

# **Management of Information Systems**

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## **IT Capability Maturity Framework (IT-CMF)**

### **Critical Capabilities**

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# **Managing IT like a Business**

## **AA — Accounting and Allocation**

The Accounting and Allocation (AA) capability is the ability to define and manage the policies, processes, and tools used for calculating the costs of IT and distributing them across the organization. The AA capability covers:

Establishing policies for measuring the consumption of IT services by business units in the organization, and for the chargeback/showback of associated IT costs to those units.

Managing how the chargeback/showback for IT service consumption is allocated.

Influencing the demand for IT services.

### *Goal*

To allocate the consumption of IT services to business units and to calculate the associated costs for chargeback/showback purposes.

### *Objectives*

Promote better understanding of the cost drivers for IT services.

Enable business units to fund directly the provision of new IT services that might not otherwise have occurred because of a limited IT budget.

Motivate managers across the organization to make sound economic decisions — for example, by subsidizing newer systems and imposing additional charges for the use of legacy systems.

Encourage users to avoid expensive IT activities when slightly less convenient but far cheaper alternatives are available.

### *Value*

The AA capability assigns costs of IT services proportionally and transparently to the users of those services, improving cost awareness and responsible usage behaviours.

### *Management Artefacts*

IT Accounting Model

Chargeback/Showback Model

IT Services Catalogue

## **BP — Business Planning**

The Business Planning (BP) capability is the ability to produce an approved document that provides implementable detail for the IT strategy, setting out the IT function's tactical objectives, the operational services to be provided, and the financial and other resources and constraints that apply in the coming planning period. The BP capability covers:

Allocating responsibility to specific employees for IT business planning.

Managing appropriate financial and non-financial resources and their capacities for ongoing IT business planning activities.

Specifying the requirements for each activity in the IT business plan.

Seeking the support of relevant stakeholders for the IT business plan.

Reviewing the IT business plan against actual performance.

### *Goal*

To link the IT strategy with IT operational planning. It represents the next level in planning detail following on from defining the IT strategy, ensuring that the necessary financial and other resources are allocated for implementation.

### *Objectives*

Break down the IT strategic plan into identifiable deliverables and required resources to achieve the medium- and long-term strategic objectives for the IT function.

Build a robust process for allocating or reserving resources for IT programmes and operations in pursuit of strategic goals and objectives.

Generate ownership and understanding among stakeholders of the critical success factors and the ways to monitor progress, so that the success of the IT business plan can be measured.

Improve confidence that the IT function, through robust planning, can effectively deliver its goals and objectives within the specified planning period.

Forecast the resources required to achieve the IT function's goals and objectives.

Outline the financial and non-financial constraints within which the IT function operates.

Focus and direct the IT effort by analysing actual against planned performance.

*Value*

The BP capability links the IT strategy with operational delivery. It enables the development of multi-year investment roadmaps and plans to ensure that the IT strategy is successfully implemented.

*Management Artefacts*

IT Business Plan

Business-as-Usual Commitments Database

Global Requirements Catalogue

## **BPM — Business Process Management**

The Business Process Management (BPM) capability is the ability to identify, design, document, monitor, optimize, and assist in the execution of both existing and new organizational processes. The BPM capability covers:

Implementing process improvement initiatives and driving cultural change for business process improvement.

Selecting, developing, and applying methods, governance models, technologies, skills, roles, and communication materials that support management of the organization's processes.

Developing and applying graphical representations of processes — for example, process architecture diagrams.

Adopting technologies that automate and assist with the execution of business process management.

### *Goal*

To create an understanding of business activity flows so that they can be more readily understood and developed, and so that errors can be reduced and risks mitigated.

### *Objectives*

Enable the organization to be more capable of change.

Drive a holistic approach to process improvement using a cross-functional and organization-wide perspective.

Correct and improve complex, people-intensive processes before (potentially) automating them.

Support a better understanding of processes and their objectives, which in turn leads to a more reliable and efficient execution of these processes.

Provide graphical representations of processes to facilitate more effective discussion and collaboration between process performers, and between performers and managers.

Make the strategic objectives of the organization more explicit and visible (for example, reliability and efficiency, product or service quality, business agility, and so on).



*Value*

The BPM capability helps to make business activity flows more effective, more efficient, and more responsive to evolving business objectives.

*Management Artefacts*

Business Process Management Policy

Business Process Management Governance Model

Business Process Management Technology Suite

Business Process Model and Notation

## CFP — Capacity Forecasting and Planning

The Capacity Forecasting and Planning (CFP) capability is the ability to model and forecast demand for IT services, infrastructure, facilities, and people. The CFP capability covers:

Collecting capacity-related strategic and operational information.

Designing and advancing IT capacity forecasting models to demonstrate how business forecasts might impact the resources required by the IT function.

Modelling the current and future capacity requirements across all IT-related resources — for example, services, infrastructure, facilities, and people.

Communicating insights from capacity planning to the relevant stakeholders.

### *Goal*

To understand what resources will be required to support IT services based on current and projected organizational demands.

### *Objectives*

Increase knowledge about the IT resource capacity in order to predict bandwidth constraints.

Scenario-model the impact of business strategies and forecasts on IT resources.

Inform management of IT strategies — for example, about over- or under-capacity utilization, or about reassigning underutilized resources.

### *Value*

The CFP capability anticipates the shifting needs for IT resources so that capacity can be cost-effectively added or reduced in a timely manner to meet changes in demand.

### *Management Artefacts*

IT Forecast Plan

IT Utilization Report

Capacity Management Information System (CMIS)

## DSM — Demand and Supply Management

The Demand and Supply Management (DSM) capability is the ability to manage the IT services portfolio in such a way that there is a balance between the demand for and the supply of IT services. The DSM capability covers:

Analysing and managing the existing and future business demand for IT services.

Analysing and managing the existing and future supply of IT services.

Proposing responses to address gaps between the demand for and supply of IT services, for both the short term and the long term.

Fostering collaboration between IT and other business units to manage the IT services portfolio.

Understanding trade-offs between satisfying demand and the cost of supply — for example, by using emerging technologies or by changing the nature of the demand.

### *Goal*

To balance the business demand for IT services and the supply of those services.

### *Objectives*

Strive for equilibrium between the demand for and the supply capacity of IT services.

Arrive at an understanding of the total or aggregate demand for IT services, and meet this with a supply capacity that is fit for purpose and cost-effective.

Forecast the impact of demand for IT services on the scalability of the supply pipeline.

Maintain a balanced IT services portfolio so that current requirements for IT can be managed, and expected future requirements can be provided for.

Understand how emerging technologies can replace or substitute current technologies, and open up new supply options.

### *Value*

The DSM capability can improve the business value that IT services deliver by reducing or eliminating supply surpluses and missed fulfilment opportunities.

