

Bachelor in Wirtschaftsinformatik (Information Systems)**Internet Economics – eBusiness**

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I. INFORMATION ON INSTRUCTOR AND TUTOR

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II. COURSE OBJECTIVES, GOALS, OUTCOMES, AND ASSESSMENT**Course Description:**

Electronic Business is thriving and is making significant inroads in business and everyday life. In fact, doing business electronically has become an integral part of everyday life for public and private organisations, both large and small, across the globe.

Based on the information society discourse and related political visions like eEurope, the course will provide an overview across a whole range of eBusiness applications, sometimes referred to as the eBusiness Ecosystem.

As it is widely recognized that eBusiness is best understood in a sectorial context, reflecting the contingencies and specifics of a respective industry, the course will use the travel and tourism industry as lead example and elaborate on the usage and development of eBusiness across different segments of that industry. Travel and tourism is an example of a global services industry characterized by a high level of information intensity and ICT innovation.

Themes and Learning Goals:

The course **objective** is to develop an understanding of the impact of Electronic Business – in economic, organisational and behavioural terms. Technologies are constantly evolving and much depends on the social, organisational and institutional situations in which technologies are embedded. The extremely dynamic Electronic Business environment provides students with a unique opportunity to learn about and understand fundamental issues about business, management, economics and the implications of living in an increasingly networked world.

	Themes	Learning Goals
1.	Internet Economics and the Information Society	To learn about political visions and action programmes, and to assess their role for companies and citizens.
2.	eBusiness basics: technology driven business innovation	To understand the role of eBusiness models, and to critically assess the development of electronic business and the role of technology (ICT).
3.	The tourism industry	To identify stakeholders and their roles, to understand the specifics of tourism products and to assess the transformation of tourism distribution systems. To understand how service properties and industry structures shape managerial decisions.
4.	The customer perspective	To comprehend the customer buying cycle and the notion CRM. To assess the role of Prosuming and service configuration.

5.	Content management	To appreciate the role of content in tourism and to distinguish different models of content production and provision as well as rights management.
6.	Revenue management	To distinguish models for flexible pricing and to understand the notion of yield management.
7.	Quality management	To appreciate the role of Web quality management and related instruments, such as Web design, usability studies, quality assessment.
8.	Innovation management	To study and assess options for service innovation.

More generally the goals are:

1. To learn theoretical foundations of the ICT-enabled transformation of services, customer roles, businesses and industries.
2. To develop a global outlook.
3. To learn how to identify major business issues, find relevant information, outline credible alternatives, and logically build and articulate convincing argument in support of a particular course of action.
4. To learn how to work in teams effectively.

Learning outcomes:

Upon the successful completion of this course, you should:

1. Understand the ICT enabled transformation of societies, economies, industries and businesses.
2. Be able to outline the specific attributes of tourism services and understand how they affect eBusiness solutions and customer behaviour.
3. Demonstrate the ability to apply core themes of management theory, such as price, quality, customer relationship management, to an eBusiness-enabled environment.
4. Be able to work in teams effectively.
5. Be able to write effective case analyses, and make compelling presentations.

Course dynamics:

Usually one session per week will be a lecture. The second session will focus on group work and student presentations. The success of this course and your personal learning depends on your individual and collective contribution to the class discussions. Please read the assigned readings before each class so that you can contribute effectively to class discussions. Learning within this course occurs at three stages: at individual-level, at group-level and in classroom.

Assessment:

40% of the mark will be based on continuous assessment of group assignments.

60% of the mark will be based on the final written exam.

III. COURSE SCHEDULE

1. Introduction: Internet Economics and the Information Society

The commission of the EU is pursuing the goal of building an Information Society.

- What is the political (and economic and social) context of Internet Economics: **European visions and action programmes?**
- Which issues or concerns are mirrored by national or international initiatives or institutions, e.g. e-inclusion or support programmes?
- Highlight **challenges**, implications and frictions of global electronic business, e.g. ICT for development, digital divide.
- What are metrics to measures the diffusion of eBusiness?

Reading:

eBusiness W@tch Report 2008: http://www.ebusiness-watch.org/key_reports/documents/BRO08.pdf

2. Defining the business: fundamentals in strategy and business models

The notion of business model captures the idea of innovation in eBusiness in a nutshell and it is related to the notion of strategic planning in an Internet context. At the same time the notion of “business model” has drawn substantial criticism as being “murky at best” Porter, 2001.

