

# Antecedents and outcomes of middle managers' adoption of gamification as a strategic alignment tool

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**Abstract:** This paper is part of a research project that investigates middle managers' adoption of gamification as a tool of strategic alignment. This study considers middle manager as pivotal on the implementation of a gamification strategy to mobilize employees' alignment with the organization's strategy. Based on literature review, we identify possible antecedents and outcomes of gamification as a strategic alignment tool. Regarding antecedents, at the organizational level, the organizational environment, the role and level of involvement of the middle manager in strategy formulation and implementation emerge as factors that may impact middle managers' willingness to adopt gamification; At the individual level, middle managers' knowledge of game design elements and their experience with gaming, as well as the perceived organizational and individual risks and benefits of adopting a gamification strategy also emerge as important factors in this process. In terms of possible outcomes, we suggest that gamification may result in increased employee engagement and alignment with strategy and motivation to keep participating on gamified experiences. Additionally, this paper proposes a conceptual framework that suggests that organization-related and individual-related antecedents influence the decision to adopt a gamification strategy and the role of middle managers in the implementation process. The implementation of the gamification experience will impact employee's alignment, engagement with the company strategy and their motivation to participate in other gamification experiences. Finally, the framework suggests that a positive perception of gamification outcomes may further the adoption of gamification as a strategic alignment tool. Empirical research is necessary to validate the conceptual framework proposed in the paper.

## 1. Introduction

Gamification is used in various sectors in the real world (Hamari et al., 2014) and constitutes a promising avenue in the organizational context (Landers et al., 2017). Despite the attention that gamification has recently drawn (Hamari et al., 2014) the field still misses theoretical foundations, valid and empirical research (Hamari and Koivisto, 2015; Seaborn and Fels, 2015; Landers et al., 2017) and a proper and comprehensive framework that describes the process (Hamari et al., 2014) and challenges (Robson et al., 2015) of creating a gamified experience.

In organizational contexts, middle managers have an important role as actors in strategy processes (Burgelman et al., 2017), namely as they mediate between the organization strategy and the people and activities that implement it and influence its outcomes (Wooldridge et al.,

2008). Thus, in order to understand if and how gamification can be used as a strategic management alignment tool, it is necessary to better understand the factors (i.e., the antecedents) that influence middle managers' willingness to adopt it. In this context, the main goal of this study is to propose a conceptual framework to explore which are the antecedents that influence middle managers adoption towards gamification as a strategy implementation and alignment tool; how those antecedents influence the gamification adoption process; and how the outcomes of the gamification may contribute to the willingness to further adopt gamification as a strategy alignment tool.

The paper is structured as follows. Section 2 provides an overview of the literature about strategic alignment and middle management showing the key concepts and issues in these areas. Section 3 displays the concept of gamification. Section 4 presents a conceptual framework that integrates the antecedents, implementation and outcomes of the adoption of gamification as alignment strategic tool by middle managers. Finally, section 5 presents the main conclusions of the paper.

## **2. Strategic alignment and middle management**

Organizations need to align their strategy, goals, processes, organizational structure and culture to achieve long-term success (Trevor and Varcoe, 2016). Strategic alignment helps organizations achieve competitive advantage and provide them with direction and flexibility to react to new opportunities (Avison et al., 2004). Companies' people, culture, structure and processes must flex and change as the strategy shifts (Trevor and Varcoe, 2016) and employees must understand the strategy, be motivated and committed to support the company (Kaplan and Norton, 2008). In this context, the perceived alignment of job tasks and strategic priorities is important to secure high levels of work engagement (Biggs et al., 2014) and the execution of strategy by different teams. Also, managers should be involved in strategy design and implementation process (Decoene and Bruggeman, 2006) to execute the strategy successfully (Box and Platts 2005).

