



# **Governance and Management of Information and Related Technologies Manual**

## **Bank of Jordan**



## Contents

<b>1. Introduction</b>	<b>3</b>
<b>2. Scope</b>	<b>3</b>
<b>3. Definitions</b>	<b>4</b>
<b>4. Objectives</b>	<b>5</b>
<b>5. Committees</b>	<b>6</b>
<b>6. Internal and External Audit</b>	<b>8</b>
<b>7. Key Principles of the Governance Framework</b>	<b>8</b>
<b>8. Goals Setting and Cascading</b>	<b>10</b>
<b>9. General Policies</b>	<b>11</b>
<b>10. Review and Develop the Manual</b>	<b>12</b>
<b>Appendix A: Goals Cascade</b>	<b>13</b>
<b>Appendix B: Matrix of Enterprise Goals</b>	<b>14</b>
<b>Appendix C: Matrix of Information and Related Technology Goals</b>	<b>16</b>



## 1. Introduction

Bank of Jordan has recognized that the board and executives need to embrace IT like any other significant business asset in the Bank. The Board of Directors and executive management—in both the business and IT functions—collaborated and worked together to include IT within the governance and management approach.

The bank has taken the initiative to use the COBIT5 framework for the Governance and Management of Information and Related technology to assist the bank in achieving its objectives for the governance and management of enterprise IT. Simply stated, to create optimal value from IT by maintaining a balance between realizing benefits and optimizing risk levels and resource use. COBIT5 enables the bank to govern and manage the IT in a holistic manner for the entire enterprise, taking in the full end-to-end business and IT functional areas of responsibility, considering the IT-related interests of internal and external stakeholders.

This manual should be read together with the bank's corporate governance manual.

## 2. Scope

The scope of implementing this guide includes - on group level each country according to its local regulations - all the bank's operations based on information technology in various branches and departments. All stakeholders shall be concerned with applying the instructions, each in its respective role and location.

Key stakeholders and their responsibilities:

- Chairman and Board of Directors: Shall be assigned responsibilities of overall direction of the governance project/program, approve tasks and responsibilities within the project, and support and provide needed funds.
- General Manager and assistants, and executive managers: Shall assigned responsibility of hiring the right experienced people in the Bank's operations to represent them in the project and characterize their tasks and responsibilities.
- General Manager and the steering committee of information technology and the project managers: take over the responsibilities of the project/program management.
- Internal Audit: participate in the IT governance project/program, representing the role of internal audit in executive matters as a consultant and independent observer to facilitate the success and completion of the project/program.
- Risks, information security, compliance and legal departments: take over the responsibilities involved in the IT governance project/program, representing



the role of those departments, and to ensure the representation of project/program by all interested parties.

- The bank’s board shall have direct responsibility for the five processes of Governance (EDM) (Evaluate, Direct and Monitor) listed in Appendix C.
- The bank’s Board and the Risk Management Department shall take over direct responsibility for the process of "Ensure Risk Optimization" (EDM 03) and the process of “Manage Risk” (APO12)

### 3. Definitions

<b>Governance</b>	Governance ensures that stakeholder needs, conditions and options are evaluated to determine balanced, agreed-on enterprise objectives to be achieved; setting direction through prioritization and decision making; and monitoring performance and compliance against agreed-on direction and objectives.
<b>COBIT5</b>	Formerly known as Control Objectives for Information and related Technology (COBIT); now used only as the acronym in its fifth iteration. A complete, internationally accepted framework for governing and managing enterprise information and technology (IT) that supports enterprise executives and management in their definition and achievement of business goals and related IT goals. COBIT describes five principles and seven enablers that support enterprises in the development, implementation, and continuous improvement and monitoring of good IT-related governance and management practices.
<b>Control</b>	The means of managing risk, including policies, procedures, guidelines, practices or organizational structures, which can be of an administrative, technical, management or legal nature. also used as a synonym for safeguard or countermeasure.
<b>Enterprise goal</b>	Business goal
<b>Governance framework</b>	A framework is a basic conceptual structure used to solve or address complex issues; an enabler of governance; a set of concepts, assumptions and practices that define how something can be approached or understood, the relationships amongst the entities involved, the roles of those involved, and the boundaries (what is and is not included in the governance system).
<b>Governance of enterprise IT</b>	A governance view that ensures that information and related technology support and enable the enterprise strategy and the achievement of enterprise objectives. It also includes the functional governance of IT, i.e., ensuring that IT capabilities are provided efficiently and effectively.



