## Information Systems Strategy and IT Governance ITC4212

Dr Nalaka Lankasena Faculty of Technology University of Sri Jayewardenepura



### Content

- Introduction to IT Governance
  - Purpose of ITG
  - What does ITG cover?
  - Definitions of ITG
  - Stakeholders of ITG
  - ITG and IT management
  - Evolution of IT within an organization

Why strategy is needed for an Organization?
What are the components of a Strategic Plan?

The importance of IT governance.

What is IT strategy?

How does IT evolve in an organization?

Discuss how IT governance happening in an organization of your choice

### Introduction

- ICT is a key factor to be considered in both current and future social and organizational development
- Modern organizations are largely dependent on IT as it significantly supports the decision making process
- A large amount of resources has been continually invested in IT in the belief that positive returns will occur improving the organizational processes
  - This situation has created a path for the evolution of IT governance as a new concept supporting organizations to improve organisational processes

#### Governance

- The term 'governance' refers to the "processes of decision-making within an institution, which enable an institution to set its policies and objectives, to achieve them, and to monitor its progress towards their achievement" (University of Oxford).
- Governance is not a separate activity but an inherent part of any organization. It refers to the processes by which organizations are operated, guided and held to account.

 Governance involves authority, accountability, leadership, direction and control in an organisation. Governance keeps our organizations and communities functioning soundly and democratically.





Significant literature in governance area reveal that government processes can be lined up in three groups: Enterprise Governance, Corporate Governance, and IT Governance.



Corporate Governance
Conformance Processes



Business Governance
Performance Processes

### **IT** Governance

Risk Mitigation

including security policy, review and control

Value Creation Performance

#### **Enterprise Governance:**

A set of responsibilities and practices exercised by the **Board and executive**management with the goal of providing strategic direction, ensuring that objectives
are achieved, ascertaining that risks are managed appropriately and verifying that the
enterprise's resources are used responsibly.

#### **Corporate Governance:**

The Australian Stock Exchange Corporate Governance Council considers corporate
governance to be "the systems by which companies are directed and managed". It
influences how the objectives of the company are set and achieved, how risk is
monitored and assessed, and how performance is optimized"

#### **Business Governance:**

 Business governance concerns the actions and controls placed on those charged with managing a business entity

#### CORPORATE GOVERNANCE FRAMEWORK



#### **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 organizational structures and processes that ensure the organization's IT sustains and extends the organization's strategy and objectives**.
- IT governance is the organizational capacity exercised by the board, executive
  management, and IT management to control the formulation and implementation of IT
  strategy and in this way ensure the fusion of business and IT
- The main objective of IT governance is to realize the issues and the strategic importance of IT to achieve its present and future organizational goals and objectives
- According to ITG Institute, ITG is to be implemented as a strategic agenda of the top management of the organization like other subjects.
- The top management should have a clear vision of its IT management responsibilities and need to set a proper system to realize those responsibilities.

..contd.

#### **Contd... IT Governance**

- The importance and how IT governance plays a role in the performance of organizations is one of the critical considerations in today's businesses
- The role of IT is critical for the success of overall strategic activities of organizations as IT supports in achieving organizational goals and generating organizational values such as reputation, trust, economic efficiency, and competitiveness
- As IT is critical to the success of organizations and organizations are largely dependent on IT, there needs to be a methodical way of governing IT.
- IT governance offers ways of finding methodical and proper solutions for supporting overall corporate governance.

#### ..contd.

## Contd... IT Governance

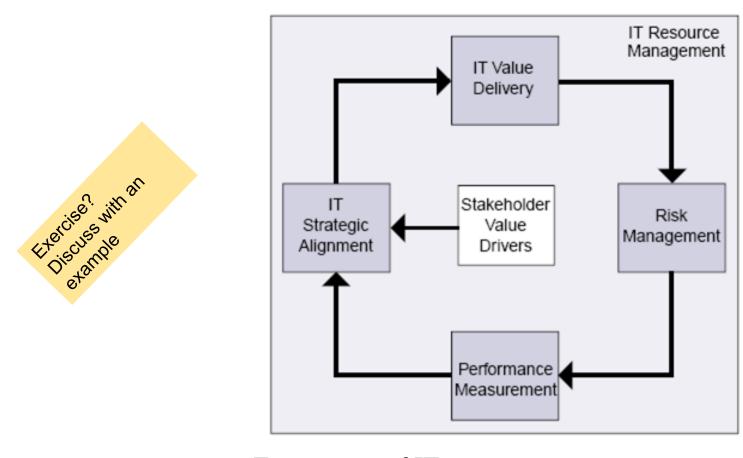
- The definition from the ITG Institute states that IT governance is an integral part of enterprise or corporate governance.
- IT should be governed properly first to ensure that it covers the aspects of corporate governance
- A survey done by Weill & Ross (2004) based on 256 organizations has suggested best performance organizations show more than 40% return on assets compared to the values achieved by their competitors. The important finding is that most of these organizations which show the best performance have implemented effective IT governance arrangements.

