

**GAMIFICATION AND CUSTOMER CHURN
AMONG MILLENNIALS IN KLANG VALLEY:
THE MEDIATING ROLE OF LOYALTY AND
BRAND ATTRACTIVENESS**

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GAMIFICATION AND CUSTOMER CHURN AMONG MILLENNIALS IN
KLANG VALLEY: THE MEDIATING ROLE OF LOYALTY AND BRAND
ATTRACTIVENESS

SI CHONG EN

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ABSTRACT

In the competitive and increasingly digitalised business environment today, customer retention has become a critical concern, particularly among Millennials who demonstrate high churn tendencies and strong digital expectations. This study investigates the impact of gamification elements on customer churn, with loyalty and brand attractiveness as mediators, among Millennials in the Klang Valley, Malaysia. Grounded in the Stimulus-Organism-Response (S-O-R) model, Customer Engagement Theory, Self-Determination Theory (SDT), and gamification frameworks such as Bartle's Player Types and Yee's Player Motivation Model, the research examines how specific gamification strategies influence consumer behaviour. Based on a quantitative research design, a structured questionnaire was administered to 180 millennial respondents. The Partial Least Squares Structural Equation Modelling (PLS-SEM) was used to analyse the structural relationships among variables, given its suitability for predictive modelling and small-to-medium sample sizes. The gamification elements evaluated include membership programmes, discounts, contest rewards, and digitalised content. The findings showed that digitalised content significantly influences both customer loyalty and brand attractiveness. However, membership programmes exhibited no significant direct effect, while discounts and contest rewards showed limited influence. Among the mediators, brand attractiveness demonstrated a stronger effect in reducing customer churn compared to loyalty. The model exhibited good predictive accuracy, with Q^2 values exceeding the accepted thresholds for all key constructs. These results have highlighted the importance of personalised and interactive gamification strategies in retaining Millennial customers. Businesses are advised to prioritise digital content and contest-based engagement to enhance brand attractiveness and loyalty. Future research is recommended to investigate the long-term effectiveness of gamification and explore emerging technologies such as augmented and virtual reality for customer engagement.

Keywords: Gamification, customer churn, millennials, loyalty, attractiveness, Klang Valley, retail industry, PLS-SEM.

APPROVAL

This is to certify that this thesis conforms to acceptable standards of scholarly presentation and is fully adequate, in quality and scope, for the fulfilment of the requirements for the Doctor of Business Administration

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DECLARATION

I hereby declare that the thesis submitted in fulfilment of the requirements for the Doctor of Business Administration is my own work and that all contributions from any other person or sources are properly and duly cited. I further declare that the material has not been submitted either in whole or in part, for a degree at this or any other university. In making this declaration, I understand and acknowledge any breaches in this declaration constitute academic misconduct, which may result in my expulsion from the programme and/or exclusion from the award of the degree.

Name: Si Chong En

A handwritten signature in black ink, appearing to read "Si Chong En".

Signature of Student:

Date: 22 May 2025

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LIST OF ABBREVIATION

SPSS	Statistical Package for the Social Sciences
SmartPLS	Smart Partial Least Squares
AR	Augmented Reality
VR	Virtual Reality
SDT	Self-Determination Theory
S-O-R	Stimulus-Organism-Response
PLS-SEM	Partial Least Squares Structural Equation Modelling
B2C	Business-to-Consumer
DOSM	Department of Statistics Malaysia

CHAPTER 1

INTRODUCTION

1.0 Overview

The modern business environment is characterised by rapid technological advancement, globalisation, and dynamic shifts in consumer behaviour. In this context, exploring the impact of gamification on reducing customer churn among Millennials in Klang Valley, Malaysia, is both timely and necessary. As brand loyalty becomes increasingly complex and customer attrition more prevalent, gamification has emerged as a promising strategy for enhancing engagement and retention (Koivisto & Hamari, 2019; Bai et al., 2020).