<b>IT goal</b>	A statement describing a desired outcome of enterprise IT in support of enterprise goals. An outcome can be an artefact, a significant change of a state or a significant capability improvement.
<b>Process</b>	Generally, a collection of practices influenced by the enterprise's policies and procedures that takes inputs from a number of sources (including other processes), manipulates the inputs and produces outputs (e.g., products, services).
<b>The Board</b>	The Board of Directors of the Bank
<b>Senior Executive Management</b>	Includes Bank's general manager, assistant general manager or, CFO, COO, Director of Risk Management.
<b>Stakeholders</b>	Any interested party in the bank, such as shareholders, employees, creditors, customers, suppliers or external concerned regulatory bodies.

#### 4. Objectives

The Bank has set the following objectives of the governance and management of information and related technology framework:

4.1. Meet stakeholder needs and achieve the objectives of the bank through the utilization of an established governance framework that:

- Facilitate the creation of value by delivering expected benefits, optimizing risk, and optimizing resources.
- Provides the relevant and credible information that lead to effective and efficient of making decision.
- Provide technological infrastructure that aligns with the bank's objectives.
- Enhance the bank's operations by employing efficient, reliable and purpose-driven technological systems.
- Strict the risk management of information technology to ensure the necessary protection of the bank's assets.
- Compliance with the relevant laws, regulations, contractual agreements and internal policies.
- Improve the reliability of the internal control environment.
- Improve relations between business needs and IT objectives.
- Management of external party's services entrusted with carrying out operations, services and products to deliver the expected value.



- 4.2. Utilizes the COBIT5 process as reference model to design efficient and effective solutions to delivery of value to stakeholders.
- 4.3. Adopting international standards as baseline for govern and manage the information and related technology.

## 5. Committees

The bank has established the necessary committees to govern and direct the governance framework in the bank.

### 5.1. Governance of Information Technology Committee.

#### 5.1.1. Members:

This committee shall be formed from the board of directors itself at least three members, and preferably include people with experience or strategic knowledge in information technology.

The committee shall meet on a quarterly basis at least, maintains documented records of the meetings

The committee may invite General Manager and/or assistants, and/or executive managers to the meeting when needed.

#### 5.1.2. Committee Duties

- 5.1.2.1. Set the strategic goals of information technology and appropriate organizational chart, including the steering committee at the executive management level and in particular “Information Technology Executive Steering Committee” to be aligned with enterprise strategic goals.
- 5.1.2.2. Adopting framework for managing, controlling and monitoring of IT projects and their resources based on international best practices in this regard to achieve enterprise goals and the IT-related goals.
- 5.1.2.3. Approve the enterprise goal cascade to IT-related Goals
- 5.1.2.4. Approve the RACI chart for the IT governance and related processes
- 5.1.2.5. Ensure the effectiveness of IT risk management, and aligned with overall risk management of the enterprise.
- 5.1.2.6. Approve the IT project and budget based on the enterprise goals
- 5.1.2.7. Supervise and review processes, resources, and IT projects to ensure their efficiency and effectiveness to fulfill the business requirements.



- 5.1.2.8. Review audit reports for information technology and take the necessary corrective action for any deviations
- 5.1.2.9. Escalate recommendations for the Board regard taking corrective action for any deviations.