Corporate and IT governance comparison			
Corporate Governance Questions	IT Governance Questions		
How does top management get managers to return some of the profits to them?	How does top management get the CIO and IT organization to return some business value to it?		
How does top management make-sure that managers do not steal the capital they supply or invest it in bad projects?			
How does top management control managers?	How does top management control the CIO and IT organization?		
Source: Shleifer & Vishny (1997) as cited in De Haes & Van Grembergen (2004:1)			

## Purpose of IT governance

- Alignment of IT with the enterprise and realization of the promised benefits
- Use of IT to enable the enterprise by exploiting opportunities and maximizing benefits
- Responsible use of IT resources
- Appropriate management of IT-related risks

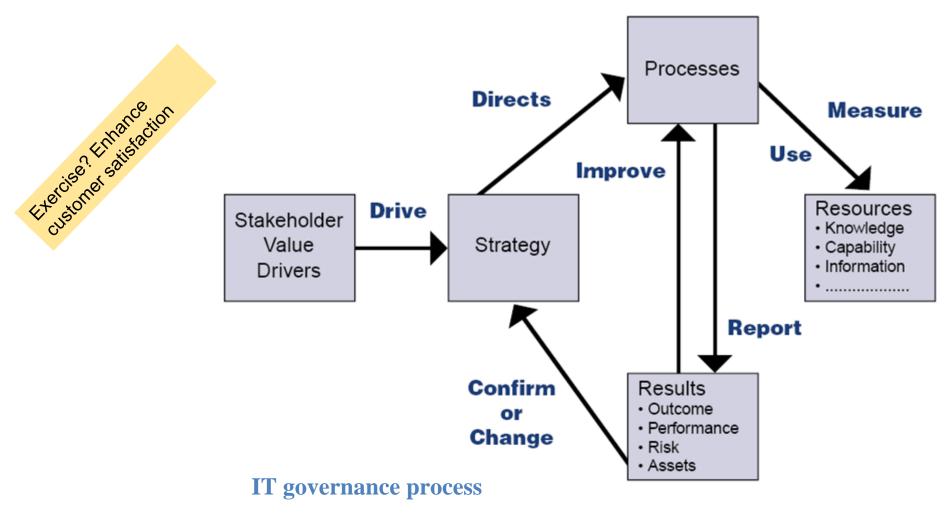
## What does IT governance cover?



Focus areas of IT governance

- Strategic alignment Focuses on ensuring the link between the organization and the IT plan. Defining, maintaining, and validating the IT value proposition and conducting IT operations in line with the organization's overall operations is addressed by the strategic alignment.
- Value delivery Ensure the value delivery throughout the delivery cycle. It is to ensure that IT delivers the pre-identified benefits against the strategy and concentrates on effective and efficient utilization of IT.
- Resource management This is about the management of the investment and the
  existing IT resources in the organization. Applications, information, infrastructure, and
  people are the main components coming under the resource category
- Risk management Needs awareness by senior officials in organizations, a clear understanding of the organization's intention for risk, understanding of the compliance requirements, and implementation of risk management procedures are to be considered under this.
- **Performance measurement** to monitor and track strategy and project implementation, resource utilization, performance of processes and service delivery.

## IT governance process



Source: IT Governance Institute (2003: 21)

## Contd.. ITG process

- IT governance process initiates with the identification on how to drive the stakeholder values.
- To deliver the stakeholder values proper strategies are to be formulated. These strategies are to manage the relevant process of the institute efficiently and effectively.
- Processes consume resources such as knowledge, human capabilities, information, funds, and technological features. The use of resources is to be measured and to be controlled to enhance efficiency.
- The processes will deliver results in terms of enhancing outcomes, performance, and assets and reducing the risk of investments.
- Based on the results, the strategy of the organization is to be reformulated or to be revised.
- **Strategy is not a constant**; it is to be changed to suit the demands or the values of the stakeholders.

