COBIT features

Business orientation

COBIT Framework organizes IT governance objectives and good practices by IT domains and processes and link them to business requirements

- Links business goals to IT goals
- Uses metrics and maturity models to measure achievement
- Responsibilities

Process sub domains (IT focus)

Process descriptions provide a reference process model and common language for everyone in an organisation

- Plan and Organize (plan)
- Acquire and Implement (build)
- Deliver and Support (run)
- Monitor and Evaluate (monitor)

The processes map to responsibility areas of plan, build, run, and monitor

Total 34 processes

Control objectives

Provides a complete set of high-level requirements to be considered by management for effective control of each IT process

Management guidelines

Helps assign responsibility, agree on objectives, measure performance, and illustrate interrelationship with other processes

Maturity models

Assesses maturity and capability per process and helps to address gaps

IT Governance = COBIT

What is COBIT?

Control Objectives for Information and Related Technologies

Good practice framework

First released in 1996

High level detail standard

By the International professional association ISACA

For IT management & IT governance

COBIT provides

- Implementable set of controls over information technology
- Organizes these controls around a logical framework of IT-related processes and enablers
- A set of generic processes for IT management
- Recommended best practices for governance and control process

Process definitions include

- Inputs and outputs
- Key activities
- Objectives of the process
- Performance measures
- Maturity model

COBIT is an integrator

Acts as an umbrella framework

Aligns and harmonises other more detailed IT standards including:

- COSO
- ITIL
- BiSL
- ISO 27000
- CMMI

COBIT is an integrator (cont)

- TOGAF
- PMBOK
- Val IT 2.0 (COBIT 5)
- Risk IT frameworks (COBIT 5)
- ISACA's IT Assurance Framework (COBIT 5)

Links good practice models with governance and business requirements

Integrates these different guidance materials

Summarises key objectives of each

Help ensure regulatory compliance

COBIT benefits

Less wasteful information management

Improve retention schedules

Increase business agility

Lower costs

Better compliance with data retention and management regulations

The consequences of not using COBIT are the opposite of these

Information and technology (IT) governance

IT governance is the responsibility of the board of directors and executive management. It is an integral part of enterprise governance and consists of the leadership and organisational structures and processes that ensure that the organisation's IT sustains and extends the organization's strategies and objectives

AS8015-2005 Australian Standard for Corporate Governance of Information and Communication Technology. AS8015 was adopted as ISO/IEC 38500 in May 2008

Roles of a CIO

Business leader. CIO must make executive decisions regarding

- Purchase of IT equipment from suppliers
- Creation of new systems
- Workforce requirements

Gain a competitive advantage

Balance interests of employees

Map out the ICT strategy, covering:

- Future proofing
- Procurement
- External standards
- Internal standards

Map out the ICT policy, covering:

- How ICT is utilized
- How ICT is applied

IT governance

Clarifying accountability

Clarifying the role of commitees

Manage systems and functions

Places great emphasis on internal customers

Focuses on technology applications in the business and how this can be managed

How does an ERP support agility?

Integrated business processes are faster and more efficent

One central database with no duplication of data reduces workload and potential for data errors

One single 'view of the truth' means faster more accurate decision making

Easy-to-use, powerful reporting across the whole suite (and therefore the whole organization)

How does an ERP support agility? (cont)

All applications have same look-and-feel across the whole system, making training and using the ERP very straightforward.

Facilitates the flow of information between all business functions

Links to outside stakeholders (supplier and customer systems)

Key objective = bring together business functions to make operations run more efficiently

Deliver real-time business intelligence

Encourage business process improvements

Leverage mobile technology

Offer end-to-end automation

Utilise cloud architecture and modular design

Example: Business intelligence - previously senior leaders would have to wait days–sometimes weeks for analysts to process and present data. Common for these reports to have errors caused by manual data
extraction and manipulation. Within ERP fast and relevant data can be extracted from ERP database, and then manipulated as desired. everything is in the one place. Extraction and analyses functions are offered in a user-friendly way.

Knowledge management strategies

Codification

- Actively managing knowledge
- Collecting and storing codified knowledge in electronic databases to make it accessible
- Might be tacit or explicit knowledge
- Also involves retrieving knowledge they need that other individuals have provided

Knowledge management strategies (cont)

Personalization

- Encourages individuals to share their knowledge directly
- Making knowledge requests of experts associated with a particular subject on an ad hoc basis
- Expert individuals provide insights to requestor

Instruments

- Intentional knowledge sharing
- Stprytelling
- Cross-project learning
- After action reviews
- Knowledge mapping (a map of knowledge repositories within a company accessible by all)
- Communities of practice
- Expert directories (to enable knowledge seeker to reach to the experts)
- Expert Systems (knowledge seeker responds to one or more specific questions to reach knowledge in a repository)
- Best practice transfer
- Knowledge fairs
- Competence management (systematic evaluation and planning of competences of individual organisation members)
- Proximity & architecture (the physical situation of employees can be either conducive or obstructive to knowledge sharing)
- Master-apprentice relationship

Knowledge management strategies (cont)

- Collaborative software technologies (wikis, shared bookmarking, blogs, social software, etc.)
- Knowledge repositories
- Measuring and reporting intellectual capital

Competative advantages

- Making available increased knowledge content in the development and provision of products and services
- Achieving shorter new product development cycles
- Facilitating and managing innovation and organisational learning
- Leveraging the expertise of people across the organisation
- Increasing network connectivity between internal and external individuals
- Managing business environments and allowing employees to obtain relevant insights and ideas appropriate to their work
- Solving intractable or wicked problems
- Managing intellectual capital and intellectual assets in the workforce (such as the expertise and know-how possessed by key individuals or stored in repositories)

