The homeostasis paradox of new business models

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Abstract

The rapid evolution of digital technologies over the last decade has paved the way for an upsurge of new business models that capitalise on the many facilities, functionalities and resources available on the internet and mobile platforms in particular. The speed and variety of new business models emerging in the digital economy created a disruptive environment that lacks theoretical frameworks and perspectives to help academics, practitioners and policy makers to critically understand and appraise the phenomenon of new business models emergence.

In a time when there is little consensus on what a business model actually is (Ostenwalder et al., 2005), the lack of theoretical basis to explain the emergence of new business models augments the complexity of the problem. In this paper we address this neglect by discussing the phenomenon of new business models emergence from a systems thinking perspective, shedding light on change and adaptiveness issues concerning business model innovation. For this, we revisit fundamental questions raised by Normann (2001) when he discussed change and creation phenomena. How do companies adapt to the increased complexity of market contexts? How do they not only adapt reactively but create new and innovative systems proactively?

Various lines of academic enquiry have drawn from systems theories and approaches such as general systems theory (von Bertalanffy, 1968), open systems theory (Katz & Kahn, 1978), cybernetics (Weiner, 1948), viable systems (Beer, 1972; Barile & Polese, 2010), system dynamics (Forrester, 1998) and complex adaptive systems (Schneider & Somers, 2006), to explain how companies adapt themselves to face new challenges. An underlying tenet in these theories and approaches is the homeostasis principle, which is one of the most remarkable and most typical properties of open and complex systems. Homeostasis is the principle of equilibrium, a systems property to react to external disturbances in order to maintain stability and survive. It implies self-adaptation to offset disrupting changes and reestablish the initial state.

From a business perspective, homeostasis refers to a company’s ability to maintain its state of equilibrium by counteracting internal and external turbulences through contextual variety absorption (Ashby, 1958). A key issue we discuss in this paper is that adaptive variability does not necessarily entails reestablishment of an original state of equilibrium. This is particularly the case of companies developing new business models.

For instance, the newness of a ‘new’ business model infers non-existence of an antecedent original state that provides basis for adaptation towards equilibrium. Thus, we infer that the development of a new business model entails change to a different organisational state that, due to lack of a referential status for equilibrium, represents a state of dynamic disequilibrium, which paradoxically may provide basis for a state of equilibrium if the new model is successful. In this sense, we postulate that in organisations developing new business models homeostatic adaptations to restore equilibrium are typically preceded by adaptation to a different state of temporary dynamic disequilibrium.

To explain this phenomenon we build upon Normann’s perception of ‘bifurcation points’ of instability, where a “system as a whole may take on new properties that no longer seem related to the original elements or its initial state” (Normann, 2011, p. 166). Furthermore, we
also build upon Beer’s concepts of attenuation and amplification of variety (Beer, 1972) to differentiate ‘homeostatic change’ (adaptation to attenuate disruption and reestablish an equilibrium state) from ‘disruptive change’ (adaptation to amplify disruption to a novel state that can conceivably influence the environment). The novel state can be considered as a new referential state for future homeostatic changes to maintain equilibrium until other disruptive changes take place.

As practical illustration, we use the theoretical perspective developed in the paper to explain the emergence of new business models enabled by digital technologies in the fashion retail sector. This was an exploratory sectoral study that involved environmental scanning to identify new business models emerging in the industry. From the theoretical perspective here addressed, one can see disruptive technologies as drivers of bifurcation points of instability for organisations. To deal with these instabilities, companies can opt for implementing either an attenuation or amplification strategy. The attenuation strategy is developed through homeostatic changes that attenuate disruptions in order to maintain a state of equilibrium. On the other hand, the amplification strategy can be implemented through disruptive changes that amplify disruptions by contextualizing the disruptive technologies into a new business model proposition for the market.

Besides the theoretical contributions developed in the paper, we provide insights for practical business management by discussing the managerial implications of the theoretical aspects here addressed for service systems innovations. We then conclude the paper by pointing out relevant issues for future research in the realm of service science.

References


