Information Technology in Business
GBAT9115

Course Overview
Semester 2 2014
Important Notice

The material contained in this study guide is in the nature of general comment only and is not advice on any particular matter. No one should act on the basis of anything contained in this guide without taking appropriate professional advice upon the particular circumstances. The Publisher, the Editors, and the Authors do not accept responsibility for the consequences of any action taken or omitted to be taken by any person, whether a subscriber to this guide or not, as a consequence of anything contained in or omitted from this guide.
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# Semester 2 2014 course schedule

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<th>Unit 1: The Place of Information Systems in Business</th>
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<td>Week 2</td>
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<td>Week 4</td>
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<td>Unit 4: Information Systems and the Way We Work</td>
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<td>Week 5</td>
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<td>Week 6</td>
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<td>Unit 6: Architecture and Infrastructure</td>
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<td>Week 7</td>
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<td>Unit 7: IS Sourcing</td>
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<td>Week 8</td>
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<td>Week 9</td>
<td>22 September</td>
<td>Unit 9: IS/IT Ethics</td>
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**Mid-term recess:** Friday 26 September – Tuesday 7 October

| Week 10 | 7 October* | Unit 10: Funding IS |
| Week 11 | 13 October | Unit 11: IS Project Management |
| Week 12 | 20 October | Unit 12: Working with Knowledge |
| Week 13 | 27 October | Examination week 1 |
| Week 14 | 3 November | Examination week 2 |

*Monday 6 October is a public holiday in NSW
Course staff

Course Coordinator

Each course has a Course Coordinator who is responsible for the academic leadership and overall academic integrity of the course. The Course Coordinator selects content and sets assessment tasks, and takes responsibility for specific academic and administrative issues related to the course when it is being offered. Course Coordinators oversee Class Facilitators and ensure that the ongoing standard of facilitation in the course is consistent with the quality requirements of the program.

The Course Coordinator is:

Ken Stevens
BFin (Admin) UNE, MCom UNSW, PhD UNSW

email: k.stevens@unsw.edu.au

Ken is a lecturer in the UNSW School of Information Systems, Technology and Management in the Australian School of Business. He teaches on the Master of Commerce and Master of Information Systems programs. He has also facilitated the MBT courses Information Systems Management and E-business Strategy and Management.

Ken holds a PhD in Information Systems from UNSW. His thesis explored the factors influencing the use of risk management methodologies in IT projects. Ken main research focus is the management of the business risks of IT. Ken also is involved in research investigating the motivations for use of online technologies in teaching. Ken is also interested in the ethics and professionalism in IT practices.

Before joining academia, Ken worked as a business systems consultant for a diverse client base that included manufacturers, wholesalers and financial institutions, in a wide range of projects including systems selection, systems implementation and systems management. Ken is a Chartered Accountant, and began his career as an accountant and auditor with Price Waterhouse.
Class Facilitator

The role of your Class Facilitator is to support the learning process by encouraging interaction amongst participants, providing direction in understanding the course content, assessing participant progress through the course and providing feedback on work submitted. MBT Class Facilitators comprise academics and industry practitioners with relevant backgrounds.

You will be notified of your Class Facilitator’s name and contact details in your class confirmation email sent by MBT Student Services. Details will also be available in the gallery section of your online class for face-to-face and distance classes.

Course author

Dr Phil Brook, BSc, DipCS, PhD

Phil’s professional career began with a position with several federal and state government departments in Australia, working in IT development, project management, DP audit and data-modelling roles. Following several years with a major bank, Phil entered academia in 1993 and is now a consultant/facilitator/author in IT/business education.

While his main research interests are concerned with project management (the topic of his PhD) and knowledge management, he also is working on a research project involving the use of virtual worlds for business education. He delivers courses on many aspects of the discipline of Information Technology in business.

He has lectured in both undergraduate and postgraduate programs in Australia, and overseas in the US, Britain, Malaysia and China.
Course information

Aims

Information Technology (IT) is an integral part of almost every organisation. It underpins many day-to-day business processes and transactions, assists managers in solving problems and making decisions, and it helps organisations to manage their knowledge.

A clear understanding of the role that IT plays in business – and an awareness of the problems and issues associated with that use – allows managers to more effectively plan for and manage the efficient use of IT through the business.

In this course, our aim is that you become familiar with the wide scope of the role IT plays in business. We will accomplish this through an investigation of the way in which IT is used within organisations and look at how it supports various business and management functions. We will also consider the Information Systems that it underpins, the processes for the management of the technology itself, and the current issues and problems that surround its use.

We will make use of current practice and theory, as discussed in recent academic and practitioner articles, as well as real-world examples. This will include your own experiences and those of your fellow classmates. Through reading the course material, completing the Unit exercises and participating in the class discussions, you should develop a broad understanding of the role of IT in business, at both a practical and theoretical level.