## **5.2. Information Technology Executive Steering Committee.**

### **5.2.1. Members:**

Shall be formed and headed by the general manager and with the membership of senior executive managers, including the head of information technology.

One of its members shall be elected to be an observer member in this committee.

The committee shall meet on a quarterly basis at least, maintains documented records of the meetings

The committee can invite third parties to attend the meetings when needed.

### **5.2.2. Committee Duties:**

- 5.2.2.1. Prepare, supervise the execution and monitor the annual plan based on the approved enterprise strategic plan.
- 5.2.2.2. Cascade the enterprise goals with IT-related goals and review to ensure they achieve the strategic plan.
- 5.2.2.3. Recommending resources allocation to achieve the goals and related processes of IT governance.
- 5.2.2.4. Prioritize the IT projects
- 5.2.2.5. Monitor the services and related technology to improve their effectiveness and efficiency
- 5.2.2.6. Recommend to Governance of Information Technology Committee in regard to:
  - 5.2.2.6.1. The necessary resources and mechanism to achieve the strategic goals
  - 5.2.2.6.2. Any deviation that effects the achievement of strategic goal
  - 5.2.2.6.3. Any unacceptable risk that is related to IT or information security
  - 5.2.2.6.4. Performance report, compliance with general framework of manage, control, and monitor of IT projects and their resources.



5.2.2.7. Provide the Committee of Governance of Information Technology with minutes of meeting

## 6. Internal and External Audit

The Board shall monitor adequate budgets and allocate the necessary tools and resources, including qualified personnel, through specialized IT audit departments.

The Internal Audit Department of the Bank and the External Auditor should be qualified and holding international professional certification related to the field.

### 6.1. Duties:

6.1.1. Both Internal and external audit will review and audit the allocation of resources and its management, IT projects, and the bank's operations based on a specialized technical review

6.1.2. The external audit to provide with an annual report in the first quarter of each year. The report shall cover Risk and Control of IT and related technology and includes the Executive Management's response and the Board's recommendations regarding it.

6.1.3. The Audit Committee shall include the responsibilities, authorizations and scope of the IT audit process within audit charter and within agreed process with external audit.

## 7. Key Principles of the Governance Framework

The governance framework of information and related technology at the Bank will be based on five key principles of COBIT 5:

### • **Principle 1: Meeting Stakeholder Needs:**

Enterprises exist to create value for their stakeholders by maintaining a balance between the realization of benefits and the optimization of risk and use of resources. COBIT provides all of the required processes and other enablers to support business value creation through the use of IT. Because every enterprise has different objectives, an enterprise can customize COBIT 5 to suit its own context through the goals cascade, translating high-level enterprise goals into manageable, specific, IT-related goals and mapping these to specific processes and practices.

### • **Principle 2: Covering the Enterprise End-to-end:**

**COBIT** integrates governance of enterprise IT into enterprise governance: It covers all functions and processes within the enterprise; COBIT does not focus only on the 'IT function', but treats information and related technologies as assets that need to be dealt with just like any other asset by everyone in the enterprise. – It considers all IT-



related governance and management enablers to be enterprise wide and end-to-end, i.e., inclusive of everything and everyone—internal and external—that is relevant to governance and management of enterprise information and related IT.

• **Principle 3: Applying a Single, Integrated Framework:**

There are many IT-related standards and good practices, each providing guidance on a subset of IT activities. COBIT aligns with other relevant standards and frameworks at a high level, and thus can serve as the overarching framework for governance and management of enterprise IT.

• **Principle 4: Enabling a Holistic Approach:**

Efficient and effective governance and management of enterprise IT require a holistic approach, taking into account several interacting components. COBIT defines a set of enablers to support the implementation of a comprehensive governance and management system for enterprise IT. Enablers are broadly defined as anything that can help to achieve the objectives of the enterprise. The COBIT framework defines seven categories of enablers:

1. Principles, Policies and Frameworks
2. Processes
3. Organizational Structures
4. Culture, Ethics and Behavior
5. Information
6. Services, Infrastructure and Applications
7. People, Skills and Competencies

• **Principle 5: Separating Governance from Management:**

The COBIT framework makes a clear distinction between governance and management. These two disciplines encompass different types of activities, require different organizational structures and serve different purposes.