*Management Artefacts*

Demand Models

IT Services Portfolio

IT Services Catalogue

Shared Operations Calendar

Supply Models

## EIM — Enterprise Information Management

The Enterprise Information Management (EIM) capability is the ability to establish effective systems for gathering, analysing, disseminating, exploiting, and disposing of data and information. The data can be held in any medium — all forms of digital storage, film, paper, or any other recording mechanism used by the organization. The EIM capability covers the strategic, operational, and security aspects of information management:

Establishing an information management strategy.

Establishing data and information governance mechanisms.

Establishing information management standards, policies, and controls.

Performing information valuations.

Defining and maintaining master- and metadata — for example, metadata for information security classifications and continuity management.

Making infrastructure and storage decisions.

Managing data and information life cycles, including data and information tracking.

Establishing information quality with inputs from stakeholders.

Measuring how frequently information is accessed and assessing its value to the

Analysing information, including exploratory and confirmative data analysis.

Developing the skills and competences of information management and analytics practitioners.

### *Goal*

To ensure that quality data is available to support the business activities of the organization.

### *Objectives*

Improve the quality of information available at all levels of the organization to support improved decision-making and business insights.

Improve the efficiency of business processes by making data and information available that is fit for purpose.

Provide flexible, dynamic, and centralized data platforms that enable stakeholders to access, interpret, and manipulate data as appropriate to their roles.

Enable the analysis of data and information to improve the identification and exploitation of new business opportunities by the provision of an appropriate linked data platform.

Safely and effectively manage data and information throughout their life cycles.

*Value*

The EIM capability provides appropriate operational data for business transactions, and consistently enables timely and informed decision-making.

*Management Artefacts*

Information Management Strategy

Information Governance Policy

Access Controls Policy

## **GIT — Green Information Technology**

The Green Information Technology (GIT) capability is the ability to minimize the environmental impact of IT, and to make the best use of technology to minimize environmental impact across the organization. The GIT capability covers:

Developing a green information technology strategy for IT and aligning it to business requirements.

Planning how to define and meet the IT function's goals for environmental sustainability.

Implementing an IT governance structure that includes common policies on compliance With environmental regulation.

Providing measurement and reporting to enable environmental sustainability across the IT life cycle and the business value chain.

Managing the people and cultural issues associated with the adoption of environmental sustainability practices enabled through technology.

Aligning organizational capabilities that are most important for ensuring environmentally sustainable computing.

### *Goal*

To manage IT operations in an environmentally sensitive manner, and to leverage IT to minimize the environmental impact of the wider business activities.

### *Objectives*

Enable the organization to meet its goals of minimizing its environmental impact by:

- Developing the IT capabilities to minimize the impact of computing activities on the environment — for example, sourcing/designing, operating, and disposing of the computing infrastructure efficiently and effectively with minimal or no impact on the environment.
- Enabling hi-tech/low-carbon business operations — for example, redesigning business operations using environmentally sensitive IT solutions.

Enable the organization to comply with environmental regulations.

Enhance its brand reputation by minimizing the organization's environmental impact.

Demonstrate leadership in information technology practices that have environmental benefits (planet), social benefits (people), and financial benefits (profit).

*Value*

The GIT capability enables organizations to minimize their impact on the environment by using IT to delivery Triple Bottom Line (TBL) results — environmental (planet), social (people), and financial (profit).

*Management Artefacts*

Environmental Sustainability Strategy

Green Information Technology Roadmap

Green Information Technology Targets



## IM — Innovation Management

The Innovation Management (IM) capability is the ability to identify, fund, and measure technology-driven business innovation, which can be:

Applied within the IT function.

Applied to the organization's operations.

Applied to the organization's products and services.

### *Goal*

To exploit IT in new and pioneering ways to satisfy business objectives.

### *Objectives*

Increase innovation throughput from the IT function by fostering a pioneering culture informed by approaches, methods, and tools for innovative thinking and problem solving.

Incentivize collaboration with other business units to identify novel uses of IT to support business operations, products, and services.

Improve accountability for innovation management by measuring business value and other meaningful metrics.

Promote informed risk taking — for example, by:

- Harvesting key learnings from unsuccessful innovation initiatives using non-accusatory approaches.
- Supporting innovative performance of teams and individual employees.
- Providing more control over how employees approach solving business challenges.

### *Value*

The IM capability helps improve the throughput of and yield from novel uses of IT and technology-driven innovation to solve business challenges.

### *Management Artefacts*

Innovation Lab

Innovation Pipeline Dashboard

Innovation Recognition Rewards

Innovation Facilitation Portal

Social Collaboration Platform

## ITG — IT Leadership and Governance

The IT Leadership and Governance (ITG) capability is the ability to motivate employees towards a common strategic direction and value proposition, and to establish appropriate IT decision-making bodies and processes, including mechanisms for IT escalation, accountability, and oversight. While the leadership aspect establishes the IT function's direction, it cannot directly affect all IT decisions distributed across the various levels in the organization. The governance aspect addresses this by establishing appropriate IT decision rights, and mechanisms for accountability and oversight. The ITG capability covers:

Uniting the IT function around a shared IT value proposition, vision, and direction.

Determining the effectiveness of the partnership between IT and other business units.

Determining the effectiveness of IT leadership.

Establishing governance/decision-making bodies and processes, including decision rights, accountabilities, and escalation paths.

### *Goal*

To establish a leadership style, and ensure that distributed IT decisions are supportive of the organization's strategic goals and objectives.

### *Objectives*

Establish the IT leadership competences required to drive organizational progress and win stakeholder support.

Enhance the business orientation and engagement of IT leaders.

Establish IT governance as a central component of effective corporate governance.

Improve confidence in, and the agility and transparency of IT decision-making.

Establish appropriate IT accountability mechanisms.

Establish oversight structures to support compliance with ethical, legislative, and/or regulatory obligations.

Provide broad oversight on the performance of IT in the organization.

### *Value*

The ITG capability can improve the direction and consistency of leadership and distributed IT decision-making throughout the organization, and accelerate realization of the organization's strategic goals and objectives.

*Management Artefacts*

IT Vision Statement

Documented IT Decision-making Process

Decision-making Responsibility and Accountability Matrix

Formal Constitution for an IT Corporate Steering Committee

Formal Constitution for an IT Enterprise Governance Council

## **ODP — Organization Design and Planning**

The Organization Design and Planning (ODP) capability is the ability to manage the IT function's internal structure and its interfaces with other business units, suppliers, and business partners. The ODP capability covers:

Defining the internal structure of the IT function, including reporting lines, span of control, roles, responsibilities, and accountabilities.

Defining the interfaces with other parts of the business, suppliers, and business partners.

Defining IT roles and key performance indicators (KPIs).

Managing the process for (re)organizing and (re)structuring the IT function.

Documenting, communicating, and gaining commitment to the organization design.

Communicating and gaining commitment to organizational change.

