## Research Report

# Mindfully Resisting the Bandwagon – IT Innovation Assimilation in the Financial Crisis

ALTHOUGH THE FINANCIAL MELTDOWN WAS INITIALLY CAUSED BY HERDING BEHAVIOR IN THE SUBPRIME MARKET FOR CREDIT DEFAULT SWAPS, A CONCURRENT "MINDLESS" IT INNOVATION ASSIMILATION OF PARTICIPATING FINANCIAL SERVICES PROVIDERS PLAYED A MAJOR ROLE IN FACILITATING THE UNDERLYING BANDWAGON.

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#### Introduction

As the last financial crisis from 2007 to 2009 depicted, economic scenarios of high dynamism and volatility demand a firm's continuous technological adaptation to retain a competitive position, as well as to comply with regulatory requirements. Such situations, which are characterized by high uncertainty, facilitate the emergence of mimicry and bandwagon phenomena among competing organizations that might negatively affect the realization of business value (Fiol and O'Connor, 2003). For instance, uncertainty resulting from incomplete information on future market developments most likely leads to a behavior of inconsiderately following a so-called "best practice approach". In such situations, organizations tend to justify their decisions with the consensus of the "herd" rather

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than environmentally aligning their IT innovation strategy. In this context, the cognitive construct organizational mindfulness is assumed to be an effective means to identify, quantify, and accommodate changes facilitated by the market. Accordingly, this dynamic capability could also help to actively resist arising bandwagon phenomena that might otherwise negatively affect the generation of (IT-induced) business value.

Recent research in the realm of IT innovation assimilation shed light on the influence of institutional pressures on the organizational assimilation of different IT innovations, e.g., (Liang et al., 2007). However, little empirical research has been conducted on analyzing the interplay of mimetic pressure resulting from environmental turbulence (Fiol and O'Connor,

2003), as well as dynamic capabilities attenuating these effects. In this respect, we regard organizational mindfulness as a firm's "rich awareness of discriminatory detail and a capacity for action" (Weick et al., 1999). Consequently, organizational mindfulness can be regarded as a promising means for organizations to successfully deal with uncertain situations, which otherwise potentially lead to disastrous negative consequences. In the context of IT innovation assimilation, organizational mindfulness is assumed to help identifying and resisting pure mimetic IT assimilation behavior and cope with incomplete information and environmental turbulence which both potentially decrease IT-based business value generation. Accordingly, we conceptualizes the aforementioned interplay of mimicry as one instance of institutional pressures driving the IT innovation assimilation process and organizational mindfulness against the background of a highly turbulent environment as reflected by the last financial crisis.

## Interplay Between Institutional Pressure and Mindfulness in Highly Turbulent Environments

The financial crisis from 2007 to 2009 reflected an extraordinary period of time with regard to the extent of market volatility. Rapid changes in the market and technological demand, subsumed by the concept of environmental turbulence, lead to an increase of uncertainty. In this regard, rapidly changing markets demanded financial services providers to assimilate IT innovations that are suitable to deal with such rapid changes and related risk exposures, while concurrently, more than 160 US American banks

defaulted. For instance, Lehman Brothers broke down within a few days not at least due to insufficient IT-based risk management systems.

Accordingly, it can be assumed that uncertainty about future market developments and current market conditions might seriously influence the generation and realization of business value from IT innovation assimilation in a negative way. Consequently, our first guiding research objective was to explore how environmental turbulence affects the influence of mimetic pressure and the realization of business value from IT innovation assimilation.

However, even in a market crisis, some firms master to overcome these challenges in a better way than their competitors or are even able to potentially exploit them to a certain degree. This significant difference in realized results can be partly attributed to capabilities allowing organizations to align the IT innovation assimilation process with environmental contingencies. Here, the "rather mindful" firms identify changes in the market earlier and are therefore able to derive highly contextualized IT innovation strategies. More than that, they are able to determine if an arising bandwagon phenomenon might be rather beneficial or harming to their firm objectives. Consequently, the second guiding research objective was to assess differences between rather mindful and less mindful firms in channeling mimetic pressure to IT innovation assimilation processes against the background of environmental turbulence.

