



Establishing Modern Master-level Studies
in Information Systems
561592-EPP-1-2015-1- FR-EPPKA2-CBHE-JP



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Information Systems Strategy

Objective	This course focuses on the key concepts, practices and issues in the strategic management of IT. The course covers four key themes. It begins with a discussion of the strategic value of IT, including the role of business-IT alignment in realising that value. Second, the course looks at strategic IT decision processes, including planned and emergent strategy-making and IT governance. Third, the course considers strategy implementation issues, including the role of IT leadership, project and portfolio management, and sourcing decisions. The course closes with a discussion of the strategic role of IT-enabled innovation and current trends in strategy and IT.
Level of course unit	Masters level
Lecturer	Name _____ Email: _____
Course Learning Outcomes	<p>After completing this course, students should be able to:</p> <ol style="list-style-type: none"> 1. to understand IT Strategic Planning Process and measurable business benefits deriving from the application of IT/IS in business (key performance indicators- KPI); 2. to determine what should be contained in IT Strategic plan and how industry standards (COBIT) can assist in determining the overall IT strategy and execution; 3. to understand network economy and innovation in strategic IS planning (moving towards digital organization, Cloud Computing and SaaS Systems); 4. to understand network economy and innovation in strategic IS planning (moving towards digital organization, Cloud Computing and SaaS Systems); 5. to apply Project Management techniques and business analytic software in the process of strategic decision making; 6. to understand Systems Development priority setting criteria and Quality and Productivity Process (CMU's Comparability Maturity Model CMMi, ITIL, and ISO); 7. to understand policies, processes, technologies needed for IT security in organization; 8. to make strategic decisions for applicable business/IT solutions through comprehensive analysis of an organisation business requirements and processes (selecting hardware, software, outsourcing - management of Package Software (Implementation, Enhancement, Conversions and training considerations) and cost/benefits of outsourcing 9. to argue, justify and present their decision and plans

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	10. to understand organizational IT structure, responsibilities and skills needed for successful strategic decision making
Format	5 Credits (150 hours of student work)
Workload	Credit weighting: 5 ECTS Lecture hours: 20 Group assignment work: 28 Independent study: 100 Examination: 2 Total Student Effort: 150 hours
Assessment	Class participation 20% Individual student research cases and class presentations (2) - 20% Team Project 40% (Deliverables: planning (20%), project recommendations (50%), project management (15%) and its presentation (15%)). The group responsible for the project will get the total grade by the instructor and by the mentor from the company involved with the case and students will receive the average grade. After that, students are responsible to distribute it among the group members internally (It is not assumed that all group members will receive the same grade). Final written exam 20%
Course Material	Content is available at https://www.moodle.hneu.edu.ua/login/index.php
Other Information	Classes will be integrated with students' direct involvement in teaching activities. - Instructor will be responsible to find a "Living Case" and students will be subdivided into groups and they will be asked to develop IS strategy for the selected organization (business, non-for profit, governmental) - Students will be responsible for individual research, presentation and assignments during the course lectures

COURSE DESCRIPTION

Topic	Learning Objectives	Theoretical component	Practical component
1	2	3	4
Topic 1. The Challenges of Managing Information Systems and Technology	Understand how IT can add value to IS and management; Determine components of IT management; Identify stakeholders responsible to create IT success;	The main sub-topic 1.1. Introduction to Corporate Information Strategy and Management 1.2. IT and Business advantages 1.3. Business models (Analysing Strategy, Capabilities, Value ,	In-Class assignment: Determine the IT and business related challenges emerging Assignment (1): Topic: Information Technology Planning Process. Interview an organization for the

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		Stakeholders, evolving business models) Video: "Innovative Technology " What are the issues and service levels?	purpose of documenting their IT planning process - who what, where, why, when, how?
Topic 2. Strategic Information Systems Plan: IT Strategy and Organization Strategy	Understand how IT should be planned in organizations which the use of IT varies in value and needs. Learn how to determine if the organization uses IT strategically or in support only. Determine what is to be contained in an IT Strategic Plan. Learn how the industry standard COBIT can assist in determining the overall IT strategy and execution. Understanding network economy and opportunities in Strategic IS Planning: SCM, CRM, Web 3, Cloud Computing, Business Analytics	The main sub-topic: 2.1. IT impact on Business models performance IT Impact on Organizations - Characteristics of the Hierarchy, Entrepreneurial, and Networked. 2.2. Organization Business Model Drivers and Performance Metrics The management of risks Video: Theme "How successful IT plans are created and managed using real examples"	Case studies presentation Discussion on case studies Individual Research "Managing Information Systems Priorities - The need for IT Governance"
Topic 3. Governance of the IT Function	Understand the support area skills of the IT department, staff retention and overall management requirements, and how the IT organization structure is designed based on the type of industry, business use of IT, and strategy deployed. Understand leadership Approaches to the Role of IT. Understand the role key skills, traits, levels of experience enabling the CIO to be successful. Understand critical assessment of sourcing IT	The main sub-topic: 3.1. The Scope and Practice of IT Governance Designing IT Governance: Critical Success, Factors and Good Practices Chief Information Officer (CIO) and The Information Services Resource Subtopic 3.2. Leadership of the IT Function	Industry Guest Speaker: lecture explore the various ways to create and maintain success for successful IT development and management. Class Discussion Presentation of Live cases Final group project to be assigned "Evaluation of IT Strategic Plans and Initiatives and Organization Business

