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Special Issue on Business Models, Platforms and Ecosystems in Health Care – Data, Devices and Technology

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Over the past decade, data has become a significant resource in shaping and supporting innovation by generating rich insights on new opportunities. As a result, data analysis continues to receive increasing attention (see e.g. Amit & Han 2017, Torkkeli et al. 2016). With the introduction of new techniques to generate, collect, analyze and share data through digital technologies (Leyens et al. 2017), this presents an opportunity to explore how new devices and technologies can support new business models. For example, the use of computers, mobile devices, sensors, etc., are continuously generating more personal data (Li et al. 2011). On a personal level, people are have begun to self-assess their behavior by collecting data on their location, sleeping patterns, fitness levels, banking and other e-commerce activities. As individuals, we now generate growing amounts of data stored in different locations. This has unleashed massive potential across many sectors, particularly in healthcare.

Healthcare organizations have begun to realize the potential in accessing personalized data and have influenced the emergence of new business models, such as Connected Health (Carroll 2016), and has led to greater attention being placed on preventive and personalize care treatment models. In addition, with the increasing uptake of modern devices (e.g. mobile phones or wearables), the use of data and net techniques (for example, big data analytics, image recognition, machine learning and artificial intelligence (Amit & Han, 2017)) has also made it possible to create new business innovations that are supporting individuals and professionals in health care domain (Francis Gomes & Moqaddamerad 2016). However, the use of data, devices and technology as a resource require health care companies to innovate and collaborate more with other organizations and their customers (see Zalewska-Kurek et al. 2016).

Although the increased digitalization and use or data have led to the emergence of new business ecosystems (Moore 1993, Iansiti & Levien 2004, Adner & Kapoor 2010) and ecosystemic / networked business models (see Iivari et al. 2016, Heikkilä et al. 2016), the relationships between external resources and the business model remain a relatively unexplored research area

(Ahokangas & Myllykoski 2014). Often, collaborating in ecosystems makes it possible for companies to step into new markets and gain new business opportunities (Clarysse et al. 2014). The general challenge to modern companies is that they are living in dynamic environment that require continuous business model change (Achtenhagen et al. 2013), rapid internationalization (Dunford et al. 2010) including the modeling their own organization to the environment, and reflecting their own value proposition from different perspectives. In an ecosystemic context, it is important to have rich personal contacts and deep understanding about the individual needs (Doz and Kosonen 2010).

The need for rapid technological development shapes the environment for business models continuously, providing challenges for companies (Palo & Tähtinen 2013, Achtenhagen et al. 2013). Companies that are shaping their business models in health care domain are facing special challenges due to the tight domain specific rules, regulations and bureaucracy that they face especially at hospital settings. In this context, the business model should not only be seen as a conceptual tool for expressing the business logic of a firm, as Osterwalder et al. (2005) for instance define, but rather, it should be used as a strategic tool to continuously align the development of technology with shaping economic value creation (Chesbrough & Rosenbloom 2002).

The use of data, technologies and devices as a resource for value creation and capture in an ecosystemic context is here to stay, and will thus have enduring effects on business ecosystems and business models in health care sector. Consequently, we recognize that while we have a good notion of the limitations of current theorizing on innovations and business models in general, as well as ideas for further research, we need more empirical and theoretical studies about the data-driven business models, platforms and business ecosystems in health care domain.

To facilitate this effort, we invite papers that generate new insights into questions including:

- Conceptualizing business models and data
- IT / data driven business ecosystems
- IT / Data driven business models
- IT/ Data driven platforms
- Healthcare data analysis

- Connecting healthcare devices
- Business models for healthcare technology
- Business ecosystems for healthcare
- Ecosystemic business models for health care
- IT-enabled healthcare models
- Data-enabled innovation in healthcare
- Data analytical techniques in healthcare
- Collaboration between ecosystem actors in healthcare
- Data driven change / transformation in health care
- Data driven health care services

To achieve this multi-disciplinary focus, the Journal of Business Models launches the initiative for a special issue specifically aiming for theoretical, conceptual, methodological and empirical studies focusing on preventive or medical care context in which the data, technology and devices are used as a resource for creation, transformation and evolution of new business models and business ecosystems from multiple disciplines (i.e. operations, dynamics, marketing, strategy, innovation, performance measurements, startup issues, cybersecurity, …etc). Prospective contributors are welcome to contact the issue editors if they seek further insights on such.

Submissions
Submissions should be made via the Journal of Business Models website, in accordance with the journal guidelines, to ensure anonymity in the blind review process.

Please clearly mention that your submission concerns the special issue of data-driven business models and business ecosystems in health care sector by choosing the appropriate article type.

Submission for this special issue can be done starting October 24, 2017. The final submission deadline is February 1, 2018.

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