The foundational components for the operation of the IT quality management system. The elements explicitly identified here are:

- Process
- Organization
- Information
- Tools, mechanisms, and systems

[A13] IT Governance and Management System Operation

Purpose

The purpose of the IT Governance and Management System Operation process is to operate and run the management system to satisfy the overall Business' needs.

Outcomes

As a result of the successful implementation of this process:

- The balance of strategic, tactical, and operational effectiveness of IT is optimized
- Informed and effective decisions are made
- The workings of IT are integrated and coordinated
- Conditions are established to best ensure that key measurements can be and are met

Scope

This process does not direct what IT activities should be performed to reflect the priorities of the Business (see A3 Direction category of processes). It does, however, oversee monitoring and control of the collected IT projects and processes, and makes corrective adjustments where needed.

Includes

- Measurement and control, such as:
  - Issues management
  - CIO dashboard
  - Balanced scorecard
- Steering IT workings within the tolerances set by Governance
- Regulating the execution of IT processes

Excludes

- Priorities and decisions on the business results of IT (a business responsibility, with participation from the processes in the Direction category)
- Portfolio Management
- Regulating IT services and solutions (processes in the Direction category)

Controls

- IT Portfolio (From: A3 A36 A365)

  A central repository containing all the IT resources and assets, projects, and services controlled and managed by the IT organization, departments, and functions.

- IT Quality System Capabilities (From: A12 A126)

  The foundational components for the operation of the IT quality management system. The elements explicitly identified here are:

  - Process
  - Organization
  - Information
  - Tools, mechanisms and systems

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■ IT Management System Capabilities (From: A12)

The foundational constituents of the IT Management Ecosystem. The elements explicitly identified are:

- Process
- Organization
- Management information
- Tools and systems
- Measurement and control instruments

■ IT Governance Capabilities (From: A12 A121)

The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

- Governance structures and charters
- Decision rights and their assignment to roles
- Decision-making processes and procedures for a specified list of decisions
- Metrics and indicators for the aspects of IT management under governance

■ IT Management System Framework (From: A11)

The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for managing the overall IT function.

■ IT Budget (From: A8 A81 A813)

The planned IT funding broken down in relevant ways, such as activities and milestones per period, to reflect the contents of the IT plan.

■ IT Strategy (From: A3 A31 A315)

A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

Inputs

■ Operational Measures and Results

Any measure or result from any IT process that might be relevant to the measurement, and control activities of the overall IT management system.

■ Program and Project Reports (From: A37)

The body of information ranging from formal, regular and summarized, through informal, ad hoc, and detailed about any aspect of program and project status, and plans. It is available to any process with a need to know.

■ Service Achievement Reports (From: A24 A244)

One or more reports about how well the service levels have been achieved and which compare IT's actual service level results achieved against the service level standards and any specific service level targets negotiated with customers. The reports can include details of service impacts both directly measured and an assessment of business impact. Some sections will be for customer distribution and others can be for service provider receipt only.

■ IT Financial Reports (From: A8 A81 A813 A814 A815)

All reports on financial data of IT for different stakeholders. Covers a wide range of reports from outlining projected costs through after-the-fact financial analyses.

■ Customer Satisfaction Results and Trends (From: A27 A276)

A report summarizing current customer satisfaction results and historical data. Can be used to identify trends.

Outputs

■ IT Measurements (To: A133)

The measurements and key indicators produced by combining measures and results from individual sources to create an IT-wide view of IT activities. Individual processes can access relevant measurements as part of their normal operation.

■ IT Management Action Items

The invoked actions designed to keep the operation of the overall IT management system within established tolerances, or in exceptional circumstances, to return it to being within those tolerances. Action items can include anything from directives and instructions through general guidance and suggestions.

■ IT Management System Reports (To: A14 A141)

The results and interpretations of the IT Management System outcomes, including key performance indicators.

■ IT Control Results (To: A131 A133 A14 A141)

An indication of the direct outcomes, and any associated consequences that result from the application of any IT management controls.