Monitoring the effectiveness and efficiency of the organization design.

### *Goal*

To organize the IT function by establishing lines of authority, defining roles and functions, and specifying their interrelationships, so that IT employees can collectively deliver the objectives of the IT function.

### *Objectives*

Promote effective decision-making and follow-on action by removing organizational bureaucracy and structural inefficiencies.

Ensure that the organization design of the IT function is appropriate to the wider organization it serves.

Promote IT employees' acceptance of organizational change.

Clarify reporting lines, roles, responsibilities, and accountabilities.

Organize the IT function so that it can develop and leverage core IT capabilities.

### *Value*

The ODP capability enables the IT function to readily adapt its organization structure in response to business needs, strategic leadership goals, and the operating environment.

*Management Artefacts*

Organization Structure Templates

Organization Design Guidelines

Organization Charts

Documented Organization Design Effectiveness Indicators

## RM — Risk Management

The Risk Management (RM) capability is the ability to assess, prioritize, handle, and monitor the exposure to and the potential impact of IT-related risks that can directly impact the business in a financial or reputational manner. Risks include those associated with (among others) IT security, data protection and information privacy, operations, continuity of business and recovery from declared disasters, IT investment and project delivery, and IT service contracts and suppliers. The RM capability covers:

Establishing an IT risk management programme and policies.

Establishing risk management roles and responsibilities.

Communicating and training in the area of risk management.

Understanding the organization's tolerance for IT-related risks.

Defining risk profiles.

Assessing and prioritizing different types of risks.

Defining risk handling strategies for identified IT risks (accept, avoid, mitigate, or transfer).

Monitoring IT risk exposures.

Integrating IT risk management with wider ERM practices such as business continuity planning, disaster recovery, information security, audit and assurance.

### *Goal*

To protect the organization from risk exposures associated with IT.

### *Objectives*

Identify and assess the IT-related risks that present vulnerabilities to the business, determine appropriate risk handling strategies, and monitor their effectiveness.

Manage the exposure to IT-related risks such as those related to IT security, IT sabotage, data protection, information privacy, product and project life cycles, and IT investment; and protect the business from the impact of risk incidents.

Increase compliance with external regulations and ethics policies relating to the deployment and use of technology.

Increase transparency around how IT-related risks could affect business objectives and decisions.

Contribute to improving the organization's reputation as a trusted supply chain business partner.

*Value*

The RM capability can reduce the frequency and the severity of risks associated with IT negatively impacting the organization's business operations.

*Management Artefacts*

Risk Management Policy

Risk Profiling and Scoring Approach

Risk Register



## **SAI — Service Analytics and Intelligence**

The Service Analytics and Intelligence (SAI) capability is the ability to define and quantify the relationships between IT infrastructure, IT services, and IT-enabled business processes. The SAI capability covers:

Service Analytics: Monitoring, modelling, and analysing service performance to:

Measure, sustain, and optimize the delivery of IT services for business value.

Provide the data that planning activities require.

Service Intelligence: Applying insights from service analytics to:

Identify risks associated with IT infrastructure and services that could impact on the business.

Identify business risks and changes that could impact on IT infrastructure and services.

Identify opportunities for business growth and IT innovation.

### *Goal*

To clarify the link between the performance of business processes and the performance of the underlying IT infrastructure and services — that is, to provide an end-to-end view of IT services.

### *Objectives*

Provide a quantified view of the end-to-end performance of IT services — that is, define and measure the relationship between IT infrastructure and services, and the business processes and services enabled by IT.

Map performance data from discrete IT systems (including networks, finance, voice, data, storage, processing speeds, data centres, and applications) to performance data from business processes and services, to highlight business value-at-risk, gain insights into ways of optimizing IT infrastructure and service configurations, and prioritize future investments.

Establish proactive approaches to resolving IT infrastructure and service quality problems by maintaining profiles of normal infrastructure operational characteristics, and automatically detecting deviations from norms.

Support improved decision-making on the performance of IT services at all levels of the organization — that is:

- Inform operational decision-making relating to service delivery by providing insight into matters such as performance, capacity, availability, cost, and use.
- Inform strategic decision-making by providing insight into matters such as profiling of user populations, understanding the business impact of change, and contingency planning.

### *Value*

The SAI capability helps identify how best to configure IT infrastructure and services to meet business demand.

### *Management Artefacts*

Service Level Agreements (SLAs)

Analytics Software

Business Process to IT Service Maps

Configuration Management Database (CMDB)

## **SRC — Sourcing**

The Sourcing (SRC) capability is the ability to evaluate, select, and integrate IT service providers according to a defined strategy and sourcing model, which could include service providers both inside and outside the organization. The SRC capability covers:

Defining the strategy for sourcing IT services and the high-level business cases for sourcing initiatives.

Defining the sourcing model, including, for example, considering internal or third-party sourcing arrangements, on-shoring, near-shoring, or far-shoring, and single or multiple IT service providers.

Developing criteria for selecting providers and processes for choosing the most advantageous provider.

Defining approaches for preparing, negotiating, closing, and re-evaluating contracts with IT service providers.

Establishing a win-win culture to promote enduring and successful relationships with the supply base.

Managing potential operational impacts when transitioning to a new provider.

### *Goal*

To streamline the strategic planning and development of the IT supply base to optimize the contribution of the supply base to the organization's strategic objectives.

### *Objectives*

Establish a common approach to selecting IT suppliers for their operational contribution and potential strategic impact, instead of awarding contracts only or mainly on the basis of lowest bid price.

Assess the value and relevance of current and potential sourcing opportunities and relationships according to long-term goals and overall business and supply management objectives.

Achieve both cost reduction and improvement in IT supplier performance.

Ensure continuity of supply if a supplier's operations are unexpectedly disrupted or when switching suppliers.

Leverage good practice and innovations from the supply base to support business innovation.

Increase organizational effectiveness by simplifying, automating, and integrating sourcing processes across the organization.

*Value*

The SRC capability fosters mutually beneficial partnerships with the supply base by developing appropriate sourcing relationships based on market knowledge and the business objectives.

*Management Artefacts*

Strategic IT Sourcing Plan

Documented IT Sourcing Methodology

Sourcing Readiness Checklist

Sourcing Contract

Sourcing Model Templates

## SP — Strategic Planning

The Strategic Planning (SP) capability is the ability to formulate a long-term vision and translate it into an actionable strategic plan for the IT function. The SP capability covers:

Developing a long-term (typically 3-5 year) orientation or vision for the IT function, and high-level strategic options, and outlining programmes to implement these options.

Aligning IT and business strategies.

Identifying and analysing business challenges and opportunities to which IT can contribute.

Involving key stakeholders in IT strategic planning.

Evaluating and adjusting strategy and targets as appropriate.

Developing relevant long-term roadmaps, such as for technology roll-out.

