771 Information Systems Strategy

Introduction

771 INFORMATION SYSTEMS STRATEGY provides students with an understanding of the contemporary technological and organisational issues involved in the management of information technology resources at a strategic level. The role of information systems in providing competitive advantage and the frequent need for business re-engineering that accompanies adoption of new technology are discussed. Strategic IT planning and the evaluation process to ensure proper alignment of technology to business goals are also explained. Global IT issues are also considered.

Case studies
Real-life case studies are incorporated into the subject to provide opportunities for students to apply theory into practice in an authentic context. Examples of cases include

Applegate, L.M., N. Bartlett, D. Chang-Leow and B.S. Neo
PSA: The World's Port of Call
Case #9-802-003
Harvard Business School Publishing
25 October 2004

McFarlan, F.W. and N. Bartlett
Postgirot Bank and Provment AB: Managing the Cost of IT Operations
Case #9-302-061
Harvard Business School Publishing
26 February 2002

McFarlan, F.W., M. Dailey and F. Young
Jardines: Tapping the Asian E-Commerce Market
Case #9-301-045
Harvard Business School Publishing
22 September 2000

Assessment

Case analyses (team and individual)	45%
Discussion board activities	30%
Final Exam	25%

Who should attend

- Managers seeking to improve business productivity through IT application
- Decision makers involved in developing and evaluating strategic IT plans
- Executives involved in the management and governance of IT resources
- IT practitioners wishing to enhance their knowledge of strategic business applications beyond technical boundaries

Learning objectives

Upon completion of this subject, students should be able to

- recommend an IT architecture that will create a competitive advantage
- identify projects within an organisation that would benefit from business process reengineering (BPR)
- determine IT planning methods that support strategic development within an organisation and make an effective contribution to the IT planning process
- assess the effectiveness of IT infrastructure in meeting organisational objectives
- identify IT strategies to support the firm's global business goals and operations

Delivery method

The subject is delivered online over a 12-week period, with an assigned Professor acting as mentor. The class will comprise students from different countries and industry backgrounds. Practical case studies and discussions help to stimulate learning and knowledge exchange, while an examination at the end of the subject will help students review and apply the knowledge and skills learnt.

Prerequisites

770 Information Technology Systems for Business

Syllabus

Segment 1: Introduction

Students are introduced to the syllabus, the resources and communication tools available within the course.

Segment 2: Strategic Systems

The segment looks at how IT may be used to give firms a competitive advantage. Students learn how to link IT applications with business strategies within an organisation and to identify strategic business opportunities that IT can help create. Different models of competition, such as the extended rivalry model, generic strategies model and value chain model, are examined.

Segment 3: Information Technology and Reengineering

Information technology can be used to enable business process reengineering, a powerful management technique characterised by critical scrutiny of business processes followed by their redesign. The different types of business process reengineering projects are discussed. Students learn how to apply the process and evaluate the impact of information technology on business process reengineering in organisations.

Segment 4: Information Technology Planning

Strategic planning within an organisation must involve information technology planning, to align the overall business plan of the firm. Students explore ways in which IT enables a firm to fulfil its strategic objectives and some of the challenges faced by organisations while conducting IT planning. Commonly-used approaches – the critical success factors approach, contingency approach and business systems planning approach – are reviewed, along with best practices in IT planning.

Segment 5: Information Technology Evaluation

The segment describes ways in which you can assess the costs and benefits of IT deployment, at the economy level and at the level of the firm. Economic evaluation techniques are explained, as are complementary evaluation methods to examine IT performance. Service level agreement monitoring and the user satisfaction measurement are among the methods covered.

Segment 6: Global Information Technology

Students are introduced to some of the challenges relating to the management and deployment of IT on a global scale. A global information systems strategy can help organisations improve business co-ordination of worldwide activities and exploit supply chain efficiencies. It is, however, important to ensure effective planning and communications, as development and implementation of global IT systems are typically centred in different locations.

Required textbook

Applegate, L.M., R.D. Austin and F.W. McFarlan. *Corporate Information Strategy and Management: Text and Cases* (6th ed). New York: Irwin/McGraw Hill, 2003.

Global Faculty

U21Global subjects are created by acknowledged experts in their field, usually senior academics who have strong understanding of postgraduate requirements. The subject content is further reviewed by academic specialists who appraise the subject from an independent perspective, ensuring a high-quality, professional product.

Subject Author

Professor Vikram Sethi
Wright State University

771 INFORMATION SYSTEMS STRATEGY was created for U21Global by **Vikram Sethi**, Chair Professor in the Management Science and Information Systems Department at the Raj Soin College of Business, Wright State University, US. Dr Sethi has published more than 50 articles in refereed journals and conferences, and produced several white papers in the areas of global information systems, human capital management, organisational transformation and information system project risk assessment.

Subject Reviewer

Professor Wing Lam
U21Global

The subject was reviewed by **Wing Lam**, Dean of Information Technology Management Programmes and Director of Pedagogy at U21Global. Dr Lam is a former faculty member of the Institute of Systems Science and Programme Manager for Research at the National University of Singapore. He has held consultancy positions with Logica-CMG, Fujitsu (formerly ICL) and Accenture (formerly Andersen Consulting). Dr Lam's research interests include enterprise integration, knowledge management and software engineering management. He has a PhD in Computer Science from King's College, University of London, UK.

Professors

Students' progress will be guided by dedicated Professor Facilitators based around the world. They provide an international perspective and impart knowledge through a wealth of experience in their field of specialisation. Our Professor Facilitators will help students make sense of the information to enable students to transform the information into knowledge and creative solutions.

Shawn SHAN

Shawn Shan is a business initiatives manager with a leading international information technology company. A former lecturer at the National University of Singapore, Dr Shan teaches information systems management, programme and project management, business process management and management and leadership training. He has held senior management positions in a number of industries, including banking, telecommunications, automobiles and manufacturing. He received his PhD from the National University of Singapore and his MBA from the University of Queensland, Australia.

Alok MISHRA

Alok Mishra is Associate Professor of Computer/Software Engineering at Atilim University, Ankara, Turkey. He has taught at the Computer Science Department, Jabalpur University, India and the Institut-Latihan-ICL in Kuala Lumpur, Malaysia. Dr Mishra's primary research interests are software engineering, information systems and information systems security, information and knowledge management and object-oriented analysis and design. He received his PhD in Computer Science from Jabalpur University, India and holds two Masters degrees – in Computer Applications (Jiwaji University, India) and Human Resource Management (Pondicherry Central University, India).

AFFILIATED UNIVERSITIES

Fudan University
Korea University
Lund University
National University of Singapore
Shanghai Jiao Tong University
Tecnológico De Monterrey
University College Dublin
University of Birmingham
University of Delhi
University of Edinburgh
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