Activities

This process is composed of these activities:

■ A131 Produce IT Measurements
■ A132 Operate IT Governance and Management System Controls
■ A133 Monitor, Analyze and Report IT Outcomes

PROJECT:	PRM-IT V3	MODEL COMMENTS:	VERSION:	3.0	PAGE COMMENTS:	MODELLER:	CFB/JRM	CONTEXT:
SECURITY:	IBM Intellectual Property	IBM Process Reference Model for IT						
FILENAME:	PRMITV30.IDD							
MODIFY DATE:	14/01/08 07:45 PM	© Copyright IBM Corporation, 2008, All Rights Reserved						

IT Management System Capabilities C3
IT Quality System Capabilities C2
IT Governance Capabilities C4
IT Portfolio C1
IT Budget C6
IT Management System Framework C5
IT Strategy C7

I1 Operational Measures and Results
I3 Service Achievement Reports/D4
I2 Program and Project Reports/D2
I4 IT Financial Reports
I5 Customer Satisfaction Results and Trends/D1

Produce IT Measurements A131

IT Management Control Items

Operate IT Governance and Management System Controls A132

Monitor, Analyze and Report IT Outcomes A133

O1 IT Measurements
O2 IT Management Action Items
O4 IT Control Results
O3 IT Management System Reports

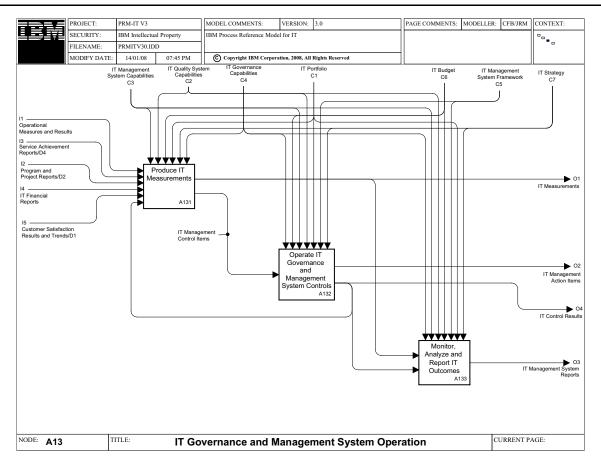| NODE:	**A13**	TITLE:	**IT Governance and Management System Operation**	CURRENT PAGE:

Figure 4. A13 IT Governance and Management System Operation

[A131] Produce IT Measurements

Description

Gathers, collates, and assembles the measurements required by the IT function for the effective operation of the IT Management System. Working on operational data from individual processes, it combines these and creates IT-wide measurements. Measurements triggering action or warning tolerances are flagged.

Controls

- IT Management System Capabilities (From: A12)

  The foundational constituents of the IT Management Ecosystem. The elements explicitly identified are:

  - Process
  - Organization
  - Management information
  - Tools and systems
  - Measurement and control instruments

- IT Quality System Capabilities (From: A12 A126)

  The foundational components for the operation of the IT quality management system. The elements explicitly identified here are:

  - Process
  - Organization
  - Information
  - Tools, mechanisms and systems

- IT Budget (From: A8 A81 A813)

  The planned IT funding broken down in relevant ways, such as activities and milestones per period, to reflect the contents of the IT plan.

- IT Portfolio (From: A3 A36 A365)

  A central repository containing all the IT resources and assets, projects, and services controlled and managed by the IT organization, departments, and functions.

- IT Strategy (From: A3 A31 A315)

  A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

- IT Governance Capabilities (From: A12 A121)

  The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

  - Governance structures and charters
  - Decision rights and their assignment to roles
  - Decision-making processes and procedures for a specified list of decisions
  - Metrics and indicators for the aspects of IT management under governance

Inputs

- Operational Measures and Results

  Any measure or result from any IT process that might be relevant to the measurement, and control activities of the overall IT management system.

- Service Achievement Reports (From: A24 A244)

  One or more reports about how well the service levels have been achieved and which compare IT's actual service level results achieved against the service level standards and any specific service level targets negotiated with customers. The reports can include details of service impacts — both directly measured and an assessment of business impact. Some sections will be for customer distribution and others can be for service provider receipt only.

- Program and Project Reports (From: A37)

  The body of information ranging from formal, regular and summarized, through informal, ad hoc, and detailed about any aspect of program and project status, and plans. It is available to any process with a need to know.

- IT Financial Reports (From: A8 A81 A813 A814 A815)

  All reports on financial data of IT for different stakeholders. Covers a wide range of reports from outlining projected costs through after-the-fact financial analyses.