Structure

Unit 1, The Place of Information Systems in Business. The course begins by considering why the study of Information Technology as it is used in business is important. This study is then given context by discussing a simple model that considers business strategy, organisational strategy and Information Systems strategy as a set that needs to be in balance in order for the business to function effectively. A model for developing an Information Systems strategy is then proposed – the combination of technology, processes and people. To conclude the unit, a series of articles on the role of people and systems is used to pose several questions about this aspect of Information Systems use.

Unit 2, Information Resources in Business. This unit expands on the idea of an Information Systems strategic plan (introduced in the previous unit) by looking at information resources in detail. The discussions throughout the unit are based around answering the question as to why it is necessary for business managers at the most senior levels to manage these information resources, rather than leave this aspect of organisational management to
middle management. Issues covered include cost reduction, value adding and strategic advantage through the use of Information Systems. Frameworks such as Porter’s Five Forces Model, the value chain and the virtual value chain are used to more concretely link Information Systems use to business operations.

Unit 3, Information Systems and the Organisation. The focus in this unit is the role that Information Systems play in how an organisation is structured and managed. The advent of modern Information Systems, and especially new ways of communicating, has enabled alternative organisational forms to emerge. Of particular interest is the role that Information Systems play in organisational change, and the management issues related to the introduction of organisational change.

Unit 4, Information Systems and the Way We Work. From the perspective of the individual, the most obvious impact of Information Systems is on the way work is performed. This unit uses the concept of information richness to better understand the relationship between the extent of change and Information Systems. The unit also looks at the new ways of working enabled by advances in technology, in particular the ways people can communicate, how they can collaborate and how virtual teams can become a reality.

Unit 5, Business Processes and Systems. This unit explores the concepts that underpin our understanding of processes and systems, and their role in Information Systems use. Discussion covers the issues related to process change and how it should be introduced into the organisation, and the Information Systems available to support this change. Examples discussed include integrated supply chains and Web Services.

Unit 6, Architecture and Infrastructure. This course does not aim to provide a detailed treatment of current technologies, only to use current examples to illustrate particular points about the use of technology in business. This unit of the course supports this aim by providing a detailed discussion on the role and development of an IT architecture (a ‘blueprint’ for technology use) and how that architecture is translated into the physical infrastructure. By understanding the role of these two key tools of Information Systems management, you will be able to better utilise whatever new technologies develop in an organisation.

Unit 7, IS Sourcing. The development and support of Information Systems does not have to be in-house. This unit looks at the management decisions that need to be made before an appropriate sourcing model can be chosen, and then explores the different models of sourcing the IS function, including outsourcing, offshoring and nearshoring. The role of Service Level Agreements is also discussed and a case study is used to illustrate the management issues related to IS sourcing.

Unit 8, IS/IT Governance. The role of IS/IT governance policies is to ensure that the appropriate management mechanisms are in place to ensure that decisions relating to IS/IT are made by the right people at the right time. Therefore, this unit looks at several different models of IS/IT governance,
including a comparison of centralised versus decentralised approaches. Also discussed are the roles of the senior executives of an organisation, and the position of the Chief Information Officer as the senior IS/IT executive.

**Unit 9, IS/IT Ethics.** Our study so far of the use of Information Systems to support an organisation has illustrated the key role that these systems have in an organisation. Just as an organisation has to be concerned with ethical behaviour, so does the use of Information Systems. This unit therefore looks at the ethical issues surrounding the use of Information Systems, such as privacy and the security of information. In a broader context, several theories of business ethics are considered, including a critique of utilitarianism.

**Unit 10, Funding IS.** This unit discusses the sometimes difficult issues about how the IS/IT function should be funded – who pays? One aspect of this question is to actually determine what the IS/IT function actually costs. Several models of funding are covered, including the issue of ownership of Information Systems. The role of the business case as a management tool for instituting change is looked at in detail, supported by a discussion about how to measure the benefits that accrue from new or changed Information Systems.

**Unit 11, IS Project Management.** Despite several decades of experience in how projects are managed, many IS projects routinely fail to meet their objectives. This unit looks at the tools and techniques of IS project management and proposes that the management of people-related issues lags behind the technical management of projects. The unit also discusses various project governance models, and concludes by briefly describing an alternative to traditional methods of planning and executing a project.

**Unit 12, Working with Knowledge.** In this unit, we examine the role of knowledge management in business. We address the importance of distinguishing between data, information and knowledge, and explain why understanding the quality of information is vital. We then look at how knowledge is acquired and accessed, and discuss in some detail the issues related to knowledge transfer. The role of business intelligence and business analytics is also discussed.
Learning outcomes

When you have completed this course you should be able to:

• differentiate between business strategy, organisational strategy and Information Systems strategy and discuss their relationship
• distinguish between the various ways the IS function can be resourced and managed
• analyse the impact of IS-initiated change on people, particularly in the context of the way people work and broader organisational issues
• demonstrate how architecture and infrastructure plans can be used to manage IS/IT
• explain the various IS governance models
• critically question assumptions related to IS-related ethical issues
• distinguish between technical and people-centred project management, and describe the tools and techniques applicable to each
• illustrate how knowledge transfer takes place and describe its relevance to business knowledge management.

