# IT Governance & the Control Environment

Week 2

## ISACA' View of Governance

 What is IT governance and what are its components?

 How does this view fit with the concept "Do the right thing and do it right"?

- IT strategic alignment
- Risk management
- Value delivery
- Resource management
- Performance management
- Do the right thing
  - Strategic alignment
  - Risk management
- Do it right
  - Resource management
  - Value delivery
  - Performance management

### What Does a Company Expect From Its IT Systems?

- Make a list of attributes that a company would want in its IT systems
- For example: a company wants its IT systems to be available

- Effective
- Efficient
- Confidential
- High integrity
- Available
- Compliant
- Reliable

# **COBIT 5 Enterprise Goals**

| Figure 4—COBIT 5 Enterprise Goals |  |                                   |                      |                          |  |
|-----------------------------------|--|-----------------------------------|----------------------|--------------------------|--|
|                                   |  | Relation to Governance Objectives |                      |                          |  |
| BSC Dimension                     | Enterprise Goal  | Benefits<br>Realisation           | Risk<br>Optimisation | Resource<br>Optimisation |  |
| Financial                         | Stakeholder value of business investments                        | P                                 |                      | S                        |  |
|                                   | <ol><li>Portfolio of competitive products and services</li></ol> | P                                 | P                    | S                        |  |
|                                   | <ol><li>Managed business risk (safeguarding of assets)</li></ol> |                                   | P                    | S                        |  |
|                                   | 4. Compliance with external laws and regulations                 |                                   | P                    |                          |  |
|                                   | 5. Financial transparency  | P                                 | S                    | S                        |  |
| Customer                          | Customer-oriented service culture                                | P                                 |                      | S                        |  |
|                                   | 7. Business service continuity and availability                  |                                   | P                    |                          |  |
|                                   | 8. Agile responses to a changing business environment            | P                                 |                      | S                        |  |
|                                   | Information-based strategic decision making                      | P                                 | P                    | P                        |  |
|                                   | 10. Optimisation of service delivery costs                       | P                                 |                      | P                        |  |
| Internal                          | 11. Optimisation of business process functionality               | P                                 |                      | P                        |  |
|                                   | 12. Optimisation of business process costs                       | P                                 |                      | P                        |  |
|                                   | 13. Managed business change programmes                           | P                                 | P                    | S                        |  |
|                                   | 14. Operational and staff productivity                           | P                                 |                      | P                        |  |
|                                   | 15. Compliance with internal policies                            |                                   | P                    |                          |  |
| Learning and Growth               | 16. Skilled and motivated people                                 | S                                 | P                    | P                        |  |
|                                   | 17. Product and business innovation culture                      | P                                 |                      |                          |  |

## **COBIT 5 IT-Related Goals**

| Figure 5—IT-related Goals |    |   |  |  |  |
|---------------------------|----|---|--|--|--|
| IT BSC Dimension          |    | Information and Related Technology Goal   |  |  |  |
| Financial                 | 01 | Alignment of IT and business strategy   |  |  |  |
|                           | 02 | IT compliance and support for business compliance with external laws and regulations                            |  |  |  |
|                           | 03 | Commitment of executive management for making IT-related decisions  |  |  |  |
|                           | 04 | Managed IT-related business risk  |  |  |  |
|                           | 05 | Realised benefits from IT-enabled investments and services portfolio  |  |  |  |
|                           | 06 | Transparency of IT costs, benefits and risk   |  |  |  |
| Customer                  | 07 | Delivery of IT services in line with business requirements  |  |  |  |
|                           | 08 | Adequate use of applications, information and technology solutions  |  |  |  |
| Internal                  | 09 | IT agility  |  |  |  |
|                           | 10 | Security of information, processing infrastructure and applications   |  |  |  |
|                           | 11 | Optimisation of IT assets, resources and capabilities   |  |  |  |
|                           | 12 | Enablement and support of business processes by integrating applications and technology into business processes |  |  |  |
|                           | 13 | Delivery of programmes delivering benefits, on time, on budget, and meeting requirements and quality standards  |  |  |  |
|                           | 14 | Availability of reliable and useful information for decision making   |  |  |  |
|                           | 15 | IT compliance with internal policies  |  |  |  |
| Learning and Growth       | 16 | Competent and motivated business and IT personnel   |  |  |  |
|                           | 17 | Knowledge, expertise and initiatives for business innovation  |  |  |  |

## What Are Controls?

Controls are the policies, procedures, practices and organizational structures designed to provide reasonable assurance that business objectives will be achieved and undesired events will be prevented.

# What Types of Controls Are There?

- Preventive
- Detective
- Corrective

What examples of each come to mind?

## Where Are Controls Applied?

#### **General Controls**

- General controls apply to an IT service
- An example is identity management

#### **Application Controls**

- Application controls apply to a business process.
- For example, was a transaction
  - Recorded correctly?
  - Processed correctly?
  - Authentic?

## **Another View of Controls**

- What are layered controls?
- Layered controls are sometimes referred to as "defense in depth"

### What is a Control Environment?

The actions, policies, values, and management styles that influence and set the tone of a firm's day-to-day activities

Business Dictionary.com

## Control Environment Role of Corporate Leadership

- Set the tone
- Bear ultimate responsibility for outcomes
- Develop and model principles and policies that represent desired outcomes
- Gain board support for policies and communicate outcomes

## Control Environment Role of Management

- Develop and document the practices and activities that are designed to ensure that the organization will meet the goals set by senior leadership
  - Processes
  - Standards
  - Guidelines

 Management defines the pathway to consistently meeting corporate objectives

# Use of Controls by Management

- Controls are put in place to ensure that processes, standards and guidelines are being followed
- Controls help mitigate risk that undesired outcomes will occur
- Controls are usually used in combinations
  - They are unlikely to all fail simultaneously

# Control Environment Monitoring & Audit

- Management should monitor controls to assess the degree to which desired behaviors and outcomes are consistently occurring
- Audits examine the adequacy (sufficiency) and effectiveness of the controls an organization has put in place