



IN4150 – Digital ecosystems

University of Oslo

Section for Digitalization

Lecturers

R. Pershina

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Fall 2022

IN4150 2022: Course outline

All lectures will take place in room [KN, Lille auditorium](#) from 10:15 – 12:00 and all group seminars in room [OJD, Seminarrom Logo](#) from 10:15 – 12:00

Lecture title, date	Lecturers	Literature
1. Course introduction & overview 22 August	Raissa, Daniel	Core literature: • Thomas, L., Autio, E. (2020), Innovation Ecosystems in Management: An Organizing Typology, Oxford Research Encyclopedia, Business and Management, Oxford: Oxford University Press. Supplementary readings: • Tiwana, A. (2014). Platform Ecosystems: Aligning Architecture, Governance, and Strategy. Elsevier Inc. Chapter 1: The Rise of Platform Ecosystems. • Michael G. Jacobides, M.G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. Strategic Management Journal, 39(8), 2255-2276.
2. Ecosystems as platforms 29 August	Raissa	Core literature: • Tiwana, A. (2014) Platform Ecosystems: Aligning Architecture, Governance, and Strategy. Elsevier Inc. Chapter 3: Why platform businesses are unlike product or service businesses. Supplementary readings: • Van Alstyne, M. W., Parker, G. G., & Choudary, S. P. (2016). Pipelines, platforms, and the new rules of strategy. Harvard Business Review, 94(4), 54-62. • Parker, G.G., Van Alstyne, M., & Chiudary, S.P. (2016) Platform revolution: How Networked Markets are Transforming the Economy – and how to make them work for you. Chapter 2: Network effects. The Power of the Platform.

3. Ecosystem architecture 5 September	Daniel	Core literature: • Tiwana, A. (2014) Platform Ecosystems: Aligning Architecture, Governance, and Strategy. Elsevier Inc. Chapter 5: Platform architecture. Supplementary readings: • Ghazawneh, A., & Henfridsson, O. (2013). Balancing platform control and external contribution in third-party development: The boundary resources model. Information Systems Journal, 23(2), 173-192. • Eaton, B., Elaluf-Calderwood, S., Sørensen, C., & Yoo, Y. (2015). Distributed Tuning of Boundary Resources, MIS Quarterly, 39 (1), 217-244.
4. Launch & Scaling of platform ecosystems I: Entrepreneurs 12 September	Raissa	Core literature: • Parker, G.G., Van Alstyne, M., & Chiudary, S.P. (2016) Platform revolution: How Networked Markets are Transforming the Economy – and how to make them work for you. Chapter 5: Launch. Chicken or Egg? Eight ways to launch a successful platform. Supplementary readings: • Alvarez, S. A., & Barney, J. B. (2007). Discovery and creation: Alternative theories of entrepreneurial action. Strategic Entrepreneurship Journal, 1(1-2), 11-26.
5. Ecosystem governance 19 September	Daniel	Core literature: • Tiwana, A. (2014) Platform Ecosystems: Aligning Architecture, Governance, and Strategy. Elsevier Inc. Chapter 6: Platform governance. Supplementary readings: • Wareham, J., Fox, P. B., & Cano Giner, J. L. (2014). Technology ecosystem governance. Organization science, 25(4), 1195-1215.
6. Ecosystem orchestration 26 September	Daniel	Core literature: • Autio, E. (2022). Orchestrating ecosystems: A multi-layered framework. Innovation, 24(1), 96-109.

		Supplementary readings: • Dhanaraj, C., & Parkhe, A. Orchestrating innovation networks. <i>Academy of Management Review</i> 31(3), 659-669. • Svendsrud, D.S., Hyde, K. M., & Aanestad, M. (2021) <i>Orchestration in Practice: The Case of Asset-intensive industries</i>. Selected papers of the IRIS, Issue NR 12. • Ansari, S., Garud, R., & Kumaraswamy, A. (2016). The disruptor's dilemma: TiVo and the US television ecosystem. <i>Strategic management journal</i>, 37(9), 1829-1853.
7. Launch & Scaling of platform ecosystems II: Incumbents 3 October	Raissa	Core literature: • Cusumano, M. A., Gawer, A., & Yoffie, D. B. (2019). <i>The business of platforms: Strategy in the age of digital competition, innovation, and power</i> (pp. 1-309). New York: Harper Business. Chapter 5. Old dogs and new tricks. Build, buy, or belong to a platform. Supplementary readings: • David B. Yoffie; Annabelle Gawer; Michael A. Cusumano 2019. <i>A Study of More Than 250 Platforms Reveals Why Most Fail</i> in <i>Harvard Business Review</i>.
8. Platform power, regulations, and sustainability 10 October	Raissa	Core literature: • Khan, L. (2017). Amazon's antitrust paradox. <i>Yale Law Journal</i>, 126. (Read "III. Amazon's business strategy" & "IV. Establishing structural dominance", pp. 746 – 783). Supplementary readings: • Parker, G. G., Van Alstyne, M. W., & Choudary, S. P. (2016). <i>Platform revolution: How networked markets are transforming the economy and how to make them work for you</i>. WW Norton & Company. Chapter 11. Policy. How platforms should (and should not) be regulated. • Stilgoe, J., Owen, R., & Macnaghten, P. (2013). Developing a framework for responsible innovation. <i>Research Policy</i>, 42(9), 1568-1580.

		• Pershina, R. (2022). Big data analytics for developing sustainable capabilities of digital business ecosystems. I Baumann, S. (Ed.), Handbook on Digital Business Ecosystems: Strategies, Platforms, Technologies, Governance and Societal Challenges, (pp. 510-528). Edward Elgar Publishing.
9. Ecosystems as infrastructures 17 October	Ole	Core literature: • Plantin, J.C., Lagozet, C., Edwards, P.N., & Sandvig, C. (2018). Infrastructure studies meet platform studies in the age of Google and Facebook. <i>New Media and Society</i> 20(1), 293-310. Supplementary readings: • Hanseth, O., & Lyytinen, K. (2010). Design Theory for dynamic complexity in information infrastructures: The case of building the internet. <i>Journal of Information Technology</i>. • Tilson, D., Lyytinen, K., & Sørensen, C. (2010). Research commentary—Digital infrastructures: The missing IS research agenda. <i>Information Systems Research</i>, 21(4), 748-759.
10. Guest lecture I 24 October		TBD
11. Guest lecture II 31 October		TBD
12. Guest lecture III 7 November		TBD
13. Guest lecture IV 14 November		TBD
14. Summary, Q&A 21 November	Daniel, Raissa	