- Customer Satisfaction Results and Trends (From: A27 A276)

  A report summarizing current customer satisfaction results and historical data. Can be used to identify trends.

- IT Control Results (From: A13 A132)

  An indication of the direct outcomes, and any associated consequences that result from the application of any IT management controls.

Outputs

- IT Measurements (To: A133)

  The measurements and key indicators produced by combining measures and results from individual sources to create an IT-wide view of IT activities. Individual processes can access relevant measurements as part of their normal operation.

- IT Management Control Items (To: A132)

  The identification of IT management system measurements that are approaching or exceeding established limits which indicate a potential need for overall management system intervention.

[A132] Operate IT Governance and Management System Controls

Description

This activity monitors for conditions that could potentially require overall management attention. In such cases, it would carry out the identification (analysis) and formulation (planning) of necessary control actions with the objective to correct out-of-line situations. Approaches such as issue management might be used to formalize these efforts, applying defined control actions to the activities within the IT function. Ultimately improving performance and meeting the needs of the overall IT undertaking.

Controls

- IT Governance Capabilities (From: A12 A121)

  The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

  - Governance structures and charters
  - Decision rights and their assignment to roles
  - Decision-making processes and procedures for a specified list of decisions

- Metrics and indicators for the aspects of IT management under governance
- IT Budget (From: A8 A81 A813)

  The planned IT funding broken down in relevant ways, such as activities and milestones per period, to reflect the contents of the IT plan.
- IT Management System Capabilities (From: A12)

  The foundational constituents of the IT Management Ecosystem. The elements explicitly identified are:
  - Process
  - Organization
  - Management information
  - Tools and systems
  - Measurement and control instruments
- IT Quality System Capabilities (From: A12 A126)

  The foundational components for the operation of the IT quality management system. The elements explicitly identified here are:
  - Process
  - Organization
  - Information
  - Tools, mechanisms and systems
- IT Portfolio (From: A3 A36 A365)

  A central repository containing all the IT resources and assets, projects, and services controlled and managed by the IT organization, departments, and functions.
- IT Management System Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for managing the overall IT function.
- IT Strategy (From: A3 A31 A315)

  A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

Inputs

- IT Management Control Items (From: A131)

  The identification of IT management system measurements that are approaching or exceeding established limits which indicate a potential need for overall management system intervention.

Outputs

- IT Management Action Items

  The invoked actions designed to keep the operation of the overall IT management system within established tolerances, or in exceptional circumstances, to return it to being within those tolerances. Action items can include anything from directives and instructions through general guidance and suggestions.
- IT Control Results (To: A131 A133 A14 A141)

  An indication of the direct outcomes, and any associated consequences that result from the application of any IT management controls.

[A133] Monitor, Analyze and Report IT Outcomes

Description

This activity analyzes the results in the IT management system measurements and produces required reports, both regularly and as necessary on an exception or request basis. These reports provide an overall view of the workings of the IT function.

Controls

- IT Governance Capabilities (From: A12 A121)

    The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

    - Governance structures and charters
    - Decision rights and their assignment to roles
    - Decision-making processes and procedures for a specified list of decisions
    - Metrics and indicators for the aspects of IT management under governance

- IT Management System Capabilities (From: A12)

    The foundational constituents of the IT Management Ecosystem. The elements explicitly identified are:

    - Process
    - Organization
    - Management information
    - Tools and systems
    - Measurement and control instruments

- IT Quality System Capabilities (From: A12 A126)

    The foundational components for the operation of the IT quality management system. The elements explicitly identified here are:

    - Process
    - Organization
    - Information
    - Tools, mechanisms and systems

- IT Budget (From: A8 A81 A813)

    The planned IT funding broken down in relevant ways, such as activities and milestones per period, to reflect the contents of the IT plan.

- IT Management System Framework (From: A11)

    The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for managing the overall IT function.

- IT Portfolio (From: A3 A36 A365)

    A central repository containing all the IT resources and assets, projects, and services controlled and managed by the IT organization, departments, and functions.

- IT Strategy (From: A3 A31 A315)

    A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

Inputs

- IT Measurements (From: A13 A131)

  The measurements and key indicators produced by combining measures and results from individual sources to create an IT-wide view of IT activities. Individual processes can access relevant measurements as part of their normal operation.