**Governance:** ensures that stakeholder needs, conditions and options are evaluated to determine balanced, agreed-on enterprise objectives to be achieved; setting direction through prioritization and decision making; and monitoring performance and compliance against agreed-on direction and objectives.

**Management:** plans, builds, runs and monitors activities in alignment with the direction set by the governance body to achieve the enterprise objectives.



## 8. Goals Setting and Cascading

Every enterprise operates in a different context; this context is determined by external factors (the market, the industry, geopolitics, etc.) and internal factors (the culture, organization, risk appetite, etc.), and requires a customized governance and management system.

Consistent with the principles and guidance in COBIT 5, The bank will create a governance structure based on stakeholder requirement and value delivery. The bank will also create a sustainable strategy of governance, management and business alignment to stakeholder needs.

The bank has adopted the COBIT 5 goals cascade mechanism to translate stakeholder needs into specific, actionable and customized enterprise goals, IT-related goals and enabler goals. This translation allows setting specific goals at every level and in every area of the bank in support of the overall goals and stakeholder requirements, and thus effectively supports alignment between the bank needs and IT solutions and services.

### **Step 1. Stakeholder Drivers Influence Stakeholder Needs**

Stakeholder needs are influenced by a number of drivers, e.g., strategy changes, a changing business and regulatory environment, and new technologies.

### **Step 2. Stakeholder Needs Cascade to Enterprise Goals**

Stakeholder needs can be related to a set of generic enterprise goals. These enterprise goals have been developed using the balanced scorecard (BSC) dimensions, and they represent a list of commonly used goals that an enterprise may define for itself. Although this list is not exhaustive, most enterprise-specific goals can be mapped easily onto one or more of the generic enterprise goals.

### **Step 3. Enterprise Goals Cascade to IT-related Goals**

Achievement of enterprise goals requires a number of IT-related outcomes, which are represented by the IT-related goals. IT-related stands for information and related technology, and the IT-related goals are structured along the dimensions of the IT balanced scorecard (IT BSC). COBIT 5 defines 17 IT-related goals, listed in figure 6 in the COBIT 5 framework.

### **Step 4. IT-related Goals Cascade to Enabler Goals**

Achieving IT-related goals requires the successful application and use of a number of enablers. The enabler concept is explained in detail in chapter 5 in the COBIT 5 framework. Enablers include:

- 1) Principles, Policies and Frameworks,
- 2) Processes,
- 3) Organizational Structures,
- 4) Culture, Ethics and Behaviors,



- 5) Information,
- 6) Services, Infrastructure and Applications, and
- 7) People, Skills and Competencies

For each enabler, a set of specific relevant goals can be defined in support of the IT-related goals. Processes are one of the enablers, and appendix A in this document contains a mapping between IT-related goals and the relevant COBIT 5 processes, which then contain related process goals.

## 9. General Policies

9.1. In order to achieve the objectives of the governance and management of the information and related technology, the bank will focus on the following governance and management processes, which will support achieving its enterprise goals and IT goals:

### **Evaluate, Direct & Monitor Domain**

1. EDM01 Ensure governance framework setting and maintenance.
2. EDM02 Ensure benefits delivery.
3. EDM03 Ensure risk optimization.
4. EDM04 Ensure resource optimization.
5. EDM05 Ensure stakeholder transparency.

### **Align, Plan & Organize Domain**

6. APO01 Manage the IT management framework.
7. APO02 Manage strategy.
8. APO03 Manage enterprise architecture.
9. APO04 Manage innovation.
10. APO05 Manage portfolio.
11. APO06 Manage budget and costs.
12. APO07 Manage human resources.
13. APO08 Manage relationships.
14. APO09 Manage service agreements.
15. APO10 Manage suppliers.
16. APO11 Manage quality.
17. APO12 Manage risk.
18. APO13 Manage security.