### *Goal*

To specify ways in which technology can enable and influence the business strategy.

### *Objectives*

Outline key strategic issues and options for how technology can support and influence the business strategy.

Clarify the purpose and goals of IT activities, thus enabling more consistent decision-making.

Align the IT function and other business units on the strategic value of technology to amplify the creation of business value.

Translate strategy and decisions into a set of programmes calculated to deliver desired objectives.

Clearly communicate strategic goals and targets to all stakeholders.

Promote more effective and efficient technology deployments.

### *Value*

The SP capability clarifies the purpose and goals of using technology to optimize value generation.

*Management Artefacts*

Business Strategic Plan

IT Strategic Plan

IT Vision Statement

Outline Business Case

IT Strategic Options

# **Managing the IT Budget**

## **BGM — Budget Management**

The Budget Management (BGM) capability is the ability to oversee and adjust the IT budget to ensure that it is spent effectively. The BGM capability covers:

Planning the IT budget.

Tracking actual expenditure and variances from the budget.

Establishing budget accountability, oversight structures, and decision rights.

Predicting future expenditure and out-of-tolerance variances.

### *Goal*

To ensure that the allocated IT budgets are spent appropriately and within expectations.

### *Objectives*

Make budget allocation decisions in a deliberative, participatory, and transparent manner.

Achieve predictable IT financial performance by establishing responsible fiscal management and clear lines of accountability.

Maintain the flexibility to respond to short-term challenges and opportunities by allowing managers to reallocate IT funds across budget categories and projects at their discretion.

Make sure that expenditure matches the allocated budget. Identify and plan for any likely overrun in advance.

### *Value*

The BGM capability helps ensure that IT budget planning is transparent and participatory, and that it responds to changing needs and unanticipated opportunities.

### *Management Artefacts*

IT Budget Plan

IT Budget Review Charter

IT Financial Audit Report

Cash Flow/Operating Budget Statement



## **BOP — Budget Oversight and Performance Analysis**

The Budget Oversight and Performance Analysis (BOP) capability is the ability to compare actual IT expenditure against budgeted IT expenditure over extended time periods. Where appropriate, it offers management the opportunity to reprofile or reprioritize budget forecasts and allocations. The BOP capability covers:

- Developing approaches and tools for budget performance analysis.
- Performing multi-year tracking and trend analysis of expenditure patterns in IT projects and IT budget categories.
- Reviewing IT budget plans versus actual expenditure.
- Providing a stimulus for rebalancing and reprioritizing budgets.
- Forecasting future IT funding levels, allocation requirements, and prices for IT services.
- Determining the impact of historical budget performance on future budget planning and on general cost management.
- Communicating IT budget performance metrics to key stakeholders.

### *Goal*

To compare actual IT expenditure against planned IT expenditure over extended time periods, and in doing so provides management with the stimulus to confirm or reset budget allocations, where appropriate.

### *Objectives*

- Improve visibility of actual IT expenditure over extended time periods.
- Better inform decisions regarding future funding levels and allocations.
- Improve the quality of future budgets, and identify favourable budget trends and areas of concern.
- Increase confidence that budget allocations can avoid unplanned adjustments midway through a financial cycle.

### *Value*

The BOP capability analyses past budgeting and expenditure patterns to inform decision-making on current planning for budget forecasts and allocations.

*Management Artefacts*

IT Budget Plan

IT Budget Analysis Tool

IT Financial Audit Report

## **FF — Funding and Financing**

The Funding and Financing (FF) capability is the ability to determine the funding level required for IT and to allocate it appropriately. The FF capability covers:

Setting the overall levels of IT funding.

Establishing leadership understanding regarding issues and options for IT funding and financing.

Establishing funding and financing governance structures and decision-making processes.

Allocating IT funds to broad categories of IT activities — for example, for capital and operational expenditure.

### *Goal*

To generate reliable and flexible sources of funding for an organization, so that it can provide adequate investment and enable the IT function to deliver services and solutions to the organization.

### *Objectives*

Set appropriate funding levels for IT to maximize development of the business capabilities that drive strategic or operational advantage.

Consider alternative sources for technology funding, and understand their associated costs and expected benefits.

Ensure transparent practices and objective governance when agreeing options for funding and financing.

Benchmark IT funding against that of peer organizations to inform funding and financing decisions.

### *Value*

The FF capability enables improved decision-making in selecting appropriate funding sources, in determining adequate funding levels, and in the initial assigning of funds for IT.

*Management Artefacts*

IT Budget Plan

IT Funding Benchmark Data

IT Funding Models

Cash Flow/Operating Budget Statement

## PPP — Portfolio Planning and Prioritization

The Portfolio Planning and Prioritization (PPP) capability is the ability to select, prioritize, approve, and terminate programmes and projects that are seeking organizational resources. The PPP capability covers:

Establishing a framework for selecting and prioritizing programmes and projects.

Involving key personnel in selecting programmes and projects.

Assessing and prioritizing programmes and projects based on their alignment with business objectives and operational needs.

Approving and terminating programmes and projects.

Maintaining oversight of financial, people, and technical resources for portfolio resource planning purposes.

### *Goal*

To establish the investment portfolio composition for technology-related programmes and projects.

### *Objectives*

Increase the likelihood that organizational resources are applied in accordance with the organization's strategy.

Improve consistency and transparency in programme and project selection, based on agreed evaluation and prioritization criteria.

Prioritize technology-related programmes and projects that have the greatest potential for value delivery in alignment with the organization's strategic direction, while managing potential downsides.

Dynamically reprioritize the portfolio based on strategy change — for example, mergers, acquisitions, and business environment changes.

Provide insight into financial, people, and technical resource requirements for execution of the IT investment portfolio.

Improve the perception of IT as a catalyst or enabler of the business, by delivering positive returns on the IT investment portfolio.

*Value*

The PPP capability helps ensure that the investment portfolio of technology-related programmes and projects is aligned to and optimized for the organization's strategic direction.

*Management Artefacts*

Portfolio Prioritization Criteria

Portfolio Prioritization Framework

Portfolio Plan

# **Managing the IT Capability**

## **CAM — Capability Assessment Management**

The Capability Assessment Management (CAM) capability is the ability of the organization to conduct current state evaluations and plan improvements for its portfolio of IT capabilities. Current state evaluations involve gathering and documenting data about the specific IT capabilities in the organization. The results then inform the planning and execution of improvement actions to deal with any deficiencies. The CAM capability covers:

Selecting an overarching capability framework and mapping other frameworks used in the organization to it.

Managing continuous improvement of the organization's IT capabilities.

Securing appropriate senior management sponsorship for IT capability improvement.

Promoting organizational buy-in and incentivizing participation in capability improvement evaluation and planning.

Planning, preparing, and conducting capability evaluations.

Setting IT capability targets and defining development roadmaps for key IT capabilities.

