

**NEW ZEALAND INSTITUTES OF TECHNOLOGY AND POLYTECHNIC  
QUALIFICATIONS IN INFORMATION & COMMUNICATIONS TECHNOLOGY**

**PRESCRIPTION: IS600 STRATEGIC INFORMATION SYSTEMS MANAGEMENT**

AIM OF MODULE:	To enable the student to apply basic techniques and principles for managing information systems for strategic commercial advantage.
CREDITS:	14
RESTRICTION:	As this module has content that overlaps with the content of EP600 and IS700 students completing this module cannot be awarded a credit for either EP600 or IS700.
STUDENT LEARNING HOURS:	140
CONTENT REVISED:	2004 (new)
PRESCRIPTION EXPIRY DATE:	November 2013

**Level and Assessment Schedule**

TOPICS	Highest Skill Level				Suggested Assessment Percentage
	R	C	A	P	
1. Management of Information for Commercial Advantage		*			10
2. Information Systems and Organisational Strategy			*		20
3. Information Systems and Organisational Management			*		30
4. Managing Information Assets				*	30
5. Managing skilled* IT workers (* Technically Sophisticated)				*	10
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## LEARNING OUTCOMES

The student will:

- C 1. Explain how effective information management is a “critical strategic success factor” for commercial competitiveness and advantage.
- A 2. Develop a corporate information systems strategy that supports the organisation’s strategic goals, using a “Case Study” organisation.
- A 3. Apply at least one method of tactically and operationally managing the corporate information systems for a case study organisation that is consistent with the organisation’s Information Systems strategy
- P 4. Evaluate a case study organisation’s need to upgrade hardware and software and propose an economically effective solution that will enable the organisation to retain and/or extend its competitive advantage.
- P 5. Solve at least two “case study” problems associated with managing modern “Highly Skilled” workforces where workers may commonly be more skilled and have greater knowledge than their manager.

## CONTENT

### 1. Information and Management

- The impact the information age has had on management and the way managers are expected to manage should be outlined in the following categories
  - Managing information and information technology
  - Management in the information age
  - Managing information for competitive advantage
  - Challenges and issues for managers of information systems
  - Managing mature IS organisations
  - Important concepts in IS management
  - Stages of growth
  - Critical success factors for IS managers

### 2. Information Systems and Organisational Strategy

- The meaning of the term “Strategic Information Systems” is defined with examples. An explanation of the way a typical organization might develop an information systems strategy that will facilitate corporate growth and market position.
  - Strategic issues for IS management.
  - The process of developing an “Information Systems Strategy” is explained. Examples are given to illustrate.
  - Strategic information systems defined.
  - Strategic information systems examples illustrated under the following categories.
    - Applications
    - Networks
- Forming and managing strategic alliances (CISM Ch 8)
- The effects of strategy on competition (CISM Ch 3)

### **3. Information Systems and Organisational Management**

- Tactical management of “Information Systems for Competitive Advantage” is covered. Consideration is given to the importance of information as a tactical resource.
  - Tactical Information is defined.
  - Understanding customer expectations as a tactical resource.
  - Managing Information Systems for competitive advantage.
  - Capacity management
  - Performance management
  - Information reporting management.
- Operational management of information systems
  - Managing customer expectations
  - Service Level Agreements defined.
  - Service Level Agreement contents outlined and explained.
  - Problem change and recovery management.
  - Network management
  - Managing the application portfolio
  - Information, Organisation, and control
- Organising and leading the IT business function.
  - The CIO’s role. (MIT)
  - Technology related management processes (MIT)
- Integrating changing technology platforms and assimilating emerging technologies. (MIT Part 2)

### **4. Managing IT Assets**

- Hardware and software evaluation and procurement

The importance of a professional approach to the acquisition of Information Systems hardware and software is explained

Methods of objectively comparing diverse vendor proposals in against to client IS acquisition requirements.

- Picture comparison method.
- Implementation led evaluation.
- Evaluation Matrix method.

The complete process of Hardware and Software evaluation is carried out for a simple “case study” purchase.

- A simple “Request for Proposal” is developed from a supplied requirements specification.
- The “Evaluation Matrix” method of hardware comparison is used to compare example vendor proposals for the hardware component of the case study purchase.
- The “Picture comparison” method and “evaluation Matrix” methods of software package evaluation are used to compare example vendor proposals for the software component of the case study purchase.
- The hardware Evaluation Matrix is extended to include a “Cost Benefit” comparison of the hardware being evaluated.
- Managing IT outsourcing. (CISM Ch 8)
- Managing the application portfolio (MIT Part 3)

- Managing the organisation's data (DBA).
  - The DBA's role
  - Critical data management factors
  - Performance
  - Risk
  - Security
  - Change
- Managing the network. (MIT Ch 15)
- Measuring IS Investments and returns (MIT Ch 16)

## **5. Managing Skilled Workers**

- Leadership in an environment of mutual respect (Kant principle 2)
  - Leadership styles - Characteristics, appropriateness and effect
  - Kant's principle of respect is explained and applied to hypothetical contexts
  - Managing in an environment of mutual respect. Advantages and disadvantages, costs and benefits are identified and discussed.
- Peak Performance Teams
  - Characteristics identified and explained
  - Developing such teams. Methods, attitudes, management styles, etc. that help develop such teams are identified and explained.
  - Managing "Peak Performance Teams". Examples are given and common management style characteristics are identified.
- Motivating a sophisticated workforce
  - The problems associated with managing a modern sophisticated workforce where workers are commonly more skilled with greater knowledge than their managers are identified and explained.
  - Personality profiling tools (Myers-Briggs and Enneagram plus any other similar appropriate tools) are explained and students apply these to themselves.
  - Personal management styles are considered on the basis of individual student profiles. Advantages and disadvantages of each style category are identified.
  - Developing and applying a management style appropriate to a modern "knowledge" workforce is explained.

### **RECOMMENDED TEXTS:**

- Management of Information Technology, Carroll. W. Frenzel, *Course Technology*
- Corporate Information Systems Management. Applegate, McFarlan, McKenny, *McGraw-Hill*
- Database Administration. Craig S. Mullins, *Addison Wesley*
- Package Evaluation. Richard Sharland, *Avebury Technical*.
- IT Problem Management. Gary Walker, *Prentice Hall PTR*.
- Peak Performance. Clive Gilson, Kevin Roberts, Michael Pratt, Ed Weymes. *Harper Collins Business*.