

Empowering Creativity in Automated Retail: Role of Coaching Leadership and Ease of Use from the Perspective of Frontline Retail Employees

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Keywords: self-determination theory, basic psychological needs satisfaction, coaching leadership, creativity, retail automation, ease of use

Introduction

The growing use of *in-store automation technology (ISAT)*, such as self-checkout systems, touchscreen kiosks, robotic assistance systems, and smart point of sale (POS), has replaced routine tasks, increased efficiency, and improved customer services through new technological solutions, leading a radical modernization of the fashion retail industry (Grewal et al., 2023; Benoit et al., 2024). Despite the rapid expansion of retail automation, 70% of retail automation implementation and maintenance initiatives stumble, largely due to frontline employees' resistance stemming from low motivation and a lack of creative problem-solving capabilities (Begley et al., 2020). In the frontline retail environment, *creativity* refers to employees' ability to identify problems and propose innovative solutions to address intricate or unfamiliar challenges in their workplace (Charbonnier-Voirin & Roussel, 2012). As frontline employees are the actual performers in managing ISAT and resolving practical and urgent issues in store, it is critical to understand their motivations to use these technologies and how they enhance their creative abilities to identify issues and invent solutions (Di Pietro et al., 2014). This will eventually help them to effectively maintain ISAT and enhance consumers' shopping experience.

To improve motivation and creative performance in the retail automation context, the role of coaching leadership is critical in driving employees' motivation (Arnold et al., 2009) and improving creative behavior (Li et al., 2022). *Coaching leadership* guides and develops individuals to reach their potential through personalized support and feedback (Li et al., 2022). However, there has been a lack of scholarly discussion on how coaching leadership can enhance motivation and creativity, particularly in the context of in-store automation. In addition, much of the existing literature has examined the *perceived ease of use* as a determinant of technology acceptance, impacting employees' motivation (Szalma, 2014) and their work performance (Omar et al., 2019). However, there is a lack of empirical evidence that explains the dynamic relationship between coaching leadership and creativity through motivational mechanisms by considering the role of ease of use.

Therefore, we employed coaching leadership theory (CLT) and self-determination theory (SDT) to understand the role of coaching leadership in understanding employees' motivational mechanisms that eventually enhance their creativity in the frontline retail workplace. Consequently, this study aims to (a) examine the role of coaching leadership in explaining motivation and employees' creativity in their work duties when adopting ISAT; (b) define the role of motivation mechanism in increasing their creativity; and (c) investigate the moderating role of ease of use on ISAT in understanding motivation and creativity.

Literature Review

According to CLT, *coaching leadership* emphasizes daily interaction between a leader and an employee through (a) guiding improvements by providing feedback and (b) facilitating improvements by mentally supporting and inspiring creative potential solutions to problems (Peláez Zuberbühler et al., 2021). In addition, SDT emphasizes the significant basic role of an individual's inherent psychological growth needs for their positive development (Ryan & Deci, 2000). Within the SDT approach, *intrinsic motivation (IM)* and *basic psychological needs satisfaction (BPNS)* are distinctive concepts where intrinsic motivation—i.e., driven by personal satisfaction rather than by external rewards—eventually guides perceptions of basic psychological needs satisfaction—*autonomy, competence, and relatedness* (Ryan & Deci, 2000). Specifically, from the perspective of BPNS (Ryan & Deci, 2017), (a) *autonomy* refers to the need for ownership of their behavior; (b) *competence* refers to the need to feel mastery over the environment with new skills; and (c) *relatedness* refers to the need to feel connected within one's community. In the retail automation context, previous studies suggest that those psychological dynamics are significant in examining employees' engagement in problem-solving activity related to the new technologies that can facilitate work performance under the inclusive coaching culture (i.e., Schmid & Dowling, 2022). Thus, this study proposes the following hypotheses.

H1-H2 Coaching leadership — (H1) guidance, and (H2) facilitation—will positively affect frontline retail employees' intrinsic motivation (IM) to adopt ISAT.

H3 Intrinsic motivation (IM) will positively affect frontline retail employees' basic psychological needs satisfaction — (a) autonomy, (b) competence, and (c) relatedness— of adopting ISAT.

H4 The basic psychological needs of adopting ISAT—(a) autonomy, (b) competence, and (c) relatedness — will positively affect the employees' creativity.

H5-H6 Coaching leadership — (H5) guidance and (H6) facilitation — will positively affect the employees' creativity.

H7-H8 Perceived ease of use of technology will moderate (H7) the influence of intrinsic motivation on basic psychological needs — (a) autonomy, (b) competence, and (c) relatedness— of adopting ISAT; and (H8) its influence on employees' creativity.

Methods

The online survey was developed to measure coaching leadership, IM, BPNS, and creativity using a 7-point Likert scale (Heslin et al., 2006; Sheldon et al., 2017; Chen et al., 2015; Charbonnier-Voirin & Roussel., 2012; Venkatesh, 2000). The data was collected via MTurk. A total of 311 frontline retail employees who work in the fashion and lifestyle industry were used in the final analysis. All participants were frontline retail employees working with ISAT in their job duties (42% male, 58% female, 48% born between 1981-1996; 83.9% White/European; 80% college-educated or above). We adopted Partial Least Squares Structural Equation Modeling (PLS-SEM) by using Smart PLS.

Results

The measurement model was assessed successfully (Hair et al., 2019). Then, the bootstrapping method was used to estimate the significance of the path coefficients to test hypotheses. Results

confirmed that two types of CL— guidance and facilitation — positively impact creativity (H1: $\beta = 0.36, p < .01$, H2: $\beta = 0.23, p < .05$). IM positively influences the BPNS—autonomy, competence, and relatedness (H3a: $\beta = 0.45, p < .001$, H3b: $\beta = 0.39, p < .001$, H3c: $\beta = 0.30, p < .001$). However, only autonomy of BPNS positively influences creativity (H4a: $\beta = 0.30, p < .001$; H4b: $\beta = -0.00, p > .05$; H4c: $\beta = 0.05, p > .05$). Surprisingly, only facilitation of CL positively influences creativity (H5: $\beta = -0.16, p > .05$; H6: $\beta = 0.38, p < .001$); Interestingly, the moderating role of perceived ease of use has a significant negative effect on the relationship between IM and relatedness of BPNS (H7c: $\beta = -0.13, p < .01$), and significant positive effect on the relationship between autonomy of BPNS and creativity (H8a: $\beta = 0.20, p < .05$).

Discussion and Implication

This study contributes to theoretical and managerial implications. First, the study contributes to the existing literature by extending the coaching leadership theory and creativity in the retail automation context. Second, by investigating the research model incorporating CLT and SDT, the study confirmed the role of motivation mechanisms in influencing creativity, particularly revealing that autonomy is the most important factor. Lastly, for fashion retail practitioners, results offer valuable insights into adopting coaching leadership practices, where managers can cultivate a supportive and empowering positive working environment that encourages creativity, thereby mitigating the risk of failure to adopt ISAT in the fashion retail industry.

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