Analysis of Generation Z Consumer Behavior in the Food and Beverage Industry in Indonesia: The Influence of Product Personalization, Social Media Engagement, and Brand Experience

Dyah Ayu Suryaningrum1, Eva Yuniarti Utami2, Hayu Lusianawati3, Najdah Thalib4

1,2 Universitas Sebelas Maret
3 Universitas Sahid
4 Universitas Musamus Merauke

ABSTRACT

In the Indonesian food and beverage sector, this study examines how brand experience, social media interaction, and product customisation affect Generation Z customer behavior. Data gathered from 150 Generation Z customers was analyzed using a quantitative method that made use of structural equation modeling with partial least squares (SEM-PLS). The results of the study show a strong positive correlation between the behavior of Generation Z consumers and each independent variable, including social media participation, brand experience, and product customisation. The findings highlight how crucial strategic customisation, a strong social media presence, and improved brand experiences are in influencing Generation Z customers' preferences and decisions. These observations have important ramifications for companies who want to modify their marketing plans in order to successfully connect this ever-changing group of consumers in the Indonesian market.

Keywords: Product Personalization, Social Media Engagement, Brand Experience, Generation Z, Consumer Behavior, Food and Beverage, Indonesia

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Corresponding Author:
Name: Dyah Ayu Suryaningrum
Institution: Universitas Sebelas Maret
e-mail: dyahsuryaningrum@staff.uns.ac.id

1. INTRODUCTION

The evolution of consumer behavior, particularly among Generation Z, has reshaped the global market landscape. Generation Z, characterized by their digital fluency and technological advances, has become a significant force influencing industries worldwide. In this context, the food and drink sector is facing a pivotal moment where businesses need to reassess their strategies to navigate the intersection of tradition and innovation [1], [2].

Understanding the factors that shape Generation Z consumer behavior in the dynamic Indonesian market is crucial for sustainable business success. The covid-19 pandemic has significantly impacted consumer preferences, with a shift towards online shopping and a preference for local fashion brands [3]. Additionally, low insurance penetration and literacy levels present challenges for insurance companies in Indonesia, highlighting the need for innovative, customer-centric insurance products targeting Millennials and Generation Z[4]. The development of internet

technology has also influenced consumer behavior, with a shift from conventional shopping to online shopping, particularly during events like National Online Shopping Day [5]. Furthermore, the sustainable behavior of Generation Z consumers is an important factor to consider, as they are naturally inclined towards environmental responsibility [6]. Finally, the continued development of technology has led to the adoption and actual use of digital payment instruments among Generation Y and Generation Z in Indonesia [7].

Contemporary consumers are seeking authenticity, personalization, and meaningful experiences in their interactions with products and brands. They want brands that are true, personal, and iconic, and they are motivated by intrinsic and extrinsic factors in their search for authenticity [8]. Additionally, consumers are interested in moderate and meaningful digital designs that address the negative impacts of technology while still providing meaningful experiences [9]. Experiential value, including cognitive, hedonic, social, and ethical dimensions, plays a crucial role in consumer engagement and brand relationship performance outcomes, leading to value co-creation [10]. The contemporary consumer’s mindset values context, authenticity, story, and resonance, which can help companies build customer-centric market strategies that align with consumer wants and needs [11]. In the Chinese market, consumers’ demands have shifted from price-driven to brand-driven needs, and improving the value of consumer experience during brand building enhances exchanges and interactions, leading to improved purchase intention [12]. Therefore, the confluence of product personalization, social media engagement and brand experience has become a focal point for businesses looking to attract the attention and loyalty of Generation Z. This study aims to investigate the complex dynamics of these factors and their influence on consumer choice in the food and beverage industry in Indonesia.

2. LITERATURE REVIEW

2.1 Generation Z Consumer Behavior

Generation Z, known for its technological fluency and distinct preferences, has changed the landscape of consumer behavior. This demographic group values authenticity, individualism, and personalized experiences [2]. They rely heavily on digital platforms and social media as key influencers in their decision-making process [13]. Understanding the unique characteristics of Generation Z and their reliance on digital platforms is critical for businesses globally [14]. In the context of the food and beverage industry in Indonesia, understanding the ins and outs of Generation Z consumer behavior is crucial to designing effective marketing strategies.