### *Goal*

To provide the organization with an accurate picture of its current IT management capabilities, and to identify areas needing improvement.

### *Objectives*

Improve the organization's ability to identify strengths and weaknesses in key IT capabilities.

Establish a consistent approach to assessing IT capabilities and selecting areas for IT capability improvement that are aligned with the organization's strategic direction.

Identify over-investment in IT capabilities that are of lower strategic importance.

Establish a credible and achievable approach to managing a continual improvement programme, which can be used to verify improvements over time.

### *Value*

The CAM capability helps ensure reliability, repeatability, and validity in assessing IT capabilities and implementing improvement initiatives.



*Management Artefacts*

Capability-based Framework

Assessment Guideline Document

Assessment Methodology

Development Roadmap

## **EAM — Enterprise Architecture Management.**

The Enterprise Architecture Management (EAM) capability is the ability to plan, design, manage, and control the conceptualization of systems, processes, and/or organizations, and the relationships between them. The conceptualization may be layered to represent specific types of relationships — for example, those between applications, business services, internal IT services, security, networking, data storage, and so on. The EAM capability covers:

Establishing principles to guide the design and evolution of systems, processes, and/or organizations.

Providing a framework, including models or templates, that articulates the business, the technical architecture, and the relationships between them.

Providing the architecture vision, roadmap, and governance, together with the approaches required for managing their life cycle.

Managing the architectural skills and architecture resourcing.

Communicating the impact of enterprise architecture activities.

### *Goal*

To deliver an overarching approach within which the IT function can design, deploy, and execute the organization's business strategy.

### *Objectives*

Enable the IT function to align its strategy with the needs of the business strategy.

Define the technical standards and operating principles for guiding business solution design and technology choices.

Ensure consistency and integration across process, information, application, and infrastructure for optimal business performance.

Reduce business complexity through the reuse and sharing of functional components, and through standardization of technologies and infrastructure.

Improve business processes and enhance productivity across the organization by unifying and integrating data linkages.

Promote sound architecture management practices and governance.

Minimize and manage business, IT, and project-level risks through more informed portfolio and solutions planning.

*Value*

The EAM capability helps determine how the organization can most effectively plan the use of technology to achieve its current and future objectives.

*Management Artefacts*

Documented Enterprise Architecture Deliverables

Documented Architecture Development Methodology

Enterprise Architecture Tool Set and Repository

## ISM — Information Security Management

The Information Security Management (ISM) capability is the ability to manage approaches, policies, and controls that safeguard the integrity, confidentiality, accessibility, accountability, and usability of digitized information resources. The ISM capability covers:

Preventing unauthorized access, use, disclosure, disruption, modification, or destruction of digitized information resources.

Establishing an information security governance model, including allocating roles, responsibilities, and accountabilities.

Measuring the effectiveness of existing security approaches, policies, and controls — for example, by applying security standards and conducting internal audits.

Managing security-related communications and training of employees.

Assessing, prioritizing, responding to, and monitoring information security risks and incidents.

Securing physical IT components and IT areas.

Providing expertise to protect, preserve, and/or destroy data in line with business, regulatory, and/or other security requirements.

Reporting on information security activities and compliance levels.

### *Goal*

To protect the information held by the organization from damage, to prevent its harmful use (to people or organizations), and to facilitate its legitimate operational and business use.

### *Objectives*

Facilitate information security approaches, policies, and controls, both during normal business operations and in the event of significant information security incidents, to safeguard the organization's information resource's:

- Integrity (that is, its accuracy and completeness)
- Confidentiality (that is, its protection from theft or unauthorized disclosure)
- Accountability (that is, its traceability and authenticity)
- Usability (that is, its fitness for purpose)
- Availability (that is, its accessibility and access controls)

Ensure that all information security incidents and suspected security weaknesses are reported through suitable channels, so that they are appropriately investigated and dealt with.

Help employees maintain appropriate levels of awareness and skills to minimize the occurrence and severity of information security incidents.

Provide assurance to stakeholders and regulators that information security approaches, policies, and controls function as intended — that is, they help discover, prevent, and minimize threats and breaches.

Ensure key stakeholders are accepting of the residual risk remaining after the information security technical analysis and mitigation actions for identified security threats have been taken.

#### *Value*

The ISM Capability can help reduce the frequency and limit the adverse effects of information security breaches.

#### *Management Artefacts*

Incident Log

Risk Register

IT Security Management Software

Information Security Management Policy

Vulnerabilities and Patch Availability Database

## **KAM — Knowledge Asset Management**

The Knowledge Asset Management (KAM) capability is the ability to identify, capture, profile, classify, store, maintain, protect, and exploit the organization's knowledge assets in pursuit of business outcomes. The KAM capability covers:

Establishing a knowledge management policy, strategy, and programme.

Assigning roles and accountabilities, and determining requisite employee skills.

Fostering a knowledge-sharing culture.

Providing tools, technologies, and other resources to support knowledge management

Managing the knowledge asset life cycle, from identifying, capturing, profiling, classifying, storing, and maintaining, to archiving or discarding, as appropriate.

Assessing the impact of knowledge asset management activities.

### *Goal*

To enable employees to capture, share, develop, and leverage their collective knowledge to improve the performance of knowledge-based business activities and decision-making.

### *Objectives*

Get the right knowledge, to the right people, at the right time, and thereby improve the quality of decision-making.

Promote access to formalized documented knowledge and also to tacit, contextual knowledge by facilitating collaboration and communication between employees and, where appropriate, between employees and external experts.

Scan the business environment to identify knowledge that is relevant to the organization.

Organize and index knowledge assets so that they can be easily found and accessed.

Measure the use and impact of knowledge assets for relevant organizational activities including, for example, research and development, operations, and training.

### *Value*

The KAM capability facilitates better learning and decision-making by leveraging relevant knowledge.

*Management Artefacts*

Knowledge Strategy Document

Knowledge Asset Repository

Knowledge Domain Experts Register

## **PAM — People Asset Management**

The People Asset Management (PAM) capability is the ability to meet the organization's requirements for an effective IT workforce. The PAM capability covers:

- Defining and implementing an IT workforce strategy.
- Implementing Human Resources (HR) policies.
- Defining IT job families and career development models.
- Establishing a compensation and incentive system.
- Defining and managing organizational culture.
- Monitoring and managing employee satisfaction.
- Defining and managing the IT function's branding and the IT employee recruitment process.
- Managing IT employee deployment into specific roles.
- Managing the evaluation of IT employee performance.
- Managing IT employee development.
- Establishing an IT employee promotion process.
- Succession planning for key IT roles.
- Managing IT employee turnover, termination, and post-employment relations (for example through alumni networking).

### *Goal*

To manage the IT workforce's employment life cycle to ensure adequate availability of competent employees.