- What is a business model? What does it cover and how does it differ from strategy?
- What are the differences between the market-based and the resource-based view of strategy?
- How does IT fit into the strategy discourse?

Reading:

Rentmeister, Jahn; Klein, Stefan (2003): Geschäftsmodelle – ein Modebegriff auf der Waagschale, in: ZfB, Ergänzungsheft 1/2003, 17-30.

Porter, M.E.: Strategy and the Internet, Harvard Business Review (79:3), 2001, pp 62-78.

3. eBusiness Quo Vadis?

Reflecting the development of Electronic Business (and more broadly: ICT) in a wider historical context:

- Why is the impact of the ongoing technical transformations difficult to assess?
- Are there new rules for the new economy?
- Why do we see the emergence of utopian and dystopian views of the Internet revolution?
- Can they be reconciled?
- Is technology neutral nor arbitrary in its impact?
- Can we do anything?

Reading:

Klein, Stefan (2004): Electronic Commerce: Hype and Downturn, in: Stanoevska-Slabeva, Katarina (ed.): Digital Economy - Anspruch und Wirklichkeit, Heidelberg: Springer Verlag, 2004, 127-140.

4. The “e” in eBusiness and the Productivity Paradox

Reflecting the challenges of accounting for the impact of ICT. Introducing the IT productivity paradox debate.

- (How) Does ICT have an impact on productivity?

- What constitutes ICT/ the IT artefact?
- Under what conditions does ICT contribute to productivity growth in companies/ in industries?

Reading:

Brynjolfsson, Eric (2003): The IT Productivity Gap, *Optimize*, July 2003, 21 [available online]

5. The Tourism eBusiness Ecosystem and Global Distribution Systems

Introducing the main stakeholders in global tourism distribution.

- What is the underlying view on Electronic Business reflected in the concept of a business ecosystem?
- How can it be applied to tourism?
- What are typical/ specific stakeholders in tourism and what is their role?
- What is the role and impact of ICT on the tourism industry based on statistical evidence?
- How did CRS develop?
- What were the drivers to develop GDS?
- What is the role of CRS/ GDS for tourism service providers (principals)?
- How did the Web shape the transformation of CRS/ GDS?

Reading:

Werthner, Hannes; Klein, Stefan (2000): ICT and the Changing Landscape of Global Tourism Distribution, in: *EM - Electronic Markets*, 9 (4), 2000, 256-262.

6. Cybermediaries and the transformation of the value chain

Early commentators on the impact of eBusiness on industry structures expected that intermediaries, such as travel agencies or retailers, would be bypassed by suppliers, aiming at reaching directly to customers (disintermediation). While some disintermediation has occurred, it has been complemented by “cybermediation”, i.e. the formation of new intermediaries on the Internet.

- What are intermediaries? What are their roles and tasks?
- What is the economic rationale for intermediation?
- How does the Web influence the business opportunities for “cybermediaries”?

Reading:

Klein, Stefan; Teubner, Rolf Alexander (2000): Web-based Procurement: New Roles for Intermediaries, in: *IS Frontiers*, 2 (1), 2000, 19-30.

Background:

Benjamin, R. and Wigand, R. (1995). Electronic Markets and Virtual Value Chains on the Information Superhighway. In: *Sloan Management Review*, 36:2, Winter, 62-72.

Sarkar, M.B., Butler, B. and Steinfield, C. (1995). Intermediaries and Cybermediaries: A Continuing Role for Mediating Players in the Electronic Marketplace. In: *Journal of Computer Mediated Communication*, 1:3 [Available on-line at: <http://jcmc.huji.ac.il/vol1/issue3/sarkar.html>].

7. Tourism products and services

Literature has argued that eBusiness is more suitable to some products than to others. The session explores characteristics of tourism products and services in the context of online transactions:

- What are relevant product taxonomies (material – immaterial, search – trust – experience)?
- What is a service? What are service bundles?
- How do product characteristics influence the opportunities of selling online?

Reading:

Philip Nelson (1970): "Information and Consumer Behavior", 78(2) *Journal of Political Economy* 311-329

8. The customer buying cycle and CRM

The customer buying cycle is a simple description of the phases of a business transaction. The session looks into tourism specific aspect of business transactions and reflects on the impact of CRM.

- What are the differences and linkages between the customer buying cycle and CRM?
- What are typical examples of CRM in tourism?
- What are pros and cons of (online) personalization/ mass customization?