2.2 Product Personalization

Product personalization has emerged as a powerful tool for businesses looking to resonate with Generation Z consumers. Research has shown that personalized products contribute significantly to increased consumer satisfaction and loyalty. Personalized production requires customer involvement in the design process, and decision-making tools are needed to assess the effects of customer interaction on product design and manufacturing systems [15]. In the era of fierce competition, finding a way to quickly find ideal fresh products online is crucial. A web crawler program can capture product information from e-commerce platforms and construct an online fresh food recommendation system, reducing the time and energy spent comparing prices and improving the efficiency of online shopping [16]. Personalization of products and services has potentials for sustainability and can unlock market opportunities. A user-centered approach during the entire life cycle can lead to optimized sustainability performance, and companies can tap into new market opportunities by offering patronizable products [17]. Brands are increasingly using product customization to engage consumers in deep and meaningful brand experiences. Brand experience drives intention to use a
customization toolkit and purchase customized products [18].

However, the effectiveness of product personalization in the Indonesian food and beverage market, particularly with regard to Generation Z, requires further investigation. This literature gap highlights the need to explore how customized offerings, from menu options to packaging, influence Generation Z consumers’ choices and preferences within the Indonesian cultural environment.

**H1:** Product personalization has a significant positive relationship with Generation Z consumer behavior in the Indonesian food and beverage industry.

### 2.3 Social Media Engagement

Social media platforms have become an integral part of Generation Z’s daily lives, shaping their perceptions and influencing their purchasing decisions. The impact of social media engagement by food and beverage brands on Generation Z has been studied in a global context, emphasizing the creation of a sense of community, brand awareness, and the power to shape consumer preferences [19]–[21]. Social media gives Generation Z access to a wide range of information, product reviews, and user-generated content, which enables them to make informed purchasing decisions [22]. Generation Z consumers are tech-savvy and digitally connected, making them market experts with a wide range of consumer information and knowledge [2]. They are more likely to use online channels for their purchasing process and are influenced by different factors compared to previous generations [1]. Social media has a great impact in shaping Generation Z’s attitude and behavior towards environmentally conscious consumer choices [23].

In Indonesia’s diverse landscape, with its unique cultural mix, investigating how social media engagement resonates with Generation Z consumers and contributes to their decision-making in the food and beverage sector is crucial.

**H2:** Social media engagement has a significant positive relationship with Generation Z consumer behavior in the Indonesian food and beverage industry.

### 2.4 Brand Experience

Positive brand experiences, which encompass sensory, emotional, and cognitive elements, are known to foster brand loyalty and advocacy. In the context of the food and beverage industry in Indonesia, factors such as dining experience, packaging aesthetics, and overall brand engagement play a crucial role in shaping consumer perceptions [24], [25]. These elements contribute to the holistic brand experience that consumers have, influencing their perceptions of the brand and their likelihood of developing loyalty towards it [26]–[28]. By providing a positive brand experience through factors like dining experience and packaging aesthetics, food and beverage brands in Indonesia can enhance consumer perceptions and increase brand loyalty and advocacy [29], [30]. However, the specific nuances of how brand experience influences Generation Z consumer behavior in this market remain relatively unexplored.

**H3:** Brand experience has a significant positive relationship with Generation Z consumer behavior in the Indonesian food and beverage industry.

### 3. METHODS

This study adopts a quantitative research design to investigate the influence of product personalization, social media engagement, and brand experience on Generation Z consumer behavior in the food and beverage industry in Indonesia. Specifically, Structural Equation Modeling using Partial Least Squares (SEM-PLS) will be used to analyze the relationship between variables and test the proposed research model [31].

#### 3.1 Population and Sample

The target population consists of Generation Z consumers aged 18 to 25 who actively participate in the Indonesian food and beverage market. A stratified random sampling technique will be used to ensure representation across different regions and socioeconomic backgrounds. Given the scope of this study, a sample size of 150 participants
is considered sufficient for statistical robustness.

3.2 Data Collection
Data was collected through a structured online survey distributed through various platforms such as social media, email, and online forums frequented by Generation Z. The survey questionnaire, which was pre-tested for clarity and relevance, would consist of 1-5 Likert scale items and closed-ended questions. The participants are informed of the purpose of the study, and their voluntary participation will be emphasized.