Middle managers are considered key drivers in strategy implementation with a central position in organizational hierarchies as they play the role of intermediaries between top managers and employees (Huy, 2001, 2002; Mair and Thurner, 2008; Wooldridge et al., 2008; Harding et al., 2014) and peers (Radaelli and Sitton-Kent, 2016). Middle managers are both controlled and controllers, resisted and resisters, can participate, influence (upward and downward), and take divergent or integrative cognitive contributions to strategic management (Floyd and Wooldridge, 1992; Harding et al., 2014). The implementation of strategy requires clear communication throughout the organization (Huy, 2001) and middle managers own a strong base of knowledge and competencies to do it (King et al., 2001; Parera and Vallejo, 2013). Top management should involve middle managers in strategy implementation (Floyd and Wooldridge, 1992; King et al., 2001; Ouakouak et al., 2014), as it is the interest of the organizations that middle managers recognize and support the strategy and implement it (Mair and Thurner, 2008).

The role of middle managers can be influenced by different factors. At the organizational level, organizations should create 'positive conditions' to develop and promote the involvement of middle managers with corporate strategy. In fact, Amar (2004) referred that in order to succeed, 'knowledge organizations' have to develop a work environment that consistently motivates and engages their employees. Additionally, the action of middle managers is limited by a lack of hierarchical power, which Radaelli and Sitton-Kent (2016) consider as a possible obstacle to

implement the strategy. At the individual level, Guth and MacMillan (1986) claim that if middle managers believe that their self-interest is being compromised, they can delay, reduce the quality or sabotage the execution of strategy implementation.

In the specific context of gamification, considering the pivotal role of middle managers, it seems relevant to understand how they influence the adoption of gamification as a strategic alignment tool and which factors may drive them to do so.

### **3. Gamification**

Gamification is present in the daily lives of organizations, employees and customers and it is used in various contexts (Koivisto and Hamari, 2014; Hanus and Fox, 2015; Robson, 2015). Still, it lacks theory (Hamari and Koivisto, 2015) and empirical research (Hamari et al., 2014; Seaborn and Fels, 2015; Hanus and Fox, 2015).

Gamification is usually defined as the use of game elements in non-game contexts (Deterding et al., 2011) to encourage engagement and enjoyment (Seaborn and Fels, 2015). It can also be used to design products, services and organizational practices (Huotari and Hamari, 2017). Of specific interest to our research, Hamari and Koivisto (2015) state that gamification also can be a motivation tool able to change behaviors, engage and mobilize people to achieve goals (Kim, 2015).