### *Objectives*

- Establish an effective recruitment process that attracts the best qualified candidates.
- Identify, manage, and retain talented and high-potential employees.
- Incentivize employee productivity, satisfaction, and motivation, and reduce turnover rates.
- Link employee compensation and incentives to performance goals.



Promote career development by providing mentoring, training, and education.

Proactively plan for employee succession to provide continuity in key organizational positions.

*Value*

The PAM capability helps ensure that the employees with the right skills and competences are available to support the achievement of organizational objectives.

*Management Artefacts*

IT Workforce Strategy

HR Policies

Job Families

Career Development Model

Training Catalogue

## **PDP — Personal Data Protection**

The Personal Data Protection (PDP) capability is the ability to develop, deploy, and implement policies, systems, and controls for processing personal and sensitive personal data relating to living persons in all digital, automated, and manual forms. It ensures that the organization safeguards the right to privacy of individuals whose information it holds, and that the organization uses personal data strictly for legitimate business purposes.

Policies, systems, and controls encompass and give effect to relevant Standards and regulations, which may differ from country to country. The organization must consider the jurisdictions in which the data is acquired, processed, stored, and in some cases through which it is transmitted to identify what regulations are relevant.

The PDP capability covers:

Processing personal data throughout its life cycle.

Maintaining the quality and integrity of personal data.

Identifying and communicating data protection regulations and standards.

Raising awareness and establishing a privacy culture.

Managing data protection relationships and agreements with third parties.

Communicating information (on database registrations, data breaches, audit data and so on) with statutory data protection officers.

Managing data privacy risks and conducting privacy impact analysis assessments.

Managing data subject rights.

Identifying and applying applicable data protection standards and regulations.

Verifying the effectiveness of data protection policies.

### *Goal*

To protect personal data from unintended disclosure or use when it is acquired, used, retained, or disposed of.

### *Objectives*

Comply with relevant data protection regulations.

Develop and deploy data protection policies, systems, and controls for appropriate acquisition, use, retention and deletion/erasure of personal data.

Manage timely communication and registration with statutory officers regarding data protection breaches and near incidents.

Verify the effectiveness of data protection policies and controls.

Develop, test, and deploy incident management processes and procedures.

*Value*

The PDP capability promotes uniformity and consistency in the way personal data is collected, managed and used to mitigate exposure to legal liability and negative publicity, and to build a culture of awareness of the need and responsibility for protecting personal data.

*Management Artefacts*

Risk Register (personal data protection view)

Privacy Impact Assessment

Personal and Sensitive Personal Data Register

## PPM — Programme and Project Management

The Programme and Project Management (PPM) capability is the ability to initiate, plan, execute, monitor, control, and close programmes and projects in line with the business objectives, and to manage associated risks, changes, and issues. The PPM capability covers:

Establishing governance Structures, such as programme/project reporting lines, stage gate reviews, and the roles, responsibilities, and accountabilities required to support programme and project management.

Establishing and adopting approaches to initiate, plan, execute, monitor, control, and close individual programmes and projects.

Identifying and using appropriate programme/project management methodologies, tools, and techniques.

Defining and developing the necessary programme/project management competences of individuals.

Managing programme/project risks, changes, and other issues.

Implementing lessons learned from programme and project execution.

### *Goal*

To provide a methodical approach to achieving business objectives when planning, executing, and closing programmes and projects.

### *Objectives*

Increase predictability in programme and project outcomes with respect to schedule, cost, and quality parameters.

Improve consistency in handling programme and project changes and risks.

Improve ability to drive strategic change and establish new capabilities in the organization, through effective programme and project delivery.

Improve business value realization from programmes and projects, with effective utilization of capital investments.

### *Value*

The PPM capability helps ensure that programmes and projects are run in an agile and consistent manner to support the timely and predictable realization of expected business benefits.

*Management Artefacts*

Project Schedule/Gantt Chart

Programme Performance Dashboard

Programme/Project Risk Scorecard

Programme/Project Issues Log

## REM — Relationship Management

The Relationship Management (REM) capability is the ability to analyse, plan, maintain, and enhance relationships between the IT function and the rest of the business. The REM capability covers:

Understanding the IT function's web of formal and informal relationships across the organization.

Developing programmes to enhance relationships between the IT function and the rest of the business.

Acting as a conduit for real-time, bi-directional knowledge transfer between the IT function and the rest of the business.

### *Goal*

To ensure that liaison and long-term interaction between the IT function and other business units foster business awareness, mutually align interests, and help minimize issues of conflict.

### *Objectives*

Increase the opportunities for innovation and collaboration by fostering openness and knowledge sharing between the IT function and other business units.

Use collaborative engagement approaches to guide business units through the technology element of projects.

Overcome internal organizational politics by championing mutual interests.

Earn the IT function a trusted-adviser and honest-broker status with other business units.

### *Value*

The REM capability enhances goodwill, trust, and confidence between the IT function and the rest of the business.

### *Management Artefacts*

Account Management Plan

Innovation Lab

IT Annual Report

Business (Unit) Profiles

Business Relationship Call Logs

IT Services Catalogue

## **RDE — Research, Development and Engineering**

The Research, Development and Engineering (RDE) capability is the ability to investigate, acquire, develop, and evaluate technologies, solutions, and usage models that are new to the organization and might offer value. The RDE capability covers:

Ensuring that research into new technologies is managed appropriately, so that risk to the organization is minimized, while opportunities are maximized.

Linking research into new technology to potential usage models that can benefit business units.

Coordinating a research pipeline of promising new technology projects, through a series of phased investment decisions, as understanding of feasibility and relevance is enhanced.

Managing the research portfolio to better align with business goals.

Instilling an organizational culture that promotes research and innovation.

Measuring the value contributed by technology research activities.

### *Goal*

To identify new technologies that can deliver business value to the organization.

‘New’ in this context ‘means things that are new to the organization, including technologies, solutions, and usage models. These could be well established elsewhere (outside the organization) but would be considered new if they had not already been applied within the organization. Of course, ‘new’ also includes technologies that are universally new or emerging.

### *Objectives*

Identify the promising technologies and usage models that are likely to deliver value.

Limit investments in potentially unpromising technologies through phased investment decisions.

Increase organizational awareness of the accepted approach for identifying and developing new technologies and usage models that are likely to deliver business value.

Manage the pipeline of new technologies and usage models so that business value returns are optimized.



*Value*

The RDE capability enables the organization to investigate how best to use new technologies and usage models to deliver business value.

*Management Artefacts*

Guidelines for New Technology Research Intelligence Gathering

Repository of New Technology Research Projects

Ideation Platform

New Technology Research Performance Report

Innovation Lab

## **SRP — Service Provisioning**

The Service Provisioning (SRP) capability is the ability to manage the life cycle of IT services to satisfy business requirements. This includes ongoing activities relating to operation, maintenance, and continual service improvement, and also transitional activities relating to the design and introduction of services, their deployment, and their eventual decommissioning. The SRP capability includes:

Defining and describing the services provided by the IT function.