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	support and technology and related decision making and outsourcing management		Continuity Awareness and Plans"
Topic 4. Organization Issues in Information Systems Development Life Cycle	<p>Understand Systems Development priority setting criteria; Quality and Productivity Process, such as CMU's Compatibility Maturity Model CMMi, ITIL, and ISO.</p> <p>Learn how higher level of quality is achieved by the use of best practices.</p> <p>Understand how best practices can be implemented into the IT organization successfully.</p>	<p>The main sub-topic:</p> <p>4.1. Systems Development priority setting criteria;</p> <p>4.2. Quality and Productivity Process, such as CMU's Comparability Maturity Model CMMi, ITIL, and ISO.</p>	<p>Individual student research of the methodologies before class (web sites below can be a starting point) and presentation</p> <p>Class discussion : How can organizations make a choice - quality or speed of delivery or can both be obtained?</p>
Topic 5. Decision making for the Information Systems (IS) and Information Technologies (IT) Security	<p>Understand why organizations are at high risk and exposure due to the continued expansion of technology for employees and customers.</p> <p>Learn management functions to accommodate dependency on technology increasing at most organizations due to the integration of technology with nearly all aspects of personal and on the job life.</p> <p>Understand why IT dependency creates the need to manage in an environment which provides for failover to technology in the event of an unusual situation.</p> <p>Understand Security Management Framework</p>	<p>The main sub-topics:</p> <p>5.1. Assuring Reliable and Secure IT Services</p> <p>5.2. Securing Infrastructure against Malicious Threats</p> <p>5.3. Risk Management of Availability and Security</p> <p>5.4. Incident Management and Disaster Recovery</p>	<p>Guest Speaker from industry : An expert with IT security speak regarding policies, Vulnerabilities, technologies, and processes to insure organizations are properly protected.</p> <p>Class discussion.</p> <p>Individual research and presentation - Critical need of a detailed, formal business recovery plan (case study delineating a real business recovery, which occurred a short time ago)</p>

<p>Topic 6. Managing IT Service Delivery</p>	<p>Understand IT procurement and economic advantage to the organization with some best practices for purchasing, to manage relationships, and to reach mutually acceptable agreements. Understand the need for service level agreements (SLA's) and develop best practices stipulations. Understand how IT is audited to insure information assets are accurate and are protected.</p>	<p>The main subtopics: 6.1. New Service models (On Demand, Software as a Service, Cloud Services and Grid Computing Models) 6.2. Strategic Decision Making in the areas of IS and IT Acquisition, Vendor Relationships and Contract Negotiation 6.2. Information Asset Controls, Data Management, and IT Outsourcing</p>	<p>Guest Speaker: Audit Manager from company will discuss the reasons IT departments and procedures are audited at least every two years. Case studies Discussion: How to negotiate a contract, which will be organizations advantage. Assignment (2): Analyse vendor contracts, simulate real business activities.</p>
<p>Topic 7. Project Management A Portfolio Approach to Managing IT Projects</p>	<p>Learn best practices for project management and IT leadership.</p>	<p>The main subtopics: 7.1 Managing IT Project Execution and delivery 7.2. Process Consistency and Agility in Project Management 7.3. Managing Sources of Implementation Risk</p>	<p>Case studies Discussion: Project management and leadership such as: Project management Institute's (PMI), Project planning techniques (GANTT, PERT) Structured Walk through, and Management of Package Software (Implementation, Enhancement, Conversions and training considerations).</p>
<p>Topic 8. Evaluation of IS Strategic Plans and Business Continuity Preparedness Plans</p>	<p>To evaluate Critical Success, Factors and Good Practices for Designing IT Governance:</p>	<p>The main subtopics: 8.1.Evaluation of IS Strategic Plans 8.2. Business Continuity Preparedness Plans</p>	<p>Group Presentations Final research topic presentations Open discussion regarding best practices to insure organizational success with IT.</p>

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RECOMMENDED OR REQUIRED READING

Main:

1. Corporate Information Strategy and Management Text and Cases 8th Edition, Linda M. Applegate, Robert D. Austin, and F. Warren McFarlan, ISBN-13: 978-0073402932
2. Various course materials are contained in the course Moodle Lecture Notes, Handouts, and Assignment sections.

Additional:

1. Ward J.& Peppard J. Strategic Planning for Information Systems , Wiley Series in Information Systems, latest edition Cassidy A. A Practical Guide to Information Systems
2. Strategic Planning. Auerbach Publications; 2nd ed.
3. Glen P. et al, Leading Geeks: How to Manage and Lead the People Who Deliver Technology, Jossey-Bass; 1st edition.
4. Earl, M. J. (1993). Experiences in Strategic Information
5. System Planning. MIS Quarterly, 1-24.
6. The value and impact of information / edited by M. Feeney and M. Grieves. - London: Bowker Saur, 1994.
7. The value of information to the intelligent organization. -
8. Hatfield : University of Hertfordshire Press, 1994.
9. Porter, M. E. (1985). Competitive Advantage: Creating and
10. Sustaining Superior Performance. New York, N.Y.: Collier
11. Macmillan.
12. Senge, P. (1994). The Fifth Discipline: The Art and Practice
13. of the Learning Organization. New York: Currency Doubleday

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