Numerous organisations report that gamified marketing strategies have improved customer engagement and loyalty, with data showing a 47% increase in brand attractiveness and a 22% improvement in loyalty (Davis, 2020). However, despite growing interest, there remains a notable gap in literature concerning the effectiveness of gamification in the post-COVID-19 era. This study aims to fill this gap by investigating how gamification influences Millennial customer attitudes, specifically loyalty and attractiveness to reduce churn.

The study focuses on Klang Valley, Malaysia's most urbanised region, which is home to approximately 7.9 million people, over 20% of the national population (Chung & Al-Khaled, 2021). Millennials comprise about 40% of this population (Department of Statistics Malaysia, 2017). This demographic is known for its high purchasing power, digital fluency, and tendency to switch brands in pursuit of novelty or better value (Chung & Al-Khaled, 2021; Fortunly, 2024). Therefore, understanding Millennials' responses to gamification in this region offers valuable insights for improving customer retention.

The primary aim of this research is to examine how gamification affects customer loyalty and brand attractiveness, and subsequently, customer churn. This includes evaluating what constitutes effective gamification, defining churn behaviour, profiling Klang Valley Millennials, and offering practical recommendations to retain this demographic in a post-pandemic context.

1.1 Background of Study

Malaysia's economy was significantly impacted by the COVID-19 pandemic. During the first Movement Control Order (MCO) in 2020, the country lost an estimated RM2.4 billion daily, amounting to RM63 billion in total losses (Flanders Investment & Trade, 2021). The GDP contracted by 17.1% in Q2 2020, the steepest decline since the 1998 Asian Financial Crisis, while the unemployment rate surged to 4.5%, the highest since 1993 (PwC, 2020; DOSM, 2020; SHAHEERA AZNAM SHAH, 2021). These economic conditions contributed to significant shifts in consumer spending patterns, with Deloitte (2021) reporting that consumers became more focused on saving and reducing expenses.

These behavioural changes necessitate new strategies to retain customers. Gamification, through mechanisms such as membership programmes, discounts, contest rewards, and digitalised content can foster loyalty and attractiveness, ultimately reducing churn (Chung & Al-Khaled, 2021; Baah et al., 2023). Interactive tools such as point systems, leaderboards, and challenges align well with consumers' demand for engaging and cost-effective experiences (Behl et al., 2020).

Research suggests that a 5% increase in customer retention can boost profits by 25% to 125%, due to lower acquisition costs and increased lifetime value (Artha et al., 2022). Gamification strategies enable companies to retain customers by

enhancing brand attachment and encouraging repeat interactions (Deng et al., 2023; Sufiz, 2019). Notably, customer satisfaction does not always equate to loyalty, studies show that 60% to 80% of defecting customers were satisfied prior to leaving (Reichheld et al., 2000). Thus, businesses must focus not only on satisfaction but also on reinforcing loyalty through meaningful engagement.

As competition intensifies, especially in the retail sector, businesses must innovate to remain relevant. Gamification provides a unique advantage in this regard, particularly among Millennials who are drawn to interactive, reward-based experiences. The global gamification market is projected to grow from USD 9.1 billion in 2020 to USD 30.7 billion by 2025, driven by widespread adoption across sectors (Gamification Market, 2020; Xi & Hamari, 2019).

In Malaysia, companies like Nike+ and EcoIsland have demonstrated the effectiveness of gamified platforms in health and education, respectively (Treiblmaier, Horst & Putz, 2018). Applying similar approaches in retail can increase engagement, foster brand loyalty, and reduce churn (Davis, 2020; Deng et al., 2023). Gamification elements such as personalised digital content, reward-based discount schemes, and experiential contest prizes help build stronger emotional connections with customers, improving both loyalty and brand attractiveness (Wang & Li, 2022; Smith et al., 2021).

