Rise, Evolution and Industrial Organisation of the Fintech Sector

Bachelor (final year) & Master course (ECTS: 7)

13.00 – 15.30 (CET Ljubljana)

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Course objectives and learning outcomes:

Fintech is a very recent industrial sector that has evolved at a neck-breaking speed. It is also a hot topic: The assigned book Shneor et al., 2020 (of which the instructor is a contributor) has been downloaded 30,000 times in the first two months since its publishing in August 2020!

Theory is preliminary and frameworks are just taking shape. In this kind of knowledge landscape, the only reasonable way to organise a course is as a process of exploration. You will be challenged to research into little known areas – but you can rest assured that you will be guided in the process. By the end of this course you will be able to understand:

- The factors that prompted this new industrial sector to emerge.
- How to apply a framework that will enable you to map a Fintech company based on its service domain and its main technology to enable that service
- The relationship and interaction between Fintechs and traditional banks
- The different routes that incumbent banks have taken to digitalise

Description of content:

Arner et al., (2016) reflect on that finance and technology had evolved hand in hand for a very long time, but it took a sharp turn in 2007-8. Indeed, Arner et al., (2016) divide the co-evolution of finance and technology into three stages, namely (i) The 'analogous age' prior to the late twentieth century; (ii) the 'digitalisation era' from late twentieth century until 2008; and (iii) the 'diverging era' with the advent of new financial providers based on advanced technologies. The first part of the course will look for explanations on why this divergence took place.

The second part of the course will focus on the new Fintech industry. Fintech will be split into seven banking functional domains (i.e., Alternative finance, Transactions, Markets, Banking backoffice, Financial inclusion, Cyber currencies and Business partner integration) and each participant will research one of those areas.

In the third and final part of the course we will focus on traditional banks and how they should adopt fintech to digitalise banking and adapt in the knowledge economy. In this part we shall look at some successful cases around the world and try to extract some lessons on where banks should focus their efforts to align technology with their business strategy.

Prerequisites for attending the course:

Having concluded an undergraduate programme; ideally have some work experience in business.

Course syllabus/Daily topics:

PROGRAMME DAY	ACTIVITY/TOPIC/SESSION
Monday, 5 July	**LSS Welcome session (no lectures)**
Tuesday, 6 July	Introduction: The banking industry and technology Read: Chapter 11 "Fintech Industry: Crowdfunding in Context" in Shneor *et al.*, 2020.
Wednesday, 7 July	Origins and future of Fintech: Technology, Part 1 Each member of the class will be assigned a theme in the rise and evolution of Fintech to develop a short essay (individual) Read: "Uncertainty Principals: The principals of quantum computing"
Thursday, 8 July	Origins and future of Fintech: Technology, Part 2 We shall update the debate on AI, five/six years on. View: Debate on artificial intelligence: Is it coming to take our livelihoods? https://www.youtube.com/watch?v=zFx5kq0pB0Y Assignment 1: Present essay on theme in the rise and evolution of Fintech. Individual. Some 1,000 words
Friday, 9 July	How has the Fintech industry developed? Part 1 Participants will learn who are the key players in their domain. Research: The class will be split in six small teams and each team will be assigned a banking services domain in which to explore the development of Fintech.
Monday, 12 July	How has the Fintech industry developed? Part 2 Teamwork: Reflect and write a short paper titled 'Structure of the Fintech industry' (<1,500 words) Reference: Chapter 1 'Theory building through comparative analysis' of 'Strategy-Technology Alignment…' as a methodology for this paper Assignment 2: The teams will present their short paper

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Tuesday, 13 July	Alternative Finance: The current state of Crowdfunding The participants will see 14 different approaches to crowdfunding; the challenges they pose. Discussion: Why has crowdfunding been slower than expected in financing SMEs? Reading: Shneor, Zhao & Flaten (2020) Chapters 1 and 2
Wednesday, 14 July	Banking post-Covid-19: How will the industry change? The effect on banking in different parts of the world. The opportunities for Fintech Class discussion on the challenges for banking post Covid-19 and how Crowdfunding might help shape the future Reading: The Statement (2020), 1, 1, Banking post Covid-19. https://www.lafferty.com/statement.html
Thursday, 15 July	Banking and the climate crisis: Principles of Responsible Banking (PRB). Discussion: Blockchain and how Fintechs will assist in implementing the PRB Reading: Forthcoming paper to be assigned.
Monday, 19 July	Strategy-Technology alignment in the age of digital banking. Part 1 Teamwork: The class will be divided into three or four larger teams. Each team will be assigned the AR of a bank to identify digitalization activities Reference reading: Chapters 11, 12 and 13 of 'Strategy-Technology Alignment:…'
Tuesday, 20 July	Strategy-Technology alignment in the age of digital banking. Part 2 Teamwork: The teams will present their findings. Followed by a discussion comparing the different cases. Preparation: Use the 'Value Catapult Model for ICT Investments' given in chapter 12 of 'Strategy-Technology Alignment:…'to give structure to your arguments. Wrap up and conclusions of the course

	Assignment 3: Write up a short paper <1,500 words on findings
Wednesday, 21 July	No lectures (preparation for final examination)
Thursday, 22 July	Final examination / Project presentations
Friday, 23 July	**Meeting hours with students & LSS Farewell session**

Online teaching methods and tools/software used:

The methodology of the course will be a series of mini-research colloquia where the participants will present the progress of their research. For this course to work effectively, it is vital that the participants invest heavily in preparing for each session.