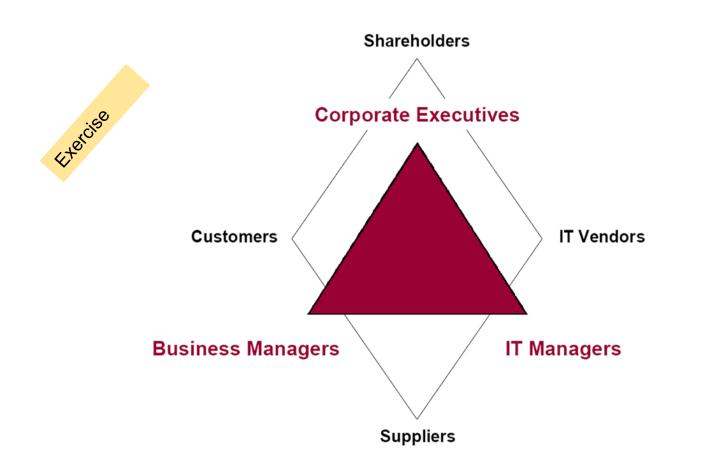
## **Definitions of IT governance**

- 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 organizational structures and processes** that ensure that the organization's IT sustains and extends the organization's strategy and objectives (IT Governance Institute, 2003:10).
- IT governance is the organizational capacity exercised by the Board, executive management, and IT management to control the formulation and implementation of IT strategy and in this way ensure the fusion of business and IT (Van Grembergen, 2002).
- IT governance is specifying the decision rights and accountability framework to encourage desirable behavior in using IT (Weill & Ross, 2004).

- The aspects of definitions of IT governance basically can be categorized into three focus areas;
  - Decision rights and accountabilities
  - Strategic alignment between IT and business
  - Organizational structure of relationships

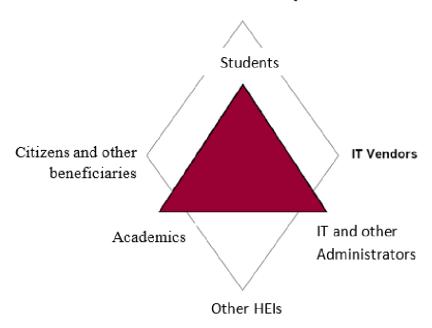
## Stakeholders in IT governance

• It is to be viewed as a shared responsibility and enterprise-wide commitment towards sustaining and maximizing IT business value.



Primary and secondary stakeholders in IT governance

#### Government/Ministry/UGC



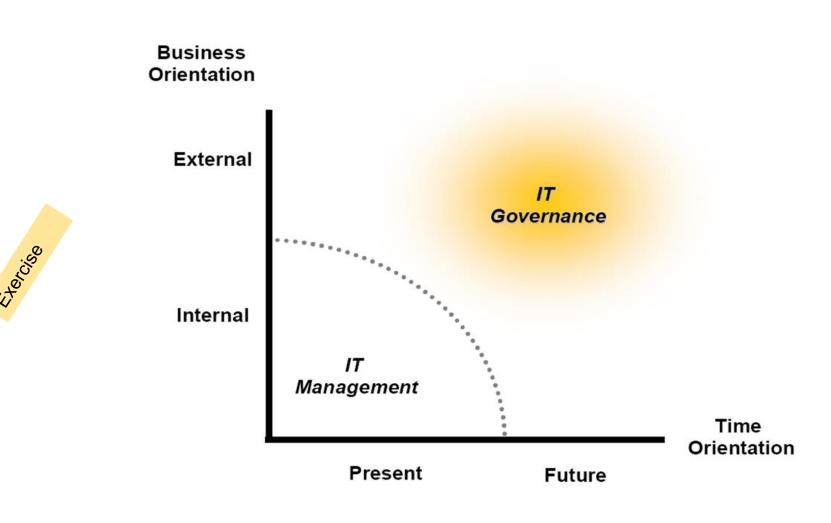
Primary and secondary stakeholders in IT governance of universities

## IT governance and IT management

- Governance determines who makes the decision. Management is the process of making and implementing decisions.
  - For example, IT governance determines how much money to be invested in IT in a particular year; management determines the actual amount, areas, and processes to utilize this allocated amount.

- IT governance faces dual demands, the first is to contribute to the business operation and the second is to position IT to meet future challenges occurring from the internal and external stakeholders.
  - One of the key challenges in IT governance is to transform an organization to meet present and future requirements simultaneously while assuring customer satisfaction and stakeholder requirements.