Given Klang Valley's dense Millennial population, high purchasing power, and competitive retail environment, this study focuses on how gamification strategies can address churn by targeting the preferences and behaviours of this critical demographic. The findings aim to provide actionable insights for retailers and marketers seeking to innovate customer retention strategies in post-pandemic Malaysia.

1.2 Statement of the Problem

In the contemporary business landscape, characterised by rapid technological advancements and evolving consumer behaviour, organisations face ongoing challenges in retaining Millennial customers and reducing customer churn (Smith & Anderson, 2022; Jones & Nguyen, 2023). This issue is particularly acute in urban regions such as Klang Valley, Malaysia (Figure 1.1 and 1.2) (Chung & Al-Khaled, 2021). Despite various customer retention strategies, churn remains a significant concern for sustainable business growth (Garcia & Lopez, 2021; Patel & Sharma, 2022). Millennials, noted for their distinct preferences and digital fluency, require more innovative approaches such as gamification to improve brand attractiveness and loyalty while reducing churn.

The COVID-19 pandemic intensified these challenges. Malaysia's economy contracted by 17.1% in Q2 2020, the sharpest decline since the 1998 Asian Financial Crisis, while unemployment peaked at 4.5% (PwC, 2020; SHAHEERA AZNAM SHAH, 2021). Deloitte (2021) further noted a shift in consumer focus toward savings and expense reduction. This behavioural shift heightens the urgency for businesses to adopt novel engagement methods to retain customers.

From a practical perspective, this study addresses the gap concerning the persistently high churn rate among Millennials in Klang Valley, despite the deployment of traditional marketing strategies (Ahmad & Rahman, 2021; Tan & Lee, 2022). Empirical data reveals that churn rates among Millennials in various industries exceed 30% annually (Hee & Rhung, 2019). This suggests a critical failure of existing retention strategies to resonate with the expectations and behaviours of digital-native consumers. Millennials' heightened expectations for interactivity and digital

experiences mean that conventional approaches are increasingly ineffective (Lim & Yusof, 2022; Chong & Mah, 2023).

A particular focus of this study is the retail industry, which serves as an ideal context due to its frequent and direct interactions with consumers. Retail businesses, especially in competitive urban environments like Klang Valley, are under increasing pressure to differentiate themselves and retain customers in the face of evolving consumer expectations. Millennials, who represent a large proportion of retail consumers, often demand engaging, personalised experiences that traditional loyalty programmes struggle to provide. Hence, the retail sector provides a relevant and practical setting for investigating the effectiveness of gamification in reducing customer churn.

On a theoretical level, there is a lack of focused research on how gamification defined as the application of game-design elements in non-gaming contexts can serve as a mechanism to strengthen customer loyalty and brand attractiveness, particularly among Millennials in Malaysia. While global studies have recognised the broader impact of gamification on engagement (Behl et al., 2020; Deng et al., 2023), few have explored the specific mechanisms and intermediary constructs through which it operates in Southeast Asian contexts. Moreover, the potential for gamification fatigue or reduced novelty over time, particularly among Millennials who crave continuous innovation, remains under-theorised (Hwang & Choi, 2019).

Existing literature has grouped gamification elements into three dimensions: achievement-based (e.g., rewards, points), social (e.g., digital communities, social media integration), and immersive (e.g., AR/VR experiences) (Koivisto & Hamari, 2019; Yang et al., 2024). While these categories provide a useful framework, there remains a lack of empirical research determining which of these gamification elements

is most effective in promoting loyalty and reducing churn within the specific context of Klang Valley. Moreover, most studies treat these elements as homogenous without exploring their differential impact across cultures and demographics.