The teaching platform will be Zoom. The engagement of the students will be achieved through a combination breaking down each session into dynamics of no more than 30 minutes' duration, and by ample use of Zoom functionality such as break-out groups and polls.

Course materials/List of readings:

Compulsory:

- Griffiths, P.D.R. (2011) Strategy-Technology Alignment: Deriving Business Value from ICT Projects, Academic Publishing International Ltd: Reading (chapters indicated above)
- Shneor, R., Zhao, L. & Flaten, B-T, Advances in Crowdfunding Research and Practice, Cham, edited, (Switzerland): Palgrave-Macmillan https://doi.org/10.1007/978-3-030-46309-0
- The Economist (2020) Uncertainty Principals: The principals of quantum computing Sep 26th, pp. 15, 76-77
- The Statement (2020), 1, 1, Banking post Covid-19, https://www.lafferty.com/statement.html
- BBC Video: Debate on artificial intelligence: Is it coming to take our livelihoods? https://www.youtube.com/watch?v=zFx5kq0pB0Y

Optional:

- Arner, D.W., Barberis, J. & Buckley, R.P. (2017) FinTech, RegTech, and the Reconceptualization of Financial Regulation, Northwestern Journal of International Law and Business, Vol. 37, No. 3
- Boonsiritamachai, W. & Pitchayadejan, K. (2017) Determinants affecting mobile banking adoption by generation Y based on the Unified Theory of Acceptance and Use of Technology Model modified by the Technology Acceptance Model concept, Kasetsart Journal of Social Sciences, Nov, pp.1 – 10
- Carney, M. (2017) The promise of Fintech–something new under the sun, Speech given at the Deutsche Bundesbank G20 conference on "Digitising finance, financial inclusion and financial literacy", Wiesbaden, 27JAN2017, https://www.bis.org/review/r170126b.pdf
- Claessens, S., Frost, J., Turner, G. & Zhu, F. (2018) Fintech credit markets around the world: size, drivers and policy issues, BIS Quarterly Review, September, pp.29-49

- Gai, K., Qiu, M. & Sun, X. (2018) A survey on Fintech, Journal of Network and Computer Applications, Issue 103, pp.262-273
- Kotarba, M. (2016) New factors inducing changes in the retail banking customer relationship management (CRM) and their exploration by the Fintech industry, Foundations of Management, Vol. 8, pp. 69-78
- Lacasse, R.M., Lambert, B.A., Osmani, E., Couture, C., Roy, N., Sylvain, J., Nadeau, F. (2016) A Digital Tsunami: FinTech and Crowdfunding, Proceedings of the International Scientific Conference on Digital Intelligence, Quebec City, Canada, April 4-6
- Lee, I. & Shin, Y.J. (2018) Fintech: Ecosystem, business models, investment decisions, and challenges, Business Horizons (Elsevier), Vol 61, Issue 1, Jan-Feb, pp. 35-46
- Leong, C., Tan, B., Xiao, X., Tan, F.T.C. & Sun, Y. (2017) Nurturing a Fintech ecosystem: The case of a youth microloan startup in China, International Journal of Information Management, Vol 37, pp. 92-97
- Puschmann, T. (2017) Fintech, Business & Information Systems Engineering, Volume 59, Issue 1, pp 69–76
- Ramos, F.A.B. (2016) Accessing the determinants of behavioral intention to adopt fintech services among the millennial generation, Repositorio Universidade Nova/ Nova School of Business and Economics (NSBE), http://hdl.handle.net/10362/23218
- Tammas-Hastings, D. (2017) The exploding popularity of RegTech, LSE Review, http://blogs.lse.ac.uk/businessreview/2017/07/07/the-exploding-popularity-of-regtech/ (accessed 12DEC18)

Online examination methods and evaluation criteria (weighted categories):

There will be four components for assessing the performance of the participants:

Assignment 1 Short essay – Individual – 15 %
Assignment 2 Report and Presentation – Small team – 15 %
Assignment 3 Report and presentation - Larger team – 15 %
Final exam: 55 %

Grading scale:

DEFINITION	%	LOCAL SCALE	ECTS SCALE	Grade (USA)
exceptional knowledge without or with negligible faults	92-100	10	A	A+, A, A-
very good knowledge with some minor faults	85-91	9	B	B+, B
good knowledge with certain faults	77-84	8	C	B
solid knowledge but with several faults	68-76	7	D	C+, C, C-
knowledge only meets minimal criteria	60-67	6	E	D+, D
knowledge does not meet minimal criteria	<60	5	F	

Short course leader(s) biography:

Professor of Finance and Academic Director of postgrads in Banking and Fintech at EM-Normandie Business School. Prior to becoming a full-time academic Paul spent many years in leadership positions at global management consulting firms, serving Boards of blue-chip companies, particularly in the financial services sector. He specialises in management of intangible assets such as intellectual capital and his research bridges across the fields of banking, Fintech, governance and the knowledge economy.

Paul holds a Master's degree in engineering; he has been a Humphrey Fellow (Fulbright Commission) at the University of Minnesota; and holds a doctorate in business administration (i.e., strategy-technology alignment in banking). He is a prolific writer in professional and academic publications and a renowned speaker at conferences and seminars. Having lived in nine and worked in 16 countries he defines himself as multicultural.