## IT governance and IT management



IT governance and IT management

- Difference between IT governance and IT management
  - IT governance focuses on establishing the overall direction, policies, and strategy for IT in alignment with business goals. On the other hand, IT management deals with the day-to-day operations and implementation of the IT strategy

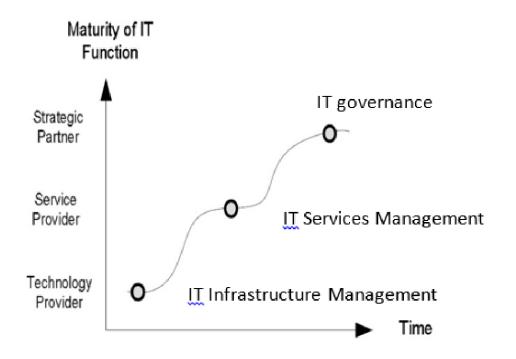
#### Example

- IT governance:
  - IT governance, you set policies and procedures that align IT activities with business goals, ensure compliance with regulations, and manage risks
- IT management:
  - IT managers are responsible for tasks such as project management, system administration, network maintenance, and user support

,

## **Evolution of IT Governance**

Exercise – An organization's IT development



#### Evolution of IT functions in an organization

Source: Salle (2004:1) as cited in HP (2003)

Service provider	Strategic partner		
IT is for efficiency	IT for business growth		
Budget are driven by external	Budgets are driven by		
benchmarks	business growth		
IT is separable from the	IT is inseparable from the		
business	business		
IT is seen as an expense to	IT is seen as an investment to		
control	manage		
IT managers are technical	IT managers are business		
experts	problem solvers		

## **Evolution of IT within organisations**

• IT emerges as a strategic partner through an evolutionary process. IT in organizations usually follows a three-stage approach as given in the figure

#### IT Infrastructure Management (ITIM)

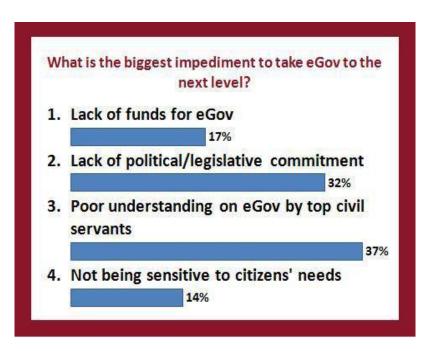
- Each evolutionary stage in IT begins with this stage. At this stage, IT organizations focus on improving the management of the IT infrastructure.
  - According to a study in Sri Lanka, IT proposals received from universities indicate
    that the pattern of fund requirements in Sri Lanka was mainly to improve the
    infrastructure facilities in universities.

#### **IT Services Management – ITSM**

- IT is to be used to transform organisations with new products and services, providing new opportunities to expand and strengthen organizations' capacity in business.
- Organizations need to launch a set of processes to move from the perspective of a 'technological provider' to a 'service partner'.

#### IT Business Value Management (IT Governance)

- At this stage, IT has been transformed and will enable organisations to achieve new business opportunities.
- IT processes of the organization are fully integrated with the complete life cycle of the business processes in order to improve the effectiveness and efficiency of its services.
- When an IT organization moves from a service provider to a strategic partner, "IT becomes not only a success factor for survival and prosperity but also an opportunity to differentiate and to achieve competitive advantage".



The biggest impediments to take eGov to the next level Source: www.icta.lk (2012)

IT fund requirements of universities – 2008				
Main Category	Category	Amount	Percentage	
Infrastructure development	Hardware for Academic Staff	35,446,200.00	4.04	
	Hardware for Teaching	493,350,650.00	56.28	
	Networking	66,255,400.00	7.56	
	Hardware	48,472,000.00	5.53	
	Hardware for Administration	14,700,000.00	1.68	
	Hardware for Risk Management	6,650,000.00	0.76	
	Hardware for Research	9,197,000.00	1.05	
	Infrastructure Communication	19,075,000.00	2.18	
Training	Training	52,328,550.00	5.97	
Applications/Services	Virtual Learning/ E Learning	115,002,100.00	13.12	
	Application for Teaching	3,910,900.00	0.45	
	Application for Administration	12,144,000.00	1.39	
	Total	876,531,800.00	100.00	
Source: UGC (2008)				

# Thank you!