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# REVOLUTIONIZING CUSTOMER ENGAGEMENT VIA GAMIFIED CHATBOTS: A PARADIGM SHIFT<sup>1</sup>

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In the swiftly evolving commercial sphere, companies leverage artificial intelligence (AI) to heighten customer experiences and augment sales. Among these AI applications in marketing, chatbots have, due to advancements in natural language processing and machine learning, gained prominence in the shopping journey (Ameen et al., 2022; Belanche et al., 2020; Belk et al., 2023; Castelo et al., 2023; Flavián et al., 2022).

Chatbot interactions during shopping can potentially enhance customer satisfaction (Chung et al., 2020) and foster positive word-of-mouth (Zarouali et al., 2018). However, recent studies highlight (i) consumer hesitancy in utilizing these for purchases (Luo et al., 2019; Sands et al., 2021); and (ii) their discontinuation after initial interactions (Crolic et al., 2022).

In order to address these drawbacks of chatbot interactions, firms are now integrating gamification into these AI interactions, enabling users, for instance, to earn rewards or discounts through gaming mechanisms. For instance, AliExpress, under the Alibaba Group, lets shoppers gamble for discount-earning digital coins during conversational agent interactions (Natanson, 2021). And Aerie, an American lingerie company, introduced a chatbot engaging customers in playful conversation, encouraging exploration of various product alternatives through a chat game version that awards points and badges (Ruby Garage, 2017).

<sup>1</sup>Based on the paper Elmashhara, M. G., De Cicco, R., Silva, S. C., Hammerschmidt, M. and Silva, M. L. (2023), How Gamifying AI Shapes Customer Motivation, Engagement, and Purchase Behavior. *Psychology & Marketing*, 10.1002/mar.21912

Yet, despite the burgeoning use of gamification, its impact on customer behavior and engagement remains uncertain (García-Jurado et al., 2021; Kao & Chueh, 2022). Exploring the impact of motivational responses evoked by gamified chatbots on customer engagement and sales effectiveness forms a pivotal query.

## Utilitarian and Hedonic Motivations in Chatbot Engagement

Motivation driving consumer interactions can be categorized into utilitarian and hedonic motivations. While utilitarian motivation may seem to have a lesser impact on emotions, perceiving an interaction as economically beneficial enhances positive emotional investment (Akram et al., 2021). This aligns with the idea that positive emotional energy stems from the anticipation of accomplishment (Pekrun & Stephens, 2010; Weiner et al., 1979). Conversely, hedonic motivation focuses on the experiential and entertaining aspects of an interaction, encompassing pleasure, fun, and excitement (Hsu & Chen, 2018; Overby & Lee, 2006). It motivates users to invest in activities and heightens their engagement to further immerse themselves in the experience (Hsu & Chen, 2018).

Within gamified-chatbot interactions, hedonic motivation is expected to amplify cognitive engagement by framing the retail experience as entertainment, potentially deepening engagement levels (Insley & Nunan, 2014; Mullins & Sabherwal, 2020). This aligns with psychological studies indicating that heightened excitement is linked to a perception of time passing swiftly (Campbell & Bryant, 2007; Sackett et al., 2010).

Excessive cognitive and emotional engagement during gamified chatbot interactions can sometimes reduce the sense of urgency to make a purchase. Customers might feel content with their interaction without the need to buy. Behavioral engagement, which encourages seeking information and product promotion, is, however, expected to enhance purchase outcomes. It takes a more practical and purpose-driven approach, focusing on achieving the goal of making a purchase. Overall, this implies companies must select gamification styles aligning with their objectives (Robson et al., 2015).