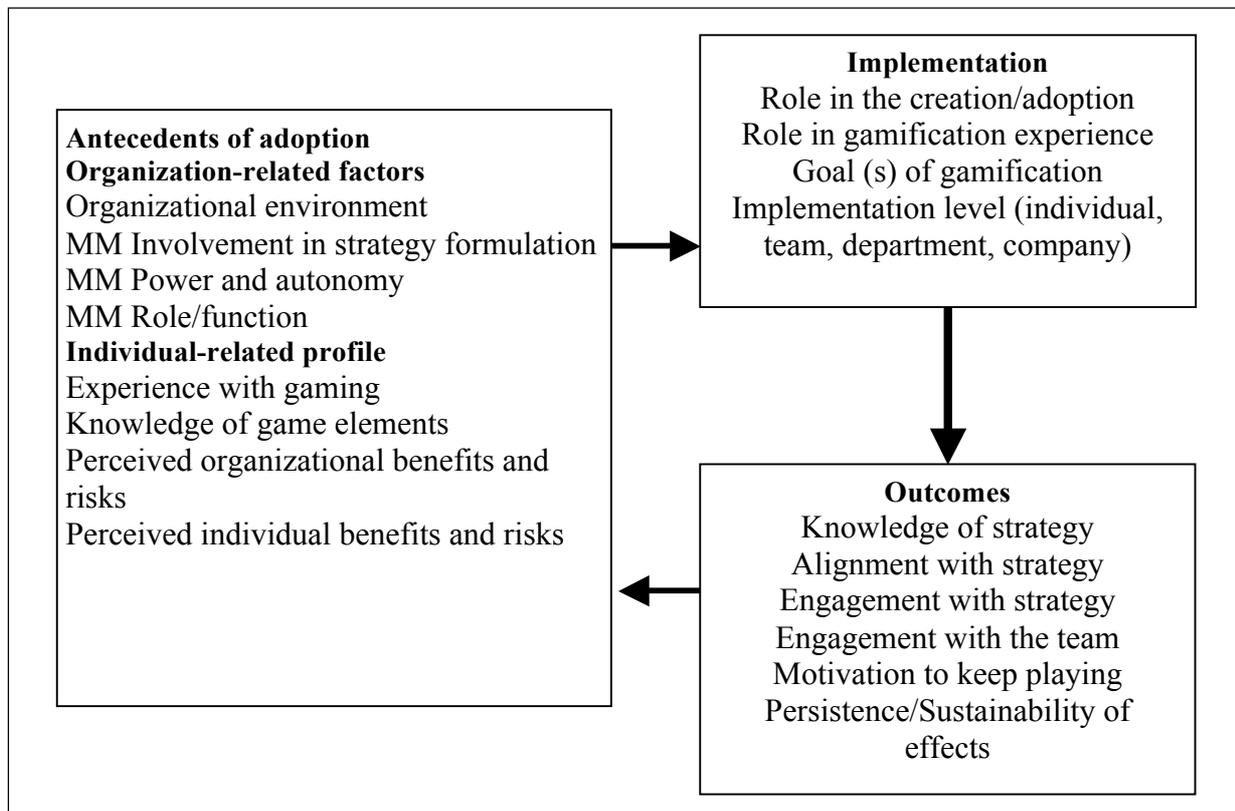
To motivate and engage people in gamified experiences middle managers can resort game design elements of mechanics, dynamics and aesthetics (Hunicke et al., 2004). For instance, mechanics promote action through challenges, luck, cooperation and competition, feedback and rewards, while dynamics attribute consistency (Hunicke et al., 2004; McCarthy et al., 2014; Hamari and Koivisto, 2015; Kim, 2015). However, Hanus and Fox (2015) suggest some caution in applying certain gamification mechanics. In fact, while some studies report positive effects of gamification (Hamari et al., 2014), others show that the perceived usefulness, enjoyment and playfulness tend to diminish with time using and ease of use (Koivisto and Hamari, 2014). Thus, on the one hand is relevant to consider whether the employees “buy” the idea of gamification to improve work performance (Landers et al., 2017). But, on the other hand, organizations must know how to motivate their employees knowing that what motivate the new generations are quite different from of what motivated the previous generations (Amar, 2004).

In this context, Hamari et al. (2017) observe that the impact of gamification on strategic management has not been sufficiently addressed. Thus, this study will hopefully shed light on the outcomes of the middle managers adoption of gamification as tool to engage and align employees with the organization’s strategy.

### **4. Antecedents and outcomes of middle managers towards gamification: a framework to research.**

Hamari et al., (2017) observe that the literature review on gamification is still very scarce regarding the impact of gamification on strategic management. Responding to this call, we propose a conceptual framework and a set of research questions to further existing knowledge on

the adoption of gamification as a strategic alignment tool by middle managers (cf. figure 1). Our framework integrates three main dimensions: The antecedents of adoption of gamification as a strategic alignment tool; The implementation of gamification process and the role of middle managers; the outcomes of the gamification process. Each of the dimensions and the relations between them are furthered below. We believe that research of these topics can be an important contribution to the strategy literature, namely in the specific field of strategic alignment.