Managing the IT services catalogue.

Managing IT service configuration.

Managing IT service availability.

Managing the IT service desk.

Managing requests, incidents, and problems.

Managing access to IT services.

Addressing requests for new IT services and decommissioning unwanted IT services.

Managing IT service levels and service level agreements (SLAs).

### *Goal*

To identify, deliver, and manage the IT services that enable the organization to meet its defined business objectives.

### *Objectives*

Implement a transparent process for monitoring the services that the IT function provides to its customers in the organization and address any problems as soon as they appear.

Improve IT helpdesk productivity by quickly resolving any requests from customers, preferably during the initial contact with the customer.

Where IT services do fail, restore them as quickly as possible, and plan proactively for any necessary IT service disruptions.

Support business change while maintaining a stable IT service environment.

Promote active stakeholder management of users and customers.

Maintain the services portfolio so that it is fit for purpose and aligned to the organization's objectives.

*Value*

The SRP capability helps to ensure that the organization's strategy and objectives are supported by reliable and effective IT services.

*Management Artefacts*

IT Services Catalogue

Service Level Agreement (SLA)

Operational Level Agreement (OLA)

Configuration Management Database (CMDB)

IT Service Management Software Suite

## **SD — Solutions Delivery**

The Solutions Delivery (SD) capability is the ability to design, develop, validate, and deploy IT solutions that effectively address the organization's business requirements and opportunities. The SD capability covers:

Managing requirements (functional and non-functional) and their traceability throughout the IT solution's delivery life cycle.

Developing IT solutions based on the output from requirements analysis and the solution's architecture.

Selecting appropriate methods and IT solutions delivery life cycle models (for example, waterfall, incremental, agile).

Reviewing and testing IT solutions throughout the development process.

Managing changes and releases that occur during the IT solution's delivery life cycle.

### *Goal*

To develop IT solutions that are effective in meeting business needs.

### *Objectives*

Manage business requirements, contain development costs, and reduce the time to market for IT solutions.

Adopt flexible solutions development and delivery methodologies based on the project context — for example, waterfall, agile, or a hybrid of the two.

Ensure that IT solutions follow agreed development methodologies regardless of where they are developed within the organization — within the IT function or within other business units.

Employ built-in assurance mechanisms that enhance the quality of IT solutions to better meet business requirements and service standards.

Design and develop stable and flexible IT solutions that can easily be maintained and updated to meet future demands of the organization.

### *Value*

The SD capability ensures a balance between quality, costs, and schedule during the development of IT solutions to meet organizational objectives.

*Management Artefacts*

Solutions Development Methodologies

Systems Requirements Log

Functional and Non-functional Requirements Log

## **SUM — Supplier Management**

The Supplier Management (SUM) capability is the ability of the IT function to manage interactions with its suppliers in line with the sourcing strategy. The SUM capability covers:

Developing relationships with suppliers to improve levels of performance, quality, and innovation.

Managing risks associated with the organization's use of outside suppliers.

Validating that suppliers' performance is in accordance with contract terms.

Facilitating lines of communication with suppliers.

Managing procurement activities with suppliers.

Building two-way performance evaluation between the IT function and its suppliers.

### *Goal*

To manage interactions between the IT function and its suppliers.

### *Objectives*

Translate the sourcing strategy into supplier performance objectives and relationship management activities.

Strike an appropriate balance between cost efficiency and supply/service quality.

Foster collaboration, trust, empathy, open communication, and a desire for mutual benefit to encourage co-innovation with preferred suppliers.

Ensure the integrity of supplier performance monitoring.

Identify constraints and scope for manoeuvre when (re)negotiating supplier contracts.

Use suppliers' expertise and innovation to support and inform the IT services' development roadmap.

Engage proactively with suppliers to resolve incidents, problems, or poor performance.

Manage supply risks across the portfolio of suppliers.

### *Value*

The SUM capability helps the IT function to build cooperative relationships with its suppliers, with a view to optimizing costs, creating shared value, and reducing supply-related risks.

*Management Artefacts*

Supplier Relationship Management Systems

Supplier Management Balanced Scorecards

Service Level Agreements (SLAs)

Operational Level Agreements (OLAs)

## **TIM — Technical Infrastructure Management**

The Technical Infrastructure Management (TIM) capability is the ability to manage an organization's IT infrastructure across the complete life cycle of:

Transitional activities including building, deploying, and decommissioning infrastructure.

Operational activities including operation, maintenance, and continual improvement of infrastructure.

IT infrastructure is comprised of:

- Physical devices — for example, servers, storage, and mobile devices.
- Virtual devices/resources — for example, virtual storage and virtual networks.
- Infrastructure-related software — for example, middleware, operating systems, and firmware.
- Communications components — for example, LAN/WAN, Wi-Fi, MPLS, and voice infrastructure.
- Platform services — for example, content management and web services.
- IT infrastructure governance — for example, asset management and configuration management.

### *Goal*

To holistically manage all physical and virtual components of the IT infrastructure to support the introduction, maintenance, and retirement of IT services.

### *Objectives*

Provide technical infrastructure stability, availability, and reliability through effective operation, maintenance, and retirement of infrastructure components.

Provide technical infrastructure adaptability and flexibility through forward-planning when creating, acquiring, improving, and disposing of infrastructure components.

Provide seamless interoperability across different kinds of infrastructure components.

Protect technical infrastructure and the data that flows through it.

Make provision for effective infrastructure utilization.



*Value*

The TIM capability provides a reliable, flexible, secure, and operationally efficient IT infrastructure to meet business requirements.

*Management Artefacts*

Documentation of the Policies and Approaches for Life Cycle Management of the IT Infrastructure

IT Infrastructure Roadmap

Remote Infrastructure Management (RIM) Platform

Configuration Management Database (CMDB)

Mobile Device Management (MDM) Platform

## UED — User Experience Design

The User Experience Design (UED) capability is the ability to proactively consider the needs of users at all stages in the life cycle of IT services and solutions. The UED capability covers:

Designing IT services and solutions that both meet business objectives and satisfy user needs.

Arriving at an understanding of users' preferences in their interactions with IT services and solutions.

Designing 'mock' environments of IT services and solutions to enable evaluation from a user experience perspective.

Gathering users' experiences through qualitative and quantitative methods — for example, through surveys, focus groups, and interviews.

### *Goal*

To address both the usability and the usefulness of IT services and solutions across various audiences, purposes, and contexts of use.

- Usability relates to the ease with which IT services and solutions can be used from a user's perspective.
- Usefulness relates to how well IT services and solutions serve their intended purposes.

### *Objectives*

Shift from technology-centric to user-centric design of IT services and solutions; in other words, make the transition from designing within the engineering boundaries or limitations of the technology to designing IT services and solutions around the needs of those who will use them.