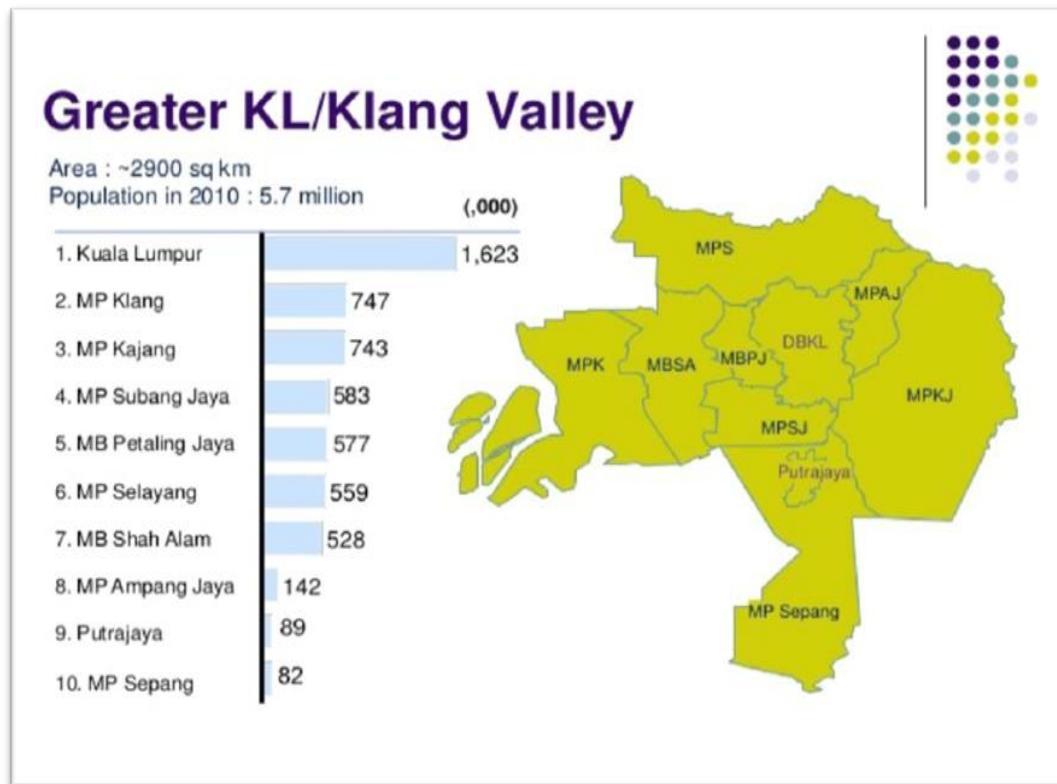
The intermediary roles of loyalty and attractiveness are central to understanding how gamification impacts customer retention. Although these constructs are frequently referenced in marketing research, their operationalisation as mediators in gamification-driven customer engagement models remains limited. Kim et al. (2019) suggest that brand attractiveness and loyalty are precursors to lower churn rates, yet few studies have modelled these relationships in high-context, digital-first Millennial markets such as Klang Valley.

Furthermore, despite the strategic importance of Millennials, current empirical studies often provide generalised insights that fail to capture the nuances of this demographic. Millennials are known to be highly mobile, brand-agnostic, and sensitive to personalisation and experience (Azami et al., 2023). Their daily reliance on mobile platforms, apps, and social media underscores the need for interactive, gamified marketing strategies. Nonetheless, research on how these traits influence engagement with gamified brand experiences in Malaysia remains fragmented.

In summary, while gamification has gained international prominence as a tool for customer engagement, both practical and theoretical gaps persist in its application to the Klang Valley Millennial segment, particularly within the retail industry. The COVID-19 pandemic has reinforced the necessity for brands to retain customers in a cost-effective and engaging manner. This study therefore aims to investigate how gamification influences customer loyalty and brand attractiveness, and how these mediators contribute to reducing churn. It intends to bridge both theoretical and

practical gaps by offering context-specific insights that can guide more effective retention strategies tailored to Millennial consumers in Malaysia's retail sector.

Figure 1.1: Sampling Frame (Klang Valley Map)



Source: Jayaraman, Leow, Asirvatham, & Chan (2020)