3.3 Variables and Measurement
The key variables include product personalization, social media engagement, brand experience, and Generation Z consumer behavior. Likert scale items measure participants' agreement or disagreement with statements related to each variable. Demographic information such as age, gender, and income was also collected for subgroup analysis.

3.4 Data Analysis
Structural Equation Modeling using Partial Least Squares (SEM-PLS) will be the main statistical technique used for data analysis. SEM-PLS is well suited for exploratory research and small sample sizes, making it ideal for this study with a sample of 150 participants. The analysis will assess the relationship between product personalization, social media engagement, brand experience, and Generation Z consumer behavior. Path coefficients, significance levels, and fit indices will be examined to validate the research model [31].

4. RESULTS AND DISCUSSION

4.1 Demographic Sample
The demographic characteristics of the sample provide insight into the diverse composition of Generation Z consumers surveyed in Indonesia. The age distribution reflects a balanced representation across the 18-25 age range. Notably, a significant proportion is in the 21-23 age group, in line with the typical characteristics of Generation Z. The slightly higher representation of females (55%) in the sample emphasizes the importance of considering gender dynamics in understanding Generation Z consumer behavior. The income distribution shows that most of the sample falls within the monthly income range of IDR3,000,000 - IDR5,000,000. This insight into the income levels of the surveyed population provides context for interpreting their consumer behavior.

4.2 Measurement Model
The measurement model evaluates the reliability and validity of the latent constructs (product personalization, social media engagement, brand experience, and Generation Z consumer behavior). The loadings, Cronbach's alpha, composite reliability, and average variance extracted (AVE) will be examined. High loadings, reliability values, and AVE values indicate a strong measurement model.

Table 1. Validity and Reliability

<table>
<thead>
<tr>
<th>Variable</th>
<th>Code</th>
<th>Loading Factor</th>
<th>Cronbach's Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Personalization</td>
<td>PP.1</td>
<td>0.884</td>
<td></td>
<td>0.905</td>
<td>0.940</td>
</tr>
<tr>
<td></td>
<td>PP.2</td>
<td>0.937</td>
<td></td>
<td></td>
<td>0.940</td>
</tr>
<tr>
<td></td>
<td>PP.3</td>
<td>0.928</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Media Engagement</td>
<td>SME.1</td>
<td>0.791</td>
<td></td>
<td>0.798</td>
<td>0.882</td>
</tr>
<tr>
<td></td>
<td>SME.2</td>
<td>0.877</td>
<td></td>
<td></td>
<td>0.714</td>
</tr>
<tr>
<td></td>
<td>SME.3</td>
<td>0.863</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Experience</td>
<td>BE.1</td>
<td>0.844</td>
<td></td>
<td>0.775</td>
<td>0.863</td>
</tr>
<tr>
<td></td>
<td>BE.2</td>
<td>0.785</td>
<td></td>
<td></td>
<td>0.677</td>
</tr>
<tr>
<td></td>
<td>BE.3</td>
<td>0.839</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generation Z Consumer Behavior</td>
<td>GZCB.1</td>
<td>0.893</td>
<td>0.840</td>
<td>0.904</td>
<td>0.758</td>
</tr>
</tbody>
</table>
The constructs of Product Personalization, Social Media Engagement, Brand Experience, and Generation Z Consumer Behavior demonstrate strong loading factors, high reliability, and satisfactory validity indices, indicating well-measured constructs in the model. The high loading factors, Cronbach's Alpha, Composite Reliability, and AVE values for Product Personalization indicate a reliable and valid measurement of this construct PP.1, PP.2, PP.3. Similarly, the results for Social Media Engagement exhibit strong loading factors and satisfactory reliability and validity indices, ensuring the construct's measurement accuracy SME.1, SME.2, SME.3. Brand Experience demonstrates good reliability and validity, although the Cronbach's Alpha falls slightly below the conventional threshold. Nevertheless, the high loading factors and Composite Reliability support the construct's overall robustness BE.1, BE.2, BE.3. Generation Z Consumer Behavior exhibits strong loading factors, high reliability, and satisfactory validity indices, indicating a well-measured construct in the model GZCB.1, GZCB.2, GZCB.3.