### **Build, Acquire & Implement Domain**

19. BAI01 Manage programmes and projects.
20. BAI02 Manage requirements definition.
21. BAI03 Manage solutions identification and build.
22. BAI04 Manage availability and capacity.
23. BAI05 Manage organizational change enablement.
24. BAI06 Manage changes.
25. BAI07 Manage change acceptance and transitioning.



- 26. BAI08 Manage knowledge.
- 27. BAI09 Manage assets.
- 28. BAI10 Manage configuration.

**Deliver Service & Support**

- 29. DSS01 Manage operations.
- 30. DSS02 Manage service requests and incidents.
- 31. DSS03 Manage problems.
- 32. DSS04 Manage continuity.
- 33. DSS05 Manage security services.
- 34. DSS06 Manage business process controls.

**Monitor, Evaluate & Assess Domain**

- 35. MEA01 Monitor, evaluate and assess performance and conformance.
- 36. MEA02 Monitor, evaluate and assess the system of internal control.
- 37. MEA03 Monitor, evaluate and assess compliance with external requirements.

**10. Review and Develop the Manual**

The Governance of Information Technology Committee should review and develop the manual whenever needed to be in line with regulation, legislation and best practices.



Appendix A: Goals Cascade

Enterprise Goals to IT-related Goals																				
IT-related Goal		Enterprise Goal																		
		1. Stakeholder value of business investments	2. Portfolio of competitive products and services	3. Managed business risk (safeguarding of assets)	4. Compliance with external laws and regulations	5. Financial transparency	6. Customer-oriented service culture	7. Business service continuity and availability	8. Agile responses to a changing business environment	9. Information-based strategic decision making	10. Optimisation of service delivery costs	11. Optimisation of business process functionality	12. Optimisation of business process costs	13. Managed business change programmes	14. Operational and staff productivity	15. Compliance with internal policies	16. Skilled and motivated people	17. Product and business innovation culture		
		Financial	Customer				Internal				Learning and Growth									
Financial	01	Alignment of IT and business strategy	P	P	S				P	S	P	P	S	P	S	P			S	S
	02	IT compliance and support for business compliance with external laws and regulations			S	P											P			
	03	Commitment of executive management for making IT-related decisions	P	S	S				S	S		S		P				S	S	
	04	Managed IT-related business risk			P	S			P	S		P		S		S	S			
	05	Realised benefits from IT-enabled investments and services portfolio	P	P				S	S		S	S	P		S					S
	06	Transparency of IT costs, benefits and risk	S		S		P			S	P		P							
Customer	07	Delivery of IT services in line with business requirements	P	P	S	S			P	S	P	S		P	S	S			S	S
	08	Adequate use of applications, information and technology solutions	S	S	S			S	S		S	S	P	S		P			S	S
Internal	09	IT agility	S	P	S			S		P			P		S	S			S	P
	10	Security of information, processing infrastructure and applications			P	P			P								P			
	11	Optimisation of IT assets, resources and capabilities	P	S					S			P	S	P	S	S				S
	12	Enablement and support of business processes by integrating applications and technology into business processes	S	P	S			S		S		S	P	S	S	S				S
	13	Delivery of programmes delivering benefits, on time, on budget, and meeting requirements and quality standards	P	S	S			S				S		S	P					
	14	Availability of reliable and useful information for decision making	S	S	S	S			P		P		S							
	15	IT compliance with internal policies			S	S											P			
Learning and Growth	16	Competent and motivated business and IT personnel	S	S	P			S		S						P			P	S
	17	Knowledge, expertise and initiatives for business innovation	S	P				S		P	S		S		S				S	P



## Appendix B: Matrix of Enterprise Goals

The bank will adopt the below list of enterprise goals as per the COBIT5 framework, and evaluate the Banks needs on a regular basis to select the most important, relevant goals for each year(s).  
The Bank’s goals will support its stakeholders needs.

