Technology & Innovation Strategy
in the Age of Platforms, Ecosystems and Artificial Intelligence

Prof. Rahul Kapoor
University of Pennsylvania
The Wharton School
(Website)

Course code: DOEC1256
Time: March 03 – 04, 2026
Location: University of Zürich, Rämistrasse 69 (SOC-E-010), 8001 Zürich
Language: English
Grading Scale: Pass/Fail
ECTS: 3

The seminar takes place on site. Attendance in person is compulsory.

Date	Time	Room
March 03	10:30 – 17:30	SOC-E-010
March 04	10:30 – 17:30	SOC-E-010

Application Instructions
Doctoral students interested in participating should submit their CV, academic transcripts, and a brief statement (3–5 sentences) outlining their motivation for joining the seminar. The statement should highlight how the seminar aligns with their research interests and academic goals. Applications should be sent (as a single PDF File) via email to tim@business.uzh.ch **by February 15, 2026**.

Course Overview
This doctoral seminar examines the major streams of management research in technology and innovation strategy, with an emphasis on how contemporary shifts in platforms, ecosystems, and artificial intelligence are reshaping firms, industries, and the nature of value creation. We will build from foundational theories of technological change, industry evolution, and innovation strategy, while extending them to analyze emerging phenomena such as multisided platforms, innovation ecosystems, and AI-enabled technological change.

Throughout the seminar, we will explore how new technologies and organizational forms both challenge and enrich established theoretical frameworks. Particular attention will be given to the strategic choices firms make as technologies evolve; the coordination, governance, and value-creation dynamics within ecosystems; and the performance implications of platform competition and AI adoption. We will also consider how these forces influence entrepreneurial entry, scaling, and industry transformation.

The goal of the course is to equip doctoral students with a deep understanding of the interplay between technologies, organizations, and markets, and to identify high-potential opportunities for scholarly contribution. By engaging classic and contemporary research—including frontier work on platforms, ecosystems, and AI—students will develop the analytical tools, theoretical grounding, and research sensibilities necessary to advance academic discourse on technology strategy and innovation in today's rapidly changing environment.

Course Delivery

This course is discussion-based, with no formal lectures. Doctoral students will be assigned key papers to read for each session and will present a concise overview of one or more papers. These presentations will serve as a foundation for in-depth, engaged discussions with the class, focusing on the novelty, relevance, and impact of the papers, as well as their academic rigor. Together, through these discussions, we will cultivate a holistic understanding of the various research domains related to entrepreneurial and innovation strategies in the contemporary era. The success of our discussions will be driven by your insights, questions, concerns, and reflections on the readings, as well as how you connect these works to your own research endeavors.

Required Preparation

Students are expected to read all the papers assigned for each session; however, each student will be tasked with preparing an in-depth analysis of one specific paper for every session. For each session, you will deliver a 12-minute presentation that provides a comprehensive overview of the assigned paper. The presentation should cover, but is not limited to, the paper's main research questions, the theoretical framework it draws upon, the methodological approach employed, its key findings, and its theoretical contributions. Additionally, presenters are expected to offer their own critical evaluation of the study, highlighting its strengths and weaknesses and positioning it within the broader context of entrepreneurial and innovation research

Assessment

This course is graded on a pass/fail basis. To successfully pass, students are required to thoroughly prepare all assigned readings prior to each session, ensuring they are ready to engage thoughtfully with the material. Active and meaningful participation in class discussions is essential, as the seminar's success relies on the collective exchange of ideas and perspectives. Additionally, students must fulfill their presentation responsibilities by delivering clear, well-prepared analyses of the assigned papers. These presentations should demonstrate a deep understanding of the material and contribute to the broader dialogue within the class. Overall, students are expected to consistently demonstrate their commitment to the learning process and the collaborative nature of the course.

Session 1. Technology and Industry Evolution

Anderson, P., & Tushman, M. L. (1990). Technological discontinuities and dominant designs: A cyclical model of technological change. *Administrative Science Quarterly*, 604-633.