- IT Control Results (From: A13 A132)

  An indication of the direct outcomes, and any associated consequences that result from the application of any IT management controls.

Outputs

- IT Management System Reports (To: A14 A141)

  The results and interpretations of the IT Management System outcomes, including key performance indicators.

[A14] IT Governance and Management System Evaluation

Purpose

The purpose of the IT Governance and Management System Evaluation process is to review and assess the execution and implementation of the IT governance and management system, and to identify potential improvements to it.

Outcomes

As a result of the successful implementation of this process:

- The overall health of the IT governance and management system is visible to the key stakeholders of the IT endeavor
- Key measurements are effective in guiding the realization of IT goals
- Potential problems with the management system are identified and resolved before their impact results in other problems (for example, customer dissatisfaction)
- There is a continual focus on the identification of improvement opportunities to the IT governance and management system

Scope

This process monitors the measurements from all IT processes in order to ensure that the system is functioning in the manner intended.

It provides the ability to audit all (or any part of) the IT governance and management system.

Includes

- Validating the adherence to management system rules
- Identifying continuous improvement actions
- Quality management assessment
- Assessing the execution of IT processes

Excludes

- Making changes to the IT Management ecosystem (IT Governance and Management System Framework, IT Governance and Management System Capabilities, depending on the scale of change)

Controls

- IT Portfolio (From: A3 A36 A365)

  A central repository containing all the IT resources and assets, projects, and services controlled and managed by the IT organization, departments, and functions.
- IT Quality System Capabilities (From: A12 A126)

  The foundational components for the operation of the IT quality management system. The elements explicitly identified here are:
  - Process
  - Organization
  - Information
  - Tools, mechanisms and systems

■ IT Management System Capabilities (From: A12)

The foundational constituents of the IT Management Ecosystem. The elements explicitly identified are:

- Process
- Organization
- Management information
- Tools and systems
- Measurement and control instruments

■ IT Governance Capabilities (From: A12 A121)

The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

- Governance structures and charters
- Decision rights and their assignment to roles
- Decision-making processes and procedures for a specified list of decisions
- Metrics and indicators for the aspects of IT management under governance

■ IT Management System Framework (From: A11)

The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for managing the overall IT function.

■ IT Governance Framework (From: A11 A111)

The guiding principles, the statements of intent, and the objectives that together shape and set the direction for the implementation of IT governance.

■ IT Budget (From: A8 A81 A813)

The planned IT funding broken down in relevant ways, such as activities and milestones per period, to reflect the contents of the IT plan.

■ IT Strategy (From: A3 A31 A315)

A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

■ Business Management System

The management system in place to govern the workings of the overall business.

Inputs

■ External Benchmarks

A representation of the effectiveness, efficiency or other metric of the workings of a survey or other sample group of businesses or functions within them.

■ IT Management System Reports (From: A13 A133)

The results and interpretations of the IT Management System outcomes, including key performance indicators.

■ IT Control Results (From: A13 A132)

An indication of the direct outcomes, and any associated consequences that result from the application of any IT management controls.

■ IT Financial Reports (From: A8 A81 A813 A814 A815)

All reports on financial data of IT for different stakeholders. Covers a wide range of reports from outlining projected costs through after-the-fact financial analyses.

- Service Achievement Reports (From: A24 A244)

  One or more reports about how well the service levels have been achieved and which compare IT's actual service level results achieved against the service level standards and any specific service level targets negotiated with customers. The reports can include details of service impacts — both directly measured and an assessment of business impact. Some sections will be for customer distribution and others can be for service provider receipt only.

- Business Evaluation Feedback

  Any feedback, formal or informal, from non-IT parts of the overall business which is relevant to evaluating the performance of the IT management system.

- Individual Process Evaluations

  A collection of metrics which describe the effectiveness and efficiency of an individual process.

- Customer Satisfaction Results and Trends (From: A27 A276)

  A report summarizing current customer satisfaction results and historical data. Can be used to identify trends.

Outputs

- IT Quality System Reports (To: A11 A113 A114 A12 A122 A123 A124 A125 A126)

  Reports specifically focused on the quality management system used within IT and indicating its conclusions on the effectiveness of, and any need for improvement in, the overall quality management system.