Goal #	Goals	Measurements Criteria of Goal Achievement (Examples)
01	Stakeholder value of business investments	<ul style="list-style-type: none"> <li>Percent of investments where value delivered meets stakeholder expectations</li> <li>Percent of products and services where expected benefits are realised</li> <li>Percent of investments where claimed benefits are met or exceeded</li> </ul>
02	Portfolio of competitive products and services	<ul style="list-style-type: none"> <li>Percent of products and services that meet or exceed targets in revenues and/or market share</li> <li>Percent of products and services that meet or exceed customer satisfaction targets</li> <li>Percent of products and services that provide competitive advantage</li> </ul>
03	Managed business risk (safeguarding of assets)	<ul style="list-style-type: none"> <li>Percent of critical business objectives and services covered by risk assessment</li> <li>Ratio of significant incidents that were not identified in risk assessments vs. total incidents</li> <li>Frequency of update of risk profile</li> </ul>
04	Compliance with external laws and regulations	<ul style="list-style-type: none"> <li>Cost of regulatory non-compliance, including settlements and fines</li> <li>Number of regulatory non-compliance issues causing public comment or negative publicity</li> <li>Number of regulatory non-compliance issues relating to contractual agreements with business partners</li> </ul>
05	Financial transparency	<ul style="list-style-type: none"> <li>Percent of investment business cases with clearly defined and approved expected costs and benefits</li> <li>Percent of products and services with defined and approved operational costs and expected benefits</li> <li>Satisfaction survey of key stakeholders regarding the transparency, understanding and accuracy of enterprise financial information</li> <li>Percent of service cost that can be allocated to users</li> </ul>
06	Customer-oriented service culture	<ul style="list-style-type: none"> <li>Number of customer service disruptions due to IT service-related incidents (reliability)</li> <li>Percent of business stakeholders satisfied that customer service delivery meets agreed-on levels</li> <li>Number of customer complaints</li> <li>Trend of customer satisfaction survey results</li> </ul>
07	Business service continuity and availability	<ul style="list-style-type: none"> <li>Number of customer service interruptions causing significant incidents</li> <li>Business cost of incidents</li> <li>Number of business processing hours lost due to unplanned service interruptions</li> <li>Percent of complaints as a function of committed service availability targets</li> </ul>
08	Agile responses to a changing business environment	<ul style="list-style-type: none"> <li>Level of board satisfaction with enterprise responsiveness to new requirements</li> <li>Number of critical products and services supported by up-to-date business processes</li> <li>Average time to turn strategic enterprise objectives into an agreed-on and approved initiative</li> </ul>
09	Information-based strategic decision making	<ul style="list-style-type: none"> <li>Degree of board and executive management satisfaction with decision making</li> <li>Number of incidents caused by incorrect business decisions based on inaccurate information</li> <li>Time to provide supporting information to enable effective business decisions</li> </ul>
10	Optimisation of service delivery costs	<ul style="list-style-type: none"> <li>Frequency of service delivery cost optimisation assessments</li> <li>Trend of cost assessment vs. service level results</li> </ul>



