



## COURSE SYLLABUS

# Doctoral course: Digital business and industrial dynamics 7,5 credit points

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Course code:  
Reviewed by: RFB  
Approved by: RFB  
Valid as of: November 2020  
Version: I  
Reference number:

Education Cycle: Third cycle, doctoral program course  
Doctoral programme subject: Business Administration

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### Purpose:

Digitalization of businesses has received much attention in recent years. Many different domains of academic research are today increasingly concerned with the how firms are affected by digitalization and how they can realize the novel opportunities that have emerged. *Digital Business* is increasingly regarded as a distinct topic within academia. As the roots of such a concept can be derived from a wide range of different literature fields such as information systems, entrepreneurship, strategic management, innovation management, systems of innovation etc there is presently a need for bringing these diverse approaches together. This course provides an overview of the subject Digital Business with a particular focus on industrial dynamics, i.e. the competitive implications for firms and industries. In doing so, it prepares the doctoral student for performing research within the subject of digital business.

### Intended learning outcomes:

On completion of the course, the students will be able to:

#### *Knowledge and understanding*

1. Present an overview of the field of digital business and show an understanding of different stands of literature that deal with the topic.

#### *Skills and abilities*

2. Identify gaps in current research and formulate research questions related to these gaps.

#### *Judgement and approach*

3. Critically evaluate contributions to the field of digital business.

### Content:

The course begins with a background and introduction to digital business. The following sessions cover how various academic fields within management dealt with the topic previously. Each session covers a couple of central contributions to digital business within a certain field, e.g. industrial dynamics or innovation studies. Explicit attention is devoted to the identification of current gaps in research and how doctoral students can formulate research questions related to addressing these gaps.

### Signing up:

Please fill in the application form and send it in to [Jibs.Research@ju.se](mailto:Jibs.Research@ju.se)

#### Type of Instruction/Teaching format:

The course is based on reading assigned material, preparations, discussion seminars and presentation seminars. This means that students are required to take an active approach to their own learning. There are written assignments and oral presentations in the course.

*All teaching will take place over Zoom.* Teaching sessions will be highly interactive, contain plenty of presentations and include participation from key scholars in the field. Sessions will deal explicitly with how the participant can identify gaps in research or make use of papers for their own doctoral work.

#### Confirmed Instructors

##### *Course examiner:*

Christian Sandström, Senior Associate Professor, Jönköping International Business School

##### *The following scholars will take part in delivering the course:*

Andrea Geissinger, PhD, Örebro University

Robin Gustafsson, Associate Professor, Aalto University

Christofer Laurell, Associate Professor, KTH Royal Institute of Technology

Jerker Moodysson, Professor, Jönköping International Business School

Christian Sandström, Senior Associate Professor, Jönköping International Business School

Karl Wennberg, Linköping University & Ratio

Christina Öberg, professor at Örebro University

#### Prerequisites:

Admitted in a doctoral programme of a recognized business school or university.

#### Examination and grades:

The course will be examined in the following way:

- Handins, Seminar attendance, presentations and active contribution to discussion (50%) fulfill ILOs 1, 3
- Assignment: Completion and presentation of term paper (50%) fulfill ILOs 1, 2, 3

All parts of the examination is individual. All parts of the examination must be passed to achieve a grade in the course.

The grades for the course are “pass” or “fail”.

#### Course evaluation:

A course evaluation will be conducted at the end of the course.

## Literature and Course Content

### **Session 1 Introduction, Digital business, innovation and industrial dynamics**

*26 of February, 13-16 SWE time*

#### Readings

Arthur, B.W. (1996) Increasing Returns and the New World of Business, *Harvard Business Review*, July-Aug.

Christensen, C. M., & Rosenbloom, R. S. (1995). Explaining the attacker's advantage: Technological paradigms, organizational dynamics, and the value network. *Research policy*, 24(2), 233-257.

Tripsas, M. (1997) Unraveling the process of creative destruction: complementary assets and incumbent survival in the typesetter industry, *Strategic Management Journal*, Vol. 18(S1), pp. 119-142

Tushman, M. L., & Anderson, P. (1986). Technological discontinuities and organizational environments. *Administrative science quarterly*, 439-465.

### **Session 2 Digital business and entrepreneurship**

*4 of March, 13-15 SWE time*

#### Readings

Nambisan, S. 2016. Digital Entrepreneurship: Toward a Digital Technology Perspective of Entrepreneurship. *Entrepreneurship Theory and Practice*, 41(6): 1029–1055.

Von Briel, F., Davidsson, P. & Recker, J. 2018. Digital Technologies as External Enablers of New Venture Creation in the IT Hardware Sector. *Entrepreneurship Theory and Practice*, 42(1), 47-69.