- IT Governance and Management System Evaluation (To: A11 A113 A114 A12 A121 A122 A123 A124 A125 A126)

  An assessment of the overall performance of the IT Management and Governance System against the targets set in the IT Management System Framework and in the IT Governance Model, and an identification of possible process improvement areas.

- IT Governance and Management Audit Results (To: A11 A111 A12 A121 A144)

  The findings, conclusions and recommendations of any audit (formal or informal, internal or external) carried out into any or all of the IT Governance and Management System.

Activities

This process is composed of these activities:

- A141 Collate IT Management System Outcomes
- A142 Analyze IT Governance and Management System Performance
- A143 Audit IT Governance and Management
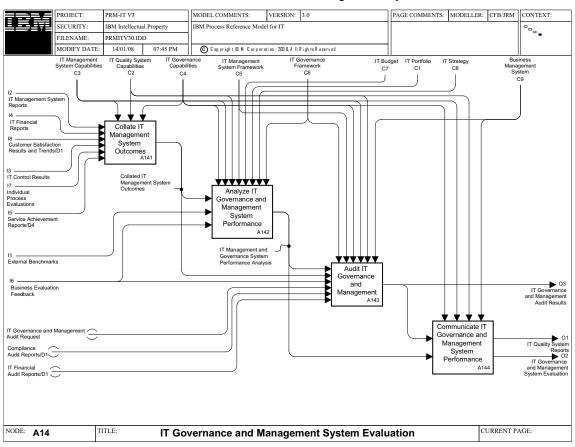- A144 Communicate IT Governance and Management System Performance

PROJECT:	PRM-IT V3	MODEL COMMENTS:	VERSION:	3.0	PAGE COMMENTS:	MODELLER:	CFB/JRM	CONTEXT:
SECURITY:	IBM Intellectual Property	IBM Process Reference Model for IT						
FILENAME:	PRMITV30.IDD							
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NODE: **A14** TITLE: **IT Governance and Management System Evaluation** CURRENT PAGE:

Figure 5. A14 IT Governance and Management System Evaluation

[A141] Collate IT Management System Outcomes

Description

Gathers all relevant information that is needed in order to be able to assess the overall effectiveness of the management system.

Controls

- IT Management System Capabilities (From: A12)

  The foundational constituents of the IT Management Ecosystem. The elements explicitly identified are:

  - Process
  - Organization
  - Management information
  - Tools and systems
  - Measurement and control instruments

- IT Quality System Capabilities (From: A12 A126)

  The foundational components for the operation of the IT quality management system. The elements explicitly identified here are:

  - Process
  - Organization
  - Information
  - Tools, mechanisms and systems

- IT Governance Capabilities (From: A12 A121)

  The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

  - Governance structures and charters
  - Decision rights and their assignment to roles
  - Decision-making processes and procedures for a specified list of decisions
  - Metrics and indicators for the aspects of IT management under governance

Inputs

- IT Management System Reports (From: A13 A133)

  The results and interpretations of the IT Management System outcomes, including key performance indicators.

- IT Financial Reports (From: A8 A81 A813 A814 A815)

  All reports on financial data of IT for different stakeholders. Covers a wide range of reports from outlining projected costs through after-the-fact financial analyses.

- Customer Satisfaction Results and Trends (From: A27 A276)

  A report summarizing current customer satisfaction results and historical data. Can be used to identify trends.

- IT Control Results (From: A13 A132)

  An indication of the direct outcomes, and any associated consequences that result from the application of any IT management controls.

- Individual Process Evaluations

  A collection of metrics which describe the effectiveness and efficiency of an individual process.

- Service Achievement Reports (From: A24 A244)

One or more reports about how well the service levels have been achieved and which compare IT's actual service level results achieved against the service level standards and any specific service level targets negotiated with customers. The reports can include details of service impacts — both directly measured and an assessment of business impact. Some sections will be for customer distribution and others can be for service provider receipt only.

Outputs

- Collated IT Management System Outcomes (To: A142 A143)

  Collection of all the Management System Assessments into an easy to use format for further analysis.