		<ul style="list-style-type: none"><li>• Satisfaction levels of board and executive management with service delivery costs</li></ul>
11	Optimisation of business process functionality	<ul style="list-style-type: none"><li>• Frequency of business process capability maturity assessments</li><li>• Trend of assessment results</li><li>• Satisfaction levels of board and executives with business process capabilities</li></ul>
12	Optimisation of business process costs	<ul style="list-style-type: none"><li>• Frequency of business process cost optimisation assessments</li><li>• Trend of cost assessment vs. service level results</li><li>• Satisfaction levels of board and executive management with business processing costs.</li></ul>
13	Managed business change programmes	<ul style="list-style-type: none"><li>• Number of programmes on time and within budget</li><li>• Percent of stakeholders satisfied with programme delivery</li><li>• Level of awareness of business change induced by IT-enabled business initiatives</li></ul>
14	Operational and staff productivity	<ul style="list-style-type: none"><li>• Number of programmes/projects on time and within budget</li><li>• Cost and staffing levels compared to benchmarks</li></ul>
15	Compliance with internal policies	<ul style="list-style-type: none"><li>• Number of incidents related to non-compliance to policy</li><li>• Percent of stakeholders who understand policies</li><li>• Percent of policies supported by effective standards and working practices</li></ul>
16	Skilled and motivated people	<ul style="list-style-type: none"><li>• Level of stakeholder satisfaction with staff expertise and skills</li><li>• Percent of staff whose skills are insufficient for the competency required for their role</li><li>• Percent of satisfied staff</li></ul>
17	Product and business innovation culture	<ul style="list-style-type: none"><li>• Level of awareness and understanding of business innovation opportunities</li><li>• Stakeholder satisfaction with levels of product and innovation expertise and ideas</li><li>• Number of approved product and service initiatives resulting from innovative ideas</li></ul>



### Appendix C: Matrix of Information and Related Technology Goals

The bank will adopt the below list of IT goals as per the COBIT 5 framework. Based on the selected Enterprise Goals from appendix A above, the Bank will select the related IT goals from the table below, based on COBIT 5 goals cascade mechanism.

Goal	Goal Description	Measurement Criteria for Goals Achievement (Examples)	Related Enterprise Goals <sup>i</sup>
01	Alignment of IT and business strategy	<ul style="list-style-type: none"> <li>Percent of enterprise strategic goals and requirements supported by IT strategic goals</li> <li>Level of stakeholder satisfaction with scope of the planned portfolio of programmes and services</li> </ul>	01, 03, 05, 07, 11, 13
02	IT compliance and support for business compliance with external laws and regulations	<ul style="list-style-type: none"> <li>Cost of IT non-compliance, including settlements and fines, and the impact of reputational loss</li> <li>Number of IT-related non-compliance issues reported to the board or causing public comment or embarrassment</li> <li>Number of non-compliance issues relating to contractual agreements with IT service providers</li> <li>Coverage of compliance assessments</li> </ul>	01, 05, 07, 09, 12, 17
03	Commitment of executive management for making IT-related decisions	<ul style="list-style-type: none"> <li>Percent of executive management roles with clearly defined accountabilities for IT decisions</li> <li>Number of times IT is on the board agenda in a proactive manner</li> <li>Frequency of IT strategy (executive) committee meetings</li> <li>Rate of execution of executive IT-related decisions</li> </ul>	04, 10, 16
04	Managed IT-related business risk	<ul style="list-style-type: none"> <li>Percent of critical business processes, IT services and IT-enabled business programmes covered by risk assessment</li> <li>Number of significant IT-related incidents that were not identified in risk assessment</li> <li>Percent of enterprise risk assessments including IT-related risk</li> <li>Frequency of update of risk profile.</li> </ul>	02, 10
05	Realised benefits from IT-enabled investments and services portfolio	<ul style="list-style-type: none"> <li>Percent of IT-enabled investments where benefit realisation is monitored through the full economic life cycle</li> <li>Percent of IT services where expected benefits are realised</li> <li>Percent of IT-enabled investments where claimed benefits are met or exceeded</li> </ul>	06
06	Transparency of IT costs, benefits and risk	<ul style="list-style-type: none"> <li>Percent of investment business cases with clearly defined and approved expected IT-related costs and benefits</li> <li>Percent of IT services with clearly defined and approved operational costs and expected benefits</li> <li>Satisfaction survey of key stakeholders regarding the level of transparency, understanding and accuracy of IT financial information</li> </ul>	01, 07
07	Delivery of IT services in line with business Requirements	<ul style="list-style-type: none"> <li>Number of business disruptions due to IT service incidents</li> <li>Percent of business stakeholders satisfied that IT service delivery meets agreed-on service levels</li> <li>Percent of users satisfied with the quality of IT service delivery</li> </ul>	04, 10, 14
08	Adequate use of applications, information and technology solutions	<ul style="list-style-type: none"> <li>Percent of business process owners satisfied with supporting IT products and services</li> </ul>	01, 07, 09, 17