Knowledge management technologies

Groupware	facilitate collaboration and sharing of organizational information
Workflow tools	Representation of processes associated with the creation, use, and maintenance of organizational knowledge
Content/Document Management	Automate the process of creating web content and/or documents
Enterprise Portals	Web sites that aggregate information
eLearning	create customized training and education software
Scheduling and planning	Automate schedule creation and maintenance
Telepresence	Virtual "face-to-face" meetings without assembling at one locatio

Profession vs professional

Profession

Disciplined group of individuals who adhere to ethical standards

Members possess special knowledge and skills

Utelise a recognised body of learning derived from research, education and training at a high level

Applies this knowledge and exercise these skills in the interest of others

Is recognised by the public as the above

Professional

A member of a profession

Profession vs professional (cont)

Governed by codes of ethics

Profess commitment to competence, integrity and morality, altruism, and the promotion of the public good within their expert domain

Are accountable to those served and to society

Professionalism

Personally held beliefs about one's own conduct as a professional

Often linked to the upholding of the principles, laws, ethics and conventions of a profession as a way of practice

Management

Classical approach	based on the belief that employees have only economical and physical needs and that the social needs & need for job satisfaction either does not exist or are unimportant

Three categories

Scientific	"one best way" to do a job
Administrative	focuses on the manager & basic managerial functions
Bureaucratic	Guidelines for structuring with formalisation of rules, procedures and a clear division of labour

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Government information

Within liberal democracies there is the expectation that public information should be publicly available

Challenges

-	Definition of public sector information
-	Who owns public information
-	May impact economic and social value
-	Technology is shifting
-	Depends on citizens attitudes, attitudes change
-	

Uses

-	Decision-making
-	Informing the public of decisions
-	Analysis of policy decisions
-	Assessment of governments, governance
-	Social and economic reuse

There is a notion that all government information belongs to its citizens because it is derived through governmental processes and therefore should be freely accessible and re-useable by them/

Access to public information is considered of fundamental importance for the effective functioning of democratic systems, as it enhances governments' and public officials' accountability

Benefits of access	accountability, participation and efficiency

Aligning IT and Business

Refers to using information technology (IT) effectively to achieve business objectives - typically improved financial performance or marketplace competitiveness

Goal is to improve the business value of IT investments

Integrates the information technology to the strategy, mission, and goals of the organization

Common business problems

IT and business professionals gaps in:

-	Objectives
-	Culture
-	Incentives
-	Understanding of the other group's body of knowledge

Gaps often result in expensive IT systems that do not provide adequate ROI

Six requirements to achieve IT/Business alignment

1	View information technology as an instrument to transform the business.
2	Hold customer service, both externally and internally, as priority. Communication is key.
3	Rotate IT and business professionals across different departments and job functions. Knowledge, experience, understanding and communication between functions must be achieved.
4	Provide clear and specific goals to both the IT and business employees. This will create an integration of both entities to achieve a common goal.

Aligning IT and Business (cont)

5	Ensure that IT and business employees understand how the company makes or loses money. So that money is not carelessly poured into the IT department with no return on that investment
6	Create a vibrant and inclusive company culture. There must not only be informational unity, but a company as whole.

Be careful

Business and IT professionals often experience conflict and in-fighting as lack of mutual understanding, failure to produce desired results leads to blaming and mistrust

Establish trust between these two groups and a mechanism for consensus decision-making

How to support evolving business needs

Ability to scale

-	To meet growing customer demand
-	Globally in compliance across subsidiaries without scaling headcount
-	Easily manage a distributed workforce
-	Automate wherever possible to replace manual processes
-	Infrastructure that can flex with growth without complex integrations bogging it down

Responsive to

-	Market dynamics
-	Customers

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How to support evolving business needs (cont)

- Ability to execute - outrun competitors

Is data driven

- Real-time visibility anytime, anywhere, across geographies and subsidiaries
- Maintains one version of 'the truth' or 'the facts' about customers, financials and compliance
- Growth as a science
- Culture of rapid testing to determine what works
- Intentionally generates data

Is Innovative

- Understands customer needs
- Understands customer pain points
- Is able to generate customer insights based on customer understanding
- Able to bring multiple disciplines together to design a unique solution and to differentiate itself from competitors

Leadership

A set of skills and attitudes for:

Influencing

Motivating

Persuading

Strategic leadership

Ability to anticipate, envision, maintain flexibility and empower others to create strategic change as nessessary

Manage business on behalf of stakeholders

Provide direction

Leadership (cont)

Formulate and implement change to corporate strategy

Monitor and control operations especially

- Financial results
- Productivity
- Quality
- Customer service
- Innovation
- Technology
- New products and services
- Staff development

Leadership styles:

- Autocratic: punish and control
- Bureaucratic: rules are enforced without challenge or questions
- Charismatic: make people want to follow and believe
- Participative: Everyone gets a say, leader gets final say
- Peoplecentric: Based on thoughts and actions, serve the people they serve
- Task/Function/Process: Do it exactly like this and it will work

What is an ERP?

Enterprise resource planning (ERP) is business process management software that allows an organization to use a system of integrated applications to manage the business and automate many back office functions related to technology, services and human resources

Suite of integrated applications

What is an ERP? (cont)

Use to collect, store, manage and interpret data from many business activities

Activities:

- product planning, purchase
- manufacturing or service delivery
- marketing and sales
- inventory management
- shipping and payment
- finance

An ERP software package generally includes:

Core functions

- Financial accounting
- Distribution
- Human Resources
- Product lifecycle management
- Advanced applications
- Customer Relationship Management (CRM)
- Mobile application for account and sales management
- Warehouse Management System
- Supply chain management software
  - * Purchasing
  - * Manufacturing
  - * Distribution

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