[A142] Analyze IT Governance and Management System Performance

Description

Examines the IT control and performance results to determine how effectively the management system enables the achievement of the enterprise IT goals, policies, and strategies. The analysis focuses on the effectiveness, efficiency and related aspects, which indicate the health of the management system, rather than the value that IT provides for the business (considered in the IT Direction process).

Specifically, it evaluates the performance of the IT Management System, aiming to identify aspects of the overall process that require improvement, such as the foundation and interfaces of the process, activity definitions, key performance metrics, the state of supporting automation, as well as the roles and responsibilities and skills required. Insights and lessons learned from direct observation and data collected on process performance are the basis for improvement recommendations.

Controls

- IT Governance Capabilities (From: A12 A121)

  The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

  - Governance structures and charters
  - Decision rights and their assignment to roles
  - Decision-making processes and procedures for a specified list of decisions
  - Metrics and indicators for the aspects of IT management under governance

- IT Management System Capabilities (From: A12)

  The foundational constituents of the IT Management Ecosystem. The elements explicitly identified are:

  - Process
  - Organization
  - Management information
  - Tools and systems
  - Measurement and control instruments

- IT Quality System Capabilities (From: A12 A126)

  The foundational components for the operation of the IT quality management system. The elements explicitly identified here are:

  - Process

- Organization
- Information
- Tools, mechanisms and systems

■ IT Management System Framework (From: A11)

The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for managing the overall IT function.

■ IT Budget (From: A8 A81 A813)

The planned IT funding broken down in relevant ways, such as activities and milestones per period, to reflect the contents of the IT plan.

■ IT Portfolio (From: A3 A36 A365)

A central repository containing all the IT resources and assets, projects, and services controlled and managed by the IT organization, departments, and functions.

■ IT Strategy (From: A3 A31 A315)

A consolidated statement of IT initiatives. Includes a summary of changes to IT capabilities and a summary of each strategic IT initiative. Also includes a statement of planned and required changes to the IT Portfolio and IT Plan. The IT Sourcing Strategy would be included.

■ IT Governance Framework (From: A11 A111)

The guiding principles, the statements of intent, and the objectives that together shape and set the direction for the implementation of IT governance.

Inputs

■ Collated IT Management System Outcomes (From: A141)

Collection of all the Management System Assessments into an easy to use format for further analysis.

■ External Benchmarks

A representation of the effectiveness, efficiency or other metric of the workings of a survey or other sample group of businesses or functions within them.

■ Business Evaluation Feedback

Any feedback, formal or informal, from non-IT parts of the overall business which is relevant to evaluating the performance of the IT management system.

Outputs

■ IT Management and Governance System Performance Analysis (To: A143 A144)

Conclusions on the effectiveness (strengths, improvement areas) of the IT Management and Governance System.

[A143] Audit IT Governance and Management

Description

Carries out a thorough examination of the setup and activity of the governance and management of IT to check that:

- The implementation conforms to the constraints set by the parent business and by external regulations (so that it is capable of achieving the desired results)
- The operational workings (for example, measurements, control actions, key decisions) have been enacted in compliance with the structures and mechanisms in place.

The methods and rules which dictate the audit proceedings will be established first, and will be influenced by the terms of reference for the audit and whether the auditing body is external or internal.

In many cases, audits require that management system workings (which provide evidence of whether conformance can be demonstrated) will need to be organized into the formats and structures required by the auditors.

Controls

- IT Governance Framework (From: A11 A111)

  The guiding principles, the statements of intent, and the objectives that together shape and set the direction for the implementation of IT governance.

- IT Management System Framework (From: A11)

  The logical structure describing the strategic (vision, mission, value proposition, guiding principles), organizational (organizational mechanisms, roles, accountabilities), process (activities, work flows, inputs, outputs), and technology (software, hardware) goals, policies and practices for managing the overall IT function.

- IT Governance Capabilities (From: A12 A121)

  The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

  - Governance structures and charters
  - Decision rights and their assignment to roles
  - Decision-making processes and procedures for a specified list of decisions
  - Metrics and indicators for the aspects of IT management under governance

- IT Management System Capabilities (From: A12)

  The foundational constituents of the IT Management Ecosystem. The elements explicitly identified are:

  - Process
  - Organization
  - Management information
  - Tools and systems
  - Measurement and control instruments

- IT Quality System Capabilities (From: A12 A126)

  The foundational components for the operation of the IT quality management system. The elements explicitly identified here are:

  - Process
  - Organization
  - Information
  - Tools, mechanisms and systems

■ Business Management System

The management system in place to govern the workings of the overall business.