Srinivasan, A. & Venkatraman, N. 2018. Entrepreneurship in digital platforms: A network-centric view. *Strategic Entrepreneurship Journal*, 12(1), 54 -71.

### **Session 3 Digital business and Information Systems**

*5 of March, 13-15 SWE time*

#### Readings

Yoo, Y., Henfridsson, O., & Lyytinen, K. (2010). Research commentary—the new organizing logic of digital innovation: an agenda for information systems research. *Information systems research*, 21(4), 724-735.

Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: toward a next generation of insights. *MIS quarterly*, 471-482.

### **Session 4 Digital business, strategy and business models**

*11 of March, 10-12 SWE time*

#### Readings

Achtenhagen, L., Melin, L., & Naldi, L. (2013). Dynamics of business models—strategizing, critical capabilities and activities for sustained value creation. *Long range planning*, 46(6), 427-442.

Amit, R., & Zott, C. (2001). Value creation in e-business. *Strategic management journal*, 22(6-7), 493-520.

Zott, C., Amit, R., & Massa, L. (2011). The business model: recent developments and future research. *Journal of management*, 37(4), 1019-1042.

Tripsas, M., & Gavetti, G. (2000). Capabilities, cognition, and inertia: Evidence from digital imaging. *Strategic management journal*, 21(10-11), 1147-1161.

### **Session 5 Digital business and Innovation studies**

*12 of March, 13-15 SWE time*

#### Readings

Dosi, G. (1982). Technological paradigms and technological trajectories: a suggested interpretation of the determinants and directions of technical change. *Research policy*, 11(3), 147-162.

Lundvall, B. Å., Johnson, B., Andersen, E. S., & Dalum, B. (2002). National systems of production, innovation and competence building. *Research policy*, 31(2), 213-231.

Geels, F. W. (2004). From sectoral systems of innovation to socio-technical systems: Insights about dynamics and change from sociology and institutional theory. *Research policy*, 33(6-7), 897-920.

### **Session 6 Digital business and institutional change**

*18 of March, 13-15 SWE time*

#### Readings

Peng, MW, S Li Sun, B Pinkham and H Chen (2009). The institution based view as a third leg for a strategy tripod. *Academy of Management Perspectives*, 23(4), 63–81

Garud, R., Jain, S., & Kumaraswamy, A. (2002). Institutional entrepreneurship in the sponsorship of common technological standards: The case of Sun Microsystems and Java. *Academy of management journal*, 45(1), 196-214.

Funk, R. J., & Hirschman, D. (2014). Derivatives and deregulation: Financial innovation and the demise of Glass–Steagall. *Administrative science quarterly*, 59(4), 669-704.

Gurses, K., & Ozcan, P. (2015). Entrepreneurship in regulated markets: Framing contests and collective action to introduce pay TV in the US. *Academy of Management Journal*, 58(6), 1709-1739.

### **Session 7 Digital business and Digital methods**

*19 march, 13-15 SWE time*

#### Readings

Stieglitz S, Dang-Xuan L, Bruns A, Neuberger C. (2014). Social Media Analytics. *Business & Information Systems Engineering*, 6(2), 89-96.

Stieglitz, S., Mirbabaie, M., Ross, B., & Neuberger, C. (2018). Social media analytics– Challenges in topic discovery, data collection, and data preparation. *International journal of information management*, 39, 156-168.

Geissinger, A., Laurell, C., Öberg, C., Sandström, C., Sick, N., Suseno, Y. (2020) Social Media Analytics for acquisition of market and non-market perceptions in the sharing economy, accepted for publication in *Journal of Knowledge Management*.

## **Session 8 Digital business and Digital history**

*25 of March, 13-15 SWE time*

### **Readings**

Cheung, Z. (2020). Analytically Structured History Approach Using a Relational Database- Essays on the Historical Embeddedness of Strategy Formulation.

Rowlinson, M., Hassard, J., & Decker, S. (2014). Research strategies for organizational history: A dialogue between historical theory and organization theory. *Academy of Management Review*, 39(3), 250-274.

Eriksson, K., Ernkvist, M., Laurell, C., Moodysson, J., Nykvist, R., & Sandström, C. (2019). A revised perspective on innovation policy for renewal of mature economies–Historical evidence from finance and telecommunications in Sweden 1980–1990. *Technological Forecasting and Social Change*, 147, 152-162.

Laurell, C., Sandström, C., Eriksson, K., & Nykvist, R. (2020). Digitalization and the future of Management Learning: New technology as an enabler of historical, practice-oriented, and critical perspectives in management research and learning. *Management Learning*, 51(1), 89-108.

## **Session 9 Digital business and Digital history**

*26 of March, 13-16 SWE time*

Final presentations and course wrap up