**Figure 1 - framework to research**

At the antecedent dimension, the framework suggests that middle managers’ willingness to adopt gamification as a strategic alignment tool is influenced by organization and individual factors. Organizations should create positive conditions to sustain, develop and promote the involvement of middle managers with the corporate strategy. In line with Amar’s (2004) claim that to succeed, ‘knowledge organizations’ have to develop a work environment that consistently motivates and engage their employees, we suggest that the way middle managers perceive the organizational environment may influence their willingness to adopt gamification. Also, the involvement of middle managers in the organization strategy processes (Floyd and Wooldridge, 1992; Ouakouak et al., 2014), e.g. in the formulation and implementation of the company’s strategy, can facilitate the adoption of gamification tools. Additionally, the level of power and autonomy that middle managers hold in organizations (Guth and MacMillan, 1986; Radaelli and Sitton-Kent, 2016;) may facilitate or hinder the adoption of innovative management tools, such as gamification. Related with the individual factors, middle managers’ knowledge about game elements and experience with gaming can also influence the adoption of gamification. Specifically, we suggest that knowledge and previous gaming experience (in work and non-work contexts) will make middle managers more at ease with the tool and also more aware of its possibilities, e.g. in terms of engagement and motivation of employee. Furthermore, a positive perception of benefits and

risks that may accrue for themselves (Guth and MacMillan,1986) and for the organization will increase middle managers' willingness to adopt gamification tools. Integrating these elements, we propose the following research question: (1) How do organizational and individual factors influence the adoption of gamification as a strategic alignment tool by middle managers?

Concerning the implementation dimension, it is also necessary to understand what is the role of middle managers in the design and implementation of the gamification experience, e.g. his/her involvement in the decision to create the experience, and his/her involvement in the design of the game (goal, elements, and implementation level) and in the actual playing of the game. Thus, a second research question emerges: (2) What is the role of middle managers in the implementation of a gamification experience as a tool of strategic alignment? Furthermore, we suggest that the configuration of organization and individual factors previously referred may influence this role, leading to the third research question: (3) How do organization and individual antecedents influence the role of middle managers in the gamification experience?

The third framework dimension focuses on the outcomes of gamification. We recall Hamari and Koivisto's (2015) and Kim (2015) claims on the impact of gamification to change behaviors, engage and mobilize people to achieve goals. In line with this claim, we suggest that a positive perception of employees about the gamification process will increase their alignment and engagement with strategy, and their motivation to keep 'playing'. Two research questions arise here: (4) What are the effects of gamification on employees' engagement and alignment with strategy and motivation to keep 'playing'; (5) How does the implementation process influence the gamification outcomes? Furthermore, building on Hamari et al.'s (2017) call for research on the short-and long-term effects of gamification, we propose that the persistence of the outcomes needs to be studied in order to evaluate the sustainability of gamification tools in management contexts. To do so, we propose the following research question (6): How do the effects of gamification evolve with time?

Closing the framework, we propose a final question to research (7) How do gamification outcomes impact the organization and individual predisposition to further use gamification as a tool of strategic alignment?

## **5. Conclusions**

This paper responds to the call for a comprehensive framework to describe gamification processes (Hamari et al., 2014) and challenges (Robson et al., 2015) in the work place. We aim at contributing to the strengthening of the theoretical foundations and the empirical research in the area, a need identified by several authors (e.g., Hamari and Koivisto, 2015; Seaborn and Fels, 2015; Landers et al., 2017).

This paper reviews relevant literature on the areas of Strategy Alignment, Middle Management and Gamification. Organizations need to align their strategy to achieve long-term success and to have employees motivated and committed with the organization. To do this, organizations should create a working environment and use adequate tools (e.g., gamification) to engage and motivate consistently their employees. Middle managers are key actors in the process of strategic alignment due to their central position in organizational hierarchies, as they act as intermediaries between top managers and employees and have an important role in the implementation of strategy throughout the organization. Gamification is usually used as a motivation tool to encourage engagement and enjoyment, and even to change people's behavior or to achieve goals. In this context, among many possible uses, gamification can be used in the workplace as strategic alignment tool. This paper suggests that middle managers may be pivotal on the adoption and

implementation of a gamification strategy to mobilize employees' alignment with the organization's strategy.

Building on existing literature, we propose a comprehensive framework to research the antecedents and outcomes of the adoption of gamification processes as strategic alignment tool by middle managers. While this paper focuses on the issue of strategic alignment, it seems reasonable to expect that this framework may also apply to the adoption of gamification with other managerial goals. Empirical research is necessary to validate the research framework proposed in the paper.

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