The required dynamic capabilities encompass reasoning to actively resist arising bandwagon phenomena that solely stem from mimetic pressure and not necessarily based upon rational reasoning. As far as the mediating agencies are concerned, we conceptualize the influence of institutional pressure on top management support as core human agency for channeling mimetic pressure to the IT innovation assimilation process (Liang et al., 2007) against the moderating influence of environmental turbulence. Based on 302 complete responses from the Anglo-Saxon financial services industry, gathered during the financial crisis, we empirically analyzed the relationships contained in our conceptual model (see Figure 1) in order to find evidence for the aforementioned research questions.

#### **Empirical Results and Discussion**

The empircal results (see Figure 1) emphasize that, in particular, mimetic pressure drives the top management to support IT innovation assimilation initiatives. Hence, it is the behavior of successful competitors initiating new bandwagons that seduces other firms in the same market to join the innovation without considering their firmspecific circumstances. In addition, the empricial results indicate that the influence of mimetic pressure on top management support is indeed strengthened by a highly turbulent environment. Thereby, we underpin the conceptual proposition that environmental turbulence eventually fosters cognitive uncertainty and resulting mimicry. In essence, our results facilitate the learning from the past crisis to reveal mechanisms of mimicry and herding behaviour that are likely to be present in highly turbulent industries in general.

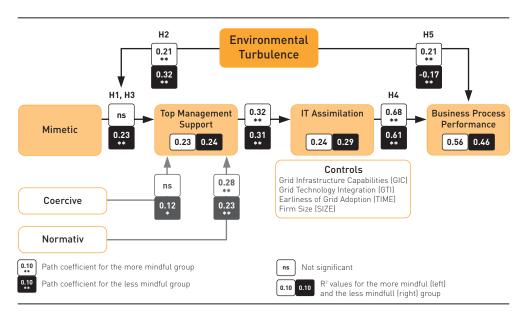


Figure 1: Results of the group comparison (low vs. high organizational mindfulness)

With the distinction between rather mindful and less mindful firms, we provide a more nuanced perspective on IT innovation assimilation and its exposure to environmental turbulence, as well as the consequences of mimetic pressure. In this regard, we find that organizational mindfulness mitigates the positive moderating impact of environmental turbulence on the influence of top management support. Consequently, in rather mindful firms, the top management is less likely to be affected by mimetic pressure caused by environmental turbulence. Moreover, the direct influence of mimetic pressure on top management support even vanishes in rather mindful firms. This can be attributed to the capability of "reflection in action" that is assumed to be especially well-developed in mindful organizations. In this context, "reflection in action" is defined by

the capability to actively learn and realign from prior and current experiences, in particular from critical, "transformative" change as initiated by bandwagons. Finally, we find evidence that rather mindful firms realize more business value from IT innovation assimilation at the business process level than less mindful firms. However, the results also reveal that the realization of IT-based business value is highly contingent and thus cannot be solely reduced to the IT innovation assimilation process itself. This would also explain why the direct effect of environmental turbulence on business value generation is relatively strong and significant.

#### Conclusion

The results of this study indicate that decisionmakers need to take into account that an

increased extent of environmental turbulence eventually leads to a higher exposure to mimetic pressure. Being aware of this relationship can be one starting point to improve the organizational scanning capabilities (e.g., by means of better decision support systems) and initiate a mindful decision-making process to identify contextually appropriate IT innovation decisions. Additionally, organizational mindfulness can be assumed to be one critical focus of HR development to build and sustain the organizational capability to effectively identify and successfully master changes facilitated by the market. Furthermore, organizational mindfulness enables a firm to actively resist arising bandwagon phenomena that might otherwise negatively affect the generation of (IT-induced) business value.

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