Inputs

■ IT Management and Governance System Performance Analysis (From: A142)

Conclusions on the effectiveness (strengths, improvement areas) of the IT Management and Governance System.

■ Collated IT Management System Outcomes (From: A141)

Collection of all the Management System Assessments into an easy to use format for further analysis.

■ Business Evaluation Feedback

Any feedback, formal or informal, from non-IT parts of the overall business which is relevant to evaluating the performance of the IT management system.

■ IT Governance and Management Audit Request

Invocation of an audit of all or part of the IT Governance and Management System by a suitably authorized person or body. Also contains the terms of reference for the audit.

■ Compliance Audit Reports (From: A716)

Documents communicating the results of individual process compliance and mitigation audits.

■ IT Financial Audit Reports (From: A816)

Financial audits include validation that accounting rules are being accurately followed and that costs are aligned with the engagement and client objectives.

Outputs

■ IT Governance and Management Audit Results (To: A11 A111 A12 A121 A144)

The findings, conclusions and recommendations of any audit (formal or informal, internal or external) carried out into any or all of the IT Governance and Management System.

[A144] Communicate IT Governance and Management System Performance

Description

Communicates the results of the assessment of the IT Management System.

Controls

■ IT Governance Capabilities (From: A12 A121)

The set of instruments that contribute the required governance characteristics to the overall IT Management Ecosystem. These will include:

- Governance structures and charters
- Decision rights and their assignment to roles
- Decision-making processes and procedures for a specified list of decisions
- Metrics and indicators for the aspects of IT management under governance

■ IT Management System Capabilities (From: A12)

The foundational constituents of the IT Management Ecosystem. The elements explicitly identified are:

- Process
- Organization

- Management information
- Tools and systems
- Measurement and control instruments

■ IT Quality System Capabilities (From: A12 A126)

The foundational components for the operation of the IT quality management system. The elements explicitly identified here are:

- Process
- Organization
- Information
- Tools, mechanisms and systems

■ Business Management System

The management system in place to govern the workings of the overall business.

Inputs

■ IT Governance and Management Audit Results (From: A14 A143)

The findings, conclusions and recommendations of any audit (formal or informal, internal or external) carried out into any or all of the IT Governance and Management System.

■ IT Management and Governance System Performance Analysis (From: A142)

Conclusions on the effectiveness (strengths, improvement areas) of the IT Management and Governance System.

Outputs

■ IT Quality System Reports (To: A11 A113 A114 A12 A122 A123 A124 A125 A126)

Reports specifically focused on the quality management system used within IT and indicating its conclusions on the effectiveness of, and any need for improvement in, the overall quality management system.

■ IT Governance and Management System Evaluation (To: A11 A113 A114 A12 A121 A122 A123 A124 A125 A126)

An assessment of the overall performance of the IT Management and Governance System against the targets set in the IT Management System Framework and in the IT Governance Model, and an identification of possible process improvement areas.

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PRM-IT A1 Node Tree

A1 – GOVERNANCE AND MANAGEMENT SYSTEM	
A11	**IT Governance and Management System Framework**
A111	Define IT Governance Framework
A112	Define IT Management Goals
A113	Establish IT Management Policies
A114	Establish IT Management Practices
A12	**IT Governance and Management System Capabilities**
A121	Establish IT Governance Capabilities
A122	Establish IT Process Capabilities
A123	Establish IT Organizational Capabilities
A124	Establish IT Management Information Capabilities
A125	Establish IT Operational Environment Capabilities
A126	Establish IT Measurement and Control Capabilities
A13	**IT Governance and Management System Operations**
A131	Produce IT Measurements
A132	Operate IT Governance and Management System Controls
A133	Monitor, Analyze and Report IT Outcomes
A14	**IT Governance and Management System Evaluation**
A141	Collate IT Management System Outcomes
A142	Analyze IT Governance and Management System Performance
A143	Audit IT Governance and Management
A144	Communicate IT Governance and Management System Performance

Figure 6. A1 Governance and Management System Node Tree