

P52 - Technologies And Business Model Innovations: Emergence, Evolution, Exaptation And Entanglement

24. TECHNOLOGICAL CHANGE and BUSINESS MODEL INNOVATION

Anup Karath Nair¹ (A.K.Nair@liverpool.ac.uk)

Paul Ellwood¹ (ellwoodp@liverpool.ac.uk), Dhruva Borah¹ (dhruba.borah@liverpool.ac.uk)

¹ Strategy, International Business and Entrepreneurship Research Group, Management School, University of Liverpool, Liverpool, United Kingdom

Track summary: This is a call for papers that advance our understanding on the relationships between technology and business model innovation (henceforth BMI). The interplay between technology defined as "the incorporation of knowledge into artifacts that can be used to solve problems" (Grodal, et al., 2023, p. 142) and BMI understood as, the discovery or creation of fundamentally novel "design or architecture of the value creation, delivery, and capture mechanisms [a firm] employs" (Teece, 2018, p. 41), has begun to pique scholarly attention in recent years (Spieth, et al., 2023; Ancillai, et al., 2023; Foss & Saebi, 2017; Massa, et al., 2017; Demil, et al., 2015; Baden-Fuller & Haefliger, 2013). However, despite acknowledgement of the reciprocal relationship that binds technology and BMI, the relationship between the two concepts has received very little theoretical or empirical scrutiny. Contributors to this track may choose to focus on the role of technology in BMI or on the role of BMI in technology development and commercialization. Equally, we welcome contributions that examine the interplay between these two perspectives and propose emergence (MacKay, et al., 2021), evolution (Grodal, et al., 2023), exaptation (Andriani & Cattani, 2016) and entanglement (Scott & Orlikowski, 2014) to categorize the intricate relationship between technology and BMI. In line with the overall theme for this year's conference - "Transforming industries through technology" - we are interested in research contributions that are either conceptual, empirical or methodological that related to multiple industries including, but not limited to, manufacturing, telecom, healthcare, pharmaceutical, energy, automation, industrial digital technologies (IDTs) and knowledge-intensive services.

| Theme | Refers to | Potential Research Questions |
|---------------------|--|---|
| Emergence | How technologies and BMI take shape rooted "in both progress and setbacks" (Kapoor & Klueter, 2020, p. 1) | <ol style="list-style-type: none"> 1. Why do firms choose sustaining or disruptive technologies for BMI? 2. How do new technologies enable business model experimentation in organizations? 3. What challenges do new technologies pose that hinder business model (re)configuration processes in established organizations and how can such challenges be overcome? 4. How are technological or business model uncertainties defined and overcome in BMI? |
| Evolution | How technologies and business models change over time (Grodal, et al., 2023; Demil & Lecocq, 2010) | <ol style="list-style-type: none"> 1. How does BMI change sustainability management approaches? 2. How does technology evolution impact BMI? 3. How does technology and business model innovation lead to new institutional arrangements or the emergence of novel institutional infrastructures that gain legitimacy? 4. What mechanisms are used to maintain organizational stability during technology evolution and business model change? |
| Exaptation | How existing technologies and business models are coopted "for emergent functions" (Andriani & Carignani, 2014, p. 1608) | <ol style="list-style-type: none"> 1. How are technologies for processing big data shaping business model (re)configuration? 2. How does technology or business model exaptation lead to innovation? 3. Under which conditions are exaptation a more promising mechanism for BMI? 4. What are the performance implications of incremental, radical, or disruptive technology and/or business model exaptation? |
| Entanglement | How technologies and BMI are ongoingly performed in practice (Scott & Orlikowski, 2014) | <ol style="list-style-type: none"> 1. How easily are BMI transferable from one industry to another, considering that consistency and fit are essential? 2. What processes and practices do firms use to exploit technologies using BMI? 3. How does the adoption of business model frameworks and conceptualization influence how technology is thought about? 4. To what extent do the mechanisms used to create and capture value from BMI change under the effect of digital transformation? |