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 eitherEP600 or IS700.
STUDENT LEARNING HOURS:	140
CONTENT REVISED:	2004 (new)
PRESCRIPTION EXPIRY DATE:	Nov 2011

Level and Assessment Schedule

TOPICS	Highest Skill Level R	C	A	P	Suggested Assessment Percentage
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
					100

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*.