Henderson, R. M., & Clark, K. B. (1990). Architectural innovation: The reconfiguration of existing product technologies and the failure of established firms. *Administrative Science Quarterly*, 9-30.

Christensen, C. M. and J. L. Bower (1996). Customer Power, Strategic Investment, and the Failure of Leading Firms. *Strategic Management Journal 17,* 197-218

Tripsas, M. (1997). Unraveling the process of creative destruction: Complementary assets and incumbent survival in the typesetter industry. *Strategic Management Journal*, *18*(s 1), 119-142.

Kapoor, R., & Klueter, T. (2015). Decoding the Adaptability–Rigidity Puzzle: Evidence from Pharmaceutical Incumbents' Pursuit of Gene Therapy and Monoclonal Antibodies. *Academy of Management Journal*, *58*(4), 1180-1207.

Furr, N., & Kapoor, R. (2018). Capabilities, technologies, and firm exit during industry shakeout: Evidence from the global solar photovoltaic industry. *Strategic Management Journal*, 39(1), 33-61.

Session 2. Value Creation and Capture in Ecosystems.

Adner, R., & Kapoor, R. (2010). Value creation in innovation ecosystems: How the structure of technological interdependence affects firm performance in new technology generations. *Strategic Management Journal*, *31*(3), 306-333.

Ansari, S., Garud, R., & Kumaraswamy, A. (2016). The disruptor's dilemma: TiVo and the US television ecosystem. *Strategic management journal*, *37*(9), 1829-1853.

Hannah, D. P., & Eisenhardt, K. M. (2018). How firms navigate cooperation and competition in nascent ecosystems. *Strategic management journal*, *39*(12), 3163-3192.

Jacobides, M. G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. *Strategic management journal*, *39*(8), 2255-2276.

Adner, R., & Lieberman, M. (2021). Disruption through complements. *Strategy Science*, *6*(1), 91-109.

Agarwal, S., & Kapoor, R. (2023). Value creation tradeoff in business ecosystems: Leveraging complementarities while managing interdependencies. *Organization Science*, *34*(3), 1216-1242.

Session 3. Platform Ecosystems

Zhu, F., & Iansiti, M. (2012). Entry into platform-based markets. *Strategic Management Journal, 33(1),* 88-106.

Cennamo, C., & Santalo, J. (2013). Platform competition: Strategic trade-offs in platform markets. *Strategic management journal*, *34*(11), 1331-1350.

Gawer, A., & Henderson, R. (2007). Platform owner entry and innovation in complementary markets: Evidence from Intel. *Journal of Economics & Management Strategy*, *16*(1), 1-34.

Kapoor, R. & Agarwal, S. (2017). Sustaining Superior Performance in Business Ecosystems: Evidence from Application Software Developers in the iOS and Android Smartphone Ecosystems. *Organization Science, 28(3): 531-551.*

Van Dyck, M., Lüttgens, D., Diener, K., Piller, F., & Pollok, P. (2024). From product to platform: How incumbents' assumptions and choices shape their platform strategy. *Research Policy*, *53*(1), 104904.

Baldwin, C. Y. (2025). Design Rules Volume 2: Chapter 17—How Technology Shapes Organizations, The MIT Press.

Session 4. The Emergence of Artificial Intelligence

Felten, E., Raj, M., & Seamans, R. (2021). Occupational, industry, and geographic exposure to artificial intelligence: A novel dataset and its potential uses. *Strategic Management Journal*, 42(12), 2195-2217.

Krakowski, S., Luger, J., & Raisch, S. (2023). Artificial intelligence and the changing sources of competitive advantage. *Strategic Management Journal*, *44*(6), 1425-1452.

Csaszar, F. A., Ketkar, H., & Kim, H. (2024). Artificial intelligence and strategic decision-making: Evidence from entrepreneurs and investors. *Strategy Science*, *9*(4), 322-345.

Babina, T., Fedyk, A., He, A., & Hodson, J. (2024). Artificial intelligence, firm growth, and product innovation. *Journal of Financial Economics*, *151*, 103745.

Please note, that the reading list may be subject to minor changes prior to the start of the course.