## Empirical Studies on Motivational Drivers, Engagement, and Purchase Outcomes

Elmashhara et al. (2023) empirically address this issue, by delving into the effects of motivational responses in gamified chatbot interactions on behavioral intentions. Their exploration encompasses the impact of utilitarian and hedonic motivations, considering their influence on cognitive, emotional, and behavioral engagement. Additionally, their research scrutinizes two distinct gamification styles – knowledge-sharing games versus reward-based chance games – to evaluate their moderation of compulsory play's effect on purchase intentions, ultimately closing the gap between intention and actual behavior.

In particular, Elmashhara et al. (2023) make use of a gamified chatbot representing a fictional online suitcase retailer to conduct 3 studies. Study 1 evaluates participants' motivation, engagement, and purchase intent. Results reveal that while cognitive engagement has minimal influence, emotional engagement negatively affects purchase intent for utilitarian motivation. In contrast, hedonic motivation proves to be the more effective driver of purchase intent.

Study 2 validate Study 1's findings, emphasizing the negative role of emotional engagement in connecting utilitarian motivation to purchase intent and the positive role of behavioral engagement linking hedonic motivation to purchase intent. Different gamification styles (represented in Figure 1) have varying effects, with chance-based games, such as rewards, enhancing purchase intent by stimulating hedonic motivation and behavioral engagement. Conversely, knowledge-sharing games, involving active participation, reduce purchase behavior by intensifying utilitarian motivation and emotional engagement. The research also highlights the importance of perceived consumer autonomy, favoring game-of-chance chatbots that do not pressure users.

Finally, Study 3 suggests that game-of-chance chatbots not only increase purchase intent but also prompt immediate actions related to purchases. In simpler terms, implementing a game of chance in chatbots not only sparks interest in buying but also drives concrete steps toward making a purchase.


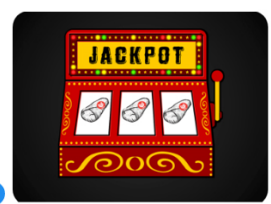
| Baseline Interaction for all Chatbot Types  | Knowledge-Sharing Chatbot  | Game of Chance Chatbot  |
|---|--|---|
| <p>Do you prefer a hardside suitcase?</p>  <p>Or a softside suitcase?</p> <p>Type something in      Send</p> | <p>Now before we show you matching products, let us play and give you some discount you can use in this purchase!</p> <p>Welcome to the Rainbow quiz!<br/>The Quiz is composed of two questions on suitcases. Try to win up to 30% discount!</p> <p>Choose the right answer!</p> <p>The first known suitcases were used in:</p> <p>9th century    15th century<br/>19th century    21st century</p> <p>Type something in      Send</p> | <p>discount you can use in this purchase</p> <p>Spin and Win with Rainbow!<br/>Pick a combination to win up to 30% discount!</p>  <p>Great, you just won 30% Discount 🎉🎉</p> <p>Type something in      Send</p> |

Figure 1 – Extracts from the Gamified Chatbot Conversations

## Implications and Considerations for Managers

Elmashhara et al. (2023)'s results offer valuable insights for businesses:

1. Hedonic motivation, rooted in the enjoyment of interacting with gamified chatbots, positively impacts behavioral engagement and purchase behavior.
2. Utilitarian motivation, based on practical benefits like discounts or information, boosts both behavioral and emotional engagement, but excessive emotional engagement can negatively affect purchase outcomes.
3. Game elements involving chance, like spin-the-wheel, effectively stimulate hedonic motivation and behavioral engagement, leading to increased purchases.
4. Chatbots focused on knowledge-sharing elements can intensify emotional engagement, potentially discouraging purchases. Businesses should consider these factors when designing gamified chatbots.
5. Striking a balance between utilitarian and hedonic motivations is crucial. Overemphasizing practical benefits can lead to excessive emotional attachment, which negatively impacts purchase intentions. Effective management of these motivations enhances customer engagement and drives purchase behavior.
6. Certain gamification elements, like games of chance, do not compel users to participate, resulting in higher perceived autonomy and more positive purchase intentions. Managers should prioritize customer autonomy when implementing gamified chatbots.

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