Indrek Ibrus (Ed.), **Emergence of Cross-Innovation Systems: Audiovisual Industries Co-Innovating with Education, Health Care and Tourism**, Bingley, UK: Emerald, 2019, 248 pp., $32.00 (paperback).

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> We can only see a short distance ahead, but we can see plenty there that needs to be done.
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> —Alan Turing, 1950 (You, 2015)

Emergence of Cross-Innovation Systems: Audiovisual Industries Co-Innovating with Education, Health Care and Tourism, edited by Indrek Ibrus, came about from a partially funded project from the European Union Baltic Sea Region program and empirical work of 11 researchers based in Northern Europe. The book aims to examine how the audiovisual media industry—which includes film, television, and video games—start innovating with education, health care, or tourism industries. Although the book is itself innovative and has many strengths, due to its generalizability and structural limitations, it may only have a niche readership.
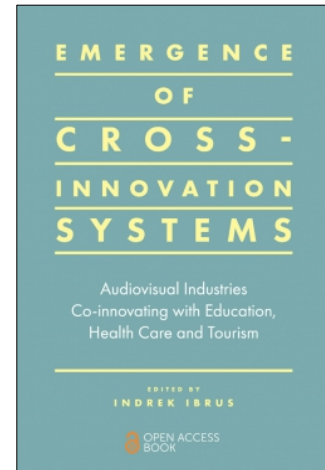
Emergence of Cross-Innovation Systems begins with a theoretical introduction about co-innovations with audiovisual media industries, then proceeds to present those innovations with the education, health care, and tourism industries, and finally summarizes the findings. The book's theoretical introduction (chapters 1–3) explains with economics, cultural, and social frameworks the context of Northern Europe. Of particular import is the term "cross-innovation," as found in the book title, which the authors define as cross-sectoral, organizational, technological, and geographical collaborative and user-driven innovation (p. 31). The Northern European countries introduced and presented throughout the book are Denmark, Sweden, Finland, Estonia, Latvia, Lithuania, and Germany. Broadly, these countries' industries differ by their size—large (e.g., Germany, Poland) or small (e.g., Sweden, Estonia)—and political structure—Nordic countries that have democratic and welfare societies (e.g., Sweden, Finland) or Baltic countries that are transitioning from authoritarian socialism to market capitalism (e.g., Estonia, Latvia).

The authors develop the case studies of the innovations between the audiovisual industry and one of the other industries through mesolevel studies—comparative views of the common industry collaborations in two different countries—and microlevel studies—comparative views of two startups in the same industries of two different countries. The education co-innovations (chapters 4–7) concern audiovisual projects for the primary and secondary education levels. The authors note two interdependent processes: personalized learning opportunities mainly using augmented reality (AR)[1] and entertainment-oriented opportunities originating from private audiovisual companies. The health care co-innovations (chapters 8–11) address a

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[1] *AR* is a technology that merges real-life environments with virtual environments (Riva, Baños, Botella, Mantovani, & Gaggioli, 2016). The game *Pokémon Go* is a notable example.

more specialized sector that entails more expertise, "consequently, the questions of reliability, authority, and ethics of health promotion arise" (p. 117). From the health-related case studies, the authors emphasize the role of local policy making, especially at developing virtual reality (VR)[2] opportunities, and the challenges of fragmentation, that is, lack of industry uniformity that place them at risk of private foreign takeovers. Finally, the tourism innovations (chapters 12–15) again emphasize the risk of foreign takeovers and summarize the role of the public sector at driving AR opportunities.

As conclusion (chapter 16), Ibrus and Nanì summarize the main themes of platformization and emergence of new rules found from the cross-innovation studies. In the co-innovations with all three industries, the authors find a pattern of platformization—a cross-sector digitization or mediatization—that facilitates industry collaborations but also risks takeovers by foreign corporations such as Google self-diagnosis in health care and Booking.com in tourism. Moreover, the authors find patterns of emergence of new rules, mostly spearheaded by the public sector, to spur AR and VR technological innovations.

Emergence of Cross-Innovation Systems concerns a unique intersection of topics and takes on an uncommon viewpoint. To the best of my knowledge, the only other recent research-based endeavor that addresses this unique intersection was the Fourth Gamification & Serious Game Symposium (2019), which had sessions on co-innovations between gaming and education, health, tourism, etc. Even related books do not foreground the audiovisual industry but take on a more tangentially approach to the European audiovisual industries, such as books focused on health care (e.g., Glowik & Smyczek, 2015) and tourism (e.g., Hall, 2017).

The main strengths of *Emergence of Cross-Innovation Systems* are its theoretical sophistication and innovative approaches. Throughout the book, the authors take great care to explicate relevant processes. For example, on the tourism co-innovations in chapter 13, Lassur and Tafel-Viia comprehensively classify the forms and types of audiovisual-tourism innovation and synthesize that "most of these forms fall into product-and-service innovation categories and some fall into the marketing innovation category" (p. 175). Moreover, the authors take innovative approaches to situate the economics, culture, and social makeup of several Northern European countries, and introduce cutting-edge AR and VR ventures.

However, the book has some limitations. Although Ibrus introduces the book as "multi-method" (p. 3), its chapters are more interpretivist, meaning more based on qualitative data (Cote, 2019). Still, relevant modern research is more wanting of quantitative research (Chung, Han, & Joun, 2015; Cote, 2019; Potts, Cunningham, Hartley, & Ormerod, 2008), which can be more generalizable. For example, chapter 10's two case studies of VR ventures on exercise for Finnish seniors and injury rehabilitation for German athletes are unlikely to be as generalizable as a quantitative study that reviews VR ventures to address addictions, anxiety disorders, stress-related disorders, autism, depression, etc. (Riva et al., 2016). Even the book's mesolevel chapters based on secondary data and archival analyses are not truly systematic and therefore challenging to be applied to other regions. As another limitation, perhaps due to the collaborative nature of the book, it lacks internal coherency. The chapters on education co-innovations are limited to primary and

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[2] *VR* is a technology that presents a completely virtual environment (Riva et al., 2016). The film trilogy *The Matrix* is centered around a VR system.

secondary education, while the chapters on health care also involve educational ventures and the role of tertiary (or higher) education. Certainly, educational health campaigns have a long history (Bandura, 2004) and academic medical centers play an invaluable role in health care innovation (DePasse, Chen, Sawyer, Jethwani, & Sim, 2014); still, for a book that already tackles so many industries, the authors could have reduced its complexity. Overall, due to these limitations, *Emergence of Cross-Innovation Systems* may not reach a broad audience, particularly an audience of stakeholders to realize cross-innovations.

Emergence of Cross-Innovation Systems is ideal for readers who can appreciate the book's theoretical intricacies and take interest in one or more industries featured in the book, yet, for a research work that relies on 144 interviews of entrepreneurs, professionals, managers, and policy makers, it may not have the most practical utility for those interviewees. The book may better serve as a starting point for audiovisual co-innovation research ahead.

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