		<ul style="list-style-type: none"> <li>• Level of business user understanding of how technology solutions support their processes</li> <li>• Satisfaction level of business users with training and user manuals</li> <li>• Net present value (NPV) showing business satisfaction level of the quality and usefulness of the technology solutions</li> </ul>	
09	IT agility	<ul style="list-style-type: none"> <li>• Level of satisfaction of business executives with IT's responsiveness to new requirements</li> <li>• Number of critical business processes supported by up-to-date infrastructure and applications</li> <li>• Average time to turn strategic IT objectives into an agreed-on and approved initiative</li> </ul>	01, 14
10	Security of information, processing infrastructure and applications	<ul style="list-style-type: none"> <li>• Number of security incidents causing financial loss, business disruption or public embarrassment</li> <li>• Number of IT services with outstanding security requirements</li> <li>• Time to grant, change and remove access privileges, compared to agreed-on service levels</li> <li>• Frequency of security assessment against latest standards and guidelines</li> </ul>	04, 06, 11
11	Optimisation of IT assets, resources and Capabilities	<ul style="list-style-type: none"> <li>• Frequency of capability maturity and cost optimisation assessments</li> <li>• Trend of assessment results</li> <li>• Satisfaction levels of business and IT executives with IT-related costs and capabilities</li> </ul>	01, 07, 08, 09, 12
12	Enablement and support of business processes by integrating applications and technology into business processes	<ul style="list-style-type: none"> <li>• Number of business processing incidents caused by technology integration errors</li> <li>• Number of business process changes that need to be delayed or reworked because of technology integration issues</li> <li>• Number of IT-enabled business programmes delayed or incurring additional cost due to technology integration issues</li> <li>• Number of applications or critical infrastructures operating in silos and not integrated</li> </ul>	05, 06, 11
13	Delivery of programmes delivering benefits, on time, on budget, and meeting requirements and quality standards	<ul style="list-style-type: none"> <li>• Number of programmes/projects on time and within budget</li> <li>• Percent of stakeholders satisfied with programme/project quality</li> <li>• Number of programmes needing significant rework due to quality defects</li> <li>• Cost of application maintenance vs. overall IT cost</li> </ul>	01, 03, 13
14	Availability of reliable and useful information for decision making	<ul style="list-style-type: none"> <li>• Level of business user satisfaction with quality and timeliness (or availability) of management information</li> <li>• Number of business process incidents caused by non-availability of information</li> <li>• Ratio and extent of erroneous business decisions where erroneous or unavailable information was a key factor</li> </ul>	08, 16
15	IT compliance with internal policies	<ul style="list-style-type: none"> <li>• Number of incidents related to non-compliance to policy</li> <li>• Percent of stakeholders who understand policies</li> <li>• Percent of policies supported by effective standards and working practices</li> <li>• Frequency of policies review and update</li> </ul>	02, 10, 15
16	Competent and motivated business and IT personnel	<ul style="list-style-type: none"> <li>• Percent of staff whose IT-related skills are sufficient for the competency required for their role</li> </ul>	



		<ul style="list-style-type: none"><li>• Percent of staff satisfied with their IT-related roles</li><li>• Number of learning/training hours per staff member</li></ul>	
17	Knowledge, expertise and initiatives for business innovation	<ul style="list-style-type: none"><li>• Level of business executive awareness and understanding of IT innovation possibilities</li><li>• Level of stakeholder satisfaction with levels of IT innovation expertise and ideas</li><li>• Number of approved initiatives resulting from innovative IT ideas</li></ul>	09, 17