Place the user's experience of the IT service or solution (rather than the service or solution itself) at the centre of design and development — for example, a user's experience of email may rely on computer hardware performance, network connectivity, email client usability, user proficiency, purpose of the task, and the environment/context of access.

Consider users' experiences across their interactions with IT services and solutions — including their knowledge about the range of services available, their experiences of taking delivery of services and using services, the training and support they require or receive, how upgrades are handled, and how redundant services are removed.

Adopt a user experience design approach that reduces development time and cost, and produces IT services and solutions that satisfy both business and user objectives.

*Value*

The UED capability helps increase levels of proficiency and productivity by using actionable information obtained from users in the design and maintenance of IT services and solutions.

*Management Artefacts*

Artefacts to Support User Experience Research Methods

Artefacts to Support User Experience Communication Methods

Artefacts to Support User Design Conceptualization Methods

## UTM — User Training Management

The User Training Management (UTM) capability is the ability to provide training that will improve user proficiency in the use of business applications and other IT-supported services.

The UTM capability covers:

Ensuring that users achieve the required level of proficiency by providing appropriate training to those users who need it, when they need it, in a way that supports the organization's operational needs cost-efficiently.

Delivering user training on business applications, other IT-supported services, and applications used for IT service and hardware management.

Delivering training associated with IT-supported security, governance policies, industry regulations, acceptable use policies, and so on.

Assessing the impact of IT-supported training on user proficiency and productivity in the work environment.

### *Goal*

To ensure that users acquire the skills they need to use business applications and other IT-supported services effectively.

### *Objectives*

Enhance the organization's efficiency and productivity by ensuring users receive the training they need to use business applications and other IT-supported services.

Reduce disruption to the organization's operations due to retraining or upskilling when business applications and other IT-supported services are deployed or upgraded.

Improve user satisfactions levels with business applications and other IT-supported services.

Reduce user support costs in, for example, helpdesk and related areas.

### *Value*

The UTM capability ensures that users are proficient and productive in their use of business applications and other IT-supported services.

*Management Artefacts*

User Training Management Plan

Training Content Knowledge Base

Database of Training Needs

Training Impact Assessment Method

# **Managing IT for Business Value**

## **BAR — Benefits Assessment and Realization**

The Benefits Assessment and Realization (BAR) capability is the ability to forecast, realize, and sustain value from IT-enabled change initiatives. The BAR capability covers:

Establishing systematic, objective, and consistent approaches to managing benefits across the full investment life cycle for IT-enabled change — that is, from benefits forecasting and planning, to benefits reviewing and reporting.

Identifying and advocating cultural and behavioural changes to maximize the value of IT-enabled change.

### *Goal*

To forecast, crystalize, and sustain the business benefits arising from IT-enabled change initiatives.

### *Objectives*

Increase organizational awareness, understanding, and commitment to the importance of creating a value mind-set/culture and sustaining business value from IT-enabled change.

Promote the message that benefits do not come from technology in and of itself, but rather from the change that technology shapes and enables — change that must be led and managed.

Focus management on outcomes of IT-enabled change initiatives and measurable benefits rather than on activities.

Create management approaches to assess potential benefits and likely costs in a transparent and inclusive manner, with a focus on continual learning and improvement.

Define transparent links between IT services and solutions (that is, what is produced or delivered) and their business impact (that is, their expected contribution to business objectives).

Manage organizational interactions across complementary actions, such as process re-design, training, cultural/behavioural change, and incentive structures, to deliver and sustain the business benefits enabled by IT.

Create a common language for describing business benefits arising from technology — for example, achievement of a business result (or end-outcome) that a Stakeholder perceives to be of value (which may not necessarily be of financial value).

Broaden employees' focus beyond efficient implementation and operation of technology to include the effective delivery of business benefits from technology implementation and operation across the full life cycle of the investment.

### *Value*

The BAR capability helps an organization forecast and manage the realization of benefits from IT-enabled change initiatives.

### *Management Artefacts*

Library of Business Value Indicators

Benefits Plan

Business Case Template

Benefits Dependency Map



## PM — Portfolio Management

The Portfolio Management (PM) capability is the ability to monitor, track, and analyse the programmes in the IT portfolio, and to report on their status. The PM capability covers:

Monitoring and tracking the progress and impact of programmes within the portfolio.

Reviewing the programmes in the portfolio for adherence to the original business case.

Monitoring utilization rates against planned resource allocations, including financial, technical, and people resources.

Providing the Portfolio Planning and Prioritization (PPP) capability with an up-to-date portfolio status, including any deviations beyond a defined threshold on progress and expected impact.

### *Goal*

To monitor and report on the status of an investment portfolio of IT programmes.

### *Objectives*

Monitor ongoing risks, progress deviations, and other factors that might impact on the portfolio's success.

Improve consistency in the evaluation of the portfolio's current status.

Support timely delivery of programmes within the portfolio through effective monitoring of resource allocation and use.

Improve confidence that the programmes in the portfolio remain aligned with the organization's overall strategy and business objectives.

Amplify business value realization across related programmes.

### *Value*

The PM capability helps ensure that the status of programmes is closely tracked to support early identification of potential issues and to minimize programme delivery conflicts.

### *Management Artefacts*

Portfolio Report

Portfolio Dashboard

Scenario Analysis Model

## TCO — Total Cost of Ownership

The Total Cost of Ownership (TCO) capability is the ability to identify, compare, and control all direct and indirect costs associated with IT assets and IT-enabled business services. The TCO capability covers:

Identifying and analysing IT costs across asset and service life cycles, from acquisition to operations, enhancements, and end of life.

Identifying all costs that both directly and indirectly affect the bottom line — for example hardware and software acquisition, management and support, communications, training, end-user expenses, the opportunity cost of downtime, and other productivity losses.

Establishing a common methodology for comparing costs within and across IT assets, processes, and services.

### *Goal*

To collect, analyse, and disseminate data on all costs associated with an IT asset or IT-enabled business service throughout its life cycle, from initial acquisition, through deployment, operations, and maintenance, to its eventual removal.

### *Objectives*

Establish a standardized method of estimating, tracking, comparing, and managing the life cycle costs of IT assets and IT-enabled business services.

Improve IT investment decisions by systematically comparing the incremental costs (direct and indirect) of competing systems to the full costs of existing systems.

Raise awareness in the organization of the full costs of IT, and promote strategic budgeting by collecting and disseminating data on the full life cycle costs of technology.

Improve the accuracy of total cost of ownership forecasts based on lessons learned from comparing forecasted and actual costs incurred.

### *Value*

The TCO capability analyses the life cycle costs associated with IT assets and IT-enabled business services. It facilitates investment selections, drives service improvements, and helps control costs.

*Management Artefacts*

Total Cost of Ownership Policy and Models

Cost Tracking Database

Configuration Management Database (CMDB)