Reading:

Riemer, Kai; Totz, Carsten; Klein, Stefan (2002): *Vergleichende Buchbesprechung Customer-Relationship-Management*, in: *Wirtschaftsinformatik*, 44 (6), 2002, 600-607.

9. Prosuming and service configuration

The phenomenon of "Prosuming" looks into novel ways of division of labour between the

- Why and how is the division of labour between service providers and customers changing?
- What is the difference between prosuming and individualization/personalization?
- What are drivers for the ongoing transformation of service configuration?
- What are trade-offs (pros and cons) for customers?

Reading:

Klein, Stefan; Totz, Carsten (2004): Prosumers as service configurators – vision, status and future requirements, in: Preissl, B.; Bouwman, H.; Steinfield, C. (eds.): *ELife after the DOT.com bust*, Heidelberg, New York: Physica, 2004, 119-135.

10. Content management

Tourism is often regarded as information business. The session introduces the notion of "information product" and discusses options for content generation and provision.

- What are the specifics of information products?
- "Content matters": would you agree for tourism businesses?
- Why has user generated content become so popular and influential?
- What are value propositions and possible revenue streams for content syndication?
- Why is standardization important for (online services in) tourism?
- Intellectual property rights and copyright: Creative Commons

Reading:

Klein, Stefan; Teubner, Rolf Alexander (1999): Informationsverhalten und Informationsstrukturen in Unternehmen, in: *Handbuch der Wirtschaftsethik*, Band 3: Ethik wirtschaftlichen Handelns, Gütersloh, pp. 416-432.

Background:

Benkler, Yochai (2006): *The Wealth of Networks – How Social Production Transforms Markets and Freedom*, New Haven and London.

Video: Wanna work together (www.youtube.com/watch?v=P3rksT1q4eg)

11. Revenue streams and pricing models

Service pricing poses unique challenges. The session elaborates on different options for flexible pricing strategies and introduces the notion of yield management.

- The concept of yield management.
- What are typical pricing strategies and contingencies of their application?
- What is the rationale for flexible pricing?
- What is the impact of the Web on pricing strategies?
- Does the idea of “the long tail” apply to tourism?
- What could be future trends for pricing models?

Reading:

Klein, Stefan; Löffbecke, Claudia (2000): The Transformation of Pricing Models on the Web: Examples from the Airline Industry, in: Klein; Stefan; O'Keefe, Bob; Gricar, Joze, Podlogar, Mateja (eds.): Proceedings of the 13th International Bled Electronic Commerce Conference, Vol. 1, Kranj, 2000, 331-349.

Anderson, C. (2004): The Long Tail, WIRED 12 (10).

12. Web quality management

The more business moves to the Web the more critical is the Quality of the Web offering. Web quality management deals with the different facets of improving the quality of customers' experience on the Web.

- What are concepts and what is the economic rationale for Web evaluation?
- What different methodological approaches are pursued?
- What are criteria for evaluation design/ configuration?

Reading:

Totz, Carsten, Riemer, Kai; Klein, Stefan (2001): Web Evaluation, in: Lowry, Paul B.; Cherrington, J. Owen; Watson, Ronald R.: The E-Business Handbook, St. Lucie Press, 2001, 45-66.

[Riemer, K., & Müller-Lankenau, C. (2005). *Web-Evaluation: Einführung in das Internet-Qualitätsmanagement*. Münster: Arbeitsbericht Nr. 21 des Kompetenzzentrums Internetökonomie und Hybridität Münster.]

13. Service innovation

Technology innovation is progressing fast. Service innovation reflects possible future scenarios of tourism (“Tourism 2020”) and attempts to link technology development and industry transformation.

- What are (technically induced) innovation trends in tourism?
- What are typical “Leitbilder” for ICT-driven innovation in tourism?
- Will innovation lead to further fragmentation or are you expecting dominant trends/ dominant designs?

Reading:

Werthner, Hannes; Klein, Stefan (2005): ICT-enabled Innovation in Travel and Tourism, in: Walder, Bibiana; Weiermair, Klaus; Sancho Pérez, Amparo (eds.): Innovation and Product Development in Tourism. Berlin: Erich Schmidt Verlag, 2005, 71-84.

Klein, Stefan (2007): eBusiness & Innovation Policies “A Vision for Transnational Cooperation” (Draft)

14. Summary & conclusion