Skills and experience you will need

There are no prerequisites for this course.

Resources

Prescribed text


An e-text of this textbook is available for purchase from the publisher or other online resellers.

A companion website for the text is available here:

http://bcs.wiley.com/he-bcs/Books?action=index&itemId=0470343818&bcsId=4903
Recommended reading

All the required readings are contained within the study guide or are accessible via the internet.

However, you may wish to supplement these readings with the introductory material that can be found in any ‘information systems’ or ‘management of information systems’ text. If so, two texts considered useful for this purpose are:


Relationship to other courses in the MBT program

This course is one of the starter technology courses in the MBT and, as such, is suitable if you are a new student in the MBT Program.

The course examines the role and impact of IT in organisations, individuals and society, and aims to give you a basic understanding of the major issues so that you can make informed decisions in your workplace.

GBAT9106 *Information Systems Management* deals with the relationship between the organisation and its Information Systems, strategic and tactical planning for Information Systems and the management of the development and acquisition of systems and technology.

GBAT9117 *E-Business: Strategy and Management* focuses more particularly on the issues a business must address when venturing into e-business, e.g. infrastructure, security, marketing.
There are two assignments and an examination for GBAT9115 *Information Technology in Business*. Assignments must be received by 9.30am Sydney time on the due dates.

<table>
<thead>
<tr>
<th>Participation</th>
<th>Throughout the semester</th>
<th>15%</th>
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<tbody>
<tr>
<td>Assignment 1</td>
<td><strong>Wednesday 27 August 2014</strong> (Week 5)</td>
<td>20%</td>
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<tr>
<td>Assignment 2</td>
<td><strong>Wednesday 15 October 2014</strong> (Week 11)</td>
<td>25%</td>
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<tr>
<td>Examination*</td>
<td><strong>Monday 3 November 2014</strong> (2pm if sitting on campus)</td>
<td>40%</td>
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* Examination is 2 hours; open book
Continual course improvement

MBT courses are revised each time they run, with updated course overviews and assessment tasks. All courses are reviewed and revised every two years and significant course updates are carried out in line with industry developments.

The MBT surveys students via the UNSW CATEI system each time a course is offered. The data collected provides anonymous feedback from students on the quality of course content and materials, class facilitation, student support services and the MBT Program in general. This student feedback is taken into account in all course revisions.

The Australian School of Business (ASB) also monitors the quality of students’ learning experiences in all its programs. A random selection of completed assessment tasks may be used for quality-assurance purposes. This information will be aggregated and used:

- to determine the extent to which program learning goals are being achieved for accreditation purposes
- to improve the quality of ASB programs.

All material used will be treated as confidential and these processes will have no bearing on course grades.

Student evaluations from last presentation of course

On the whole the course went well, with all but one student being satisfied with the course. The level of participation across all classes was strong and the assignment, whilst not necessarily well received by all students, proved to be of sufficient difficulty and complexity for the course.

Positive comments were made about many aspects of the course. Of note were:

- the good range of topics covered by the course
- the engaging and knowledgeable facilitators
- the workplace/job relevance of the material covered and the assignment
- the sharing of experiences among the students
- the currency of the material covered.

Students did make some suggestions and recommendations for improving the course. Issues reported by students fell roughly into the following categories.

Minor formatting errors in the materials
A number of comments were received about some minor formatting errors within the course notes.

**Reading load and reliance on textbook**

Some students commented that the reading load was too high and the course made too much use of the textbook.

**The assignments should not have covered the same technological area**

A number of students complained about the fact the assignments covered the same technological area.

**The course did not have enough focus on newer technologies**

A number of students commented that the course lacked sufficient focus on technology, especially new technologies.

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**Coordinator’s response**

**Minor formatting errors in the materials**

The notes have been reviewed and formatting errors corrected where found.

**Reading load and reliance on textbook**

The reading load in this course is very similar to that of other MBT courses.

**The assignments should not have covered the same technological area**

It was a deliberate strategy by the facilitator for the assignments to cover the same recent IT innovation context – this was to allow the students to focus on the discussion in the assignment in regard to how various aspects of the use of the technology applied to their organisation at both the operational and strategic level. Given that many favourable comments were also received about this practice, it is difficult to determine whether it was useful or not. It is also worth noting that the assignment questions were quite hard and quite a few students appeared surprised with the lower than expected marks they received. The assignments for this year will use the same technological innovation across both assignments, but the questions posed are somewhat broader so as to allow the students greater latitude in what they address in the assignment.

**The course did not have enough focus on newer technologies**

The Coordinator and Facilitators will ensure that newer technologies, such as ‘the cloud’, are addressed in the discussion forums. Newer technologies are also now incorporated into the assignments.