Table 2. The Acceptability of Discrimination

<table>
<thead>
<tr>
<th></th>
<th>Brand Experience</th>
<th>Generation Z Consumer Behavior</th>
<th>Product Personalization</th>
<th>Social Media Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Experience</td>
<td>0.823</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generation Z</td>
<td>0.759</td>
<td>0.871</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Personalization</td>
<td>0.714</td>
<td>0.653</td>
<td>0.917</td>
<td></td>
</tr>
<tr>
<td>Social Media</td>
<td>0.823</td>
<td>0.644</td>
<td>0.732</td>
<td>0.845</td>
</tr>
<tr>
<td>Engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The discriminant validity matrix shows that there are positive relationships between some constructs, but each latent variable remains distinct. The correlation coefficients generally align with theoretical expectations, indicating that Brand Experience, Generation Z Consumer Behavior, Product Personalization, and Social Media Engagement are unique and contribute independently to the overall model. However, there is a strong correlation between Product Personalization and Social Media Engagement, suggesting potential overlap in how personalized products are promoted and shared on social media.
Model Fit Evaluations
Table 3. Model Fit

<table>
<thead>
<tr>
<th></th>
<th>Saturated Model</th>
<th>Estimated Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRMR</td>
<td>0.103</td>
<td>0.103</td>
</tr>
<tr>
<td>d_ULS</td>
<td>0.822</td>
<td>0.822</td>
</tr>
<tr>
<td>d_G</td>
<td>0.430</td>
<td>0.430</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>304.332</td>
<td>304.332</td>
</tr>
<tr>
<td>NFI</td>
<td>0.730</td>
<td>0.730</td>
</tr>
</tbody>
</table>

The standardized root mean square residual (SRMR) values for both the saturated and estimated models are identical at 0.103, indicating a reasonable fit of the estimated model to the saturated model. The unweighted least squares (d_ULS) values are also identical for both models at 0.822, suggesting that the estimated model adequately reproduces the covariance structure observed in the saturated model. The geodesic discrepancy (d_G) values are consistent at 0.430 for both models, indicating that the estimated model appropriately captures the geodesic structure of the saturated model. The chi-square values for both models are 304.332, suggesting a consistent fit between the saturated and estimated models. The normed fit index (NFI) values are also consistent at 0.730 for both models, indicating a reasonable fit of the estimated model.

4.3 Structural Model

The structural model explores the relationships among latent constructs. Path coefficients, t values, and R² values will be analyzed to determine the strength and significance of these relationships. The hypotheses formulated in the research design are validated or rejected based on these results.

Table 4. Hypothesis Tests Results

<table>
<thead>
<tr>
<th></th>
<th>Original Sample (O)</th>
<th>Sample Mean (M)</th>
<th>Standard Deviation (STDEV)</th>
<th>T Statistics (O/STDEV)</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Experience -&gt;</td>
<td>0.626</td>
<td>0.616</td>
<td>0.112</td>
<td>5.579</td>
<td>0.00</td>
</tr>
<tr>
<td>Generation Z Consumer Behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Personalization -&gt;</td>
<td>0.242</td>
<td>0.244</td>
<td>0.119</td>
<td>2.274</td>
<td>0.00</td>
</tr>
<tr>
<td>Generation Z Consumer Behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Media Engagement -&gt;</td>
<td>0.248</td>
<td>0.237</td>
<td>0.108</td>
<td>2.183</td>
<td>0.00</td>
</tr>
<tr>
<td>Generation Z Consumer Behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The outcomes of the structural model highlight the unique and noteworthy roles that Brand Experience, Product Personalization, and Social Media Engagement play in shaping the purchasing habits of Generation Z within the Indonesian food and beverage sector. These results offer practical advice to companies looking to modify their approaches in order to successfully interact with and satisfy the tastes of Generation Z customers.

a. The correlation between Brand Experience and Generation Z Consumer Behavior is statistically significant and large, as indicated by the positive path coefficient of 0.626. The relationship is strong and unlikely to be the result of chance, as indicated by the T statistics of 5.579, which is much higher than the traditional criterion (p < 0.001). In the Indonesian food and beverage business, Generation Z consumer behavior is influenced by pleasant brand experiences.

b. There is a moderate but statistically significant impact from product personalization on Generation Z consumer behavior, as indicated by the path coefficient of 0.242.
According to the T statistics of 2.274 and a p-value of less than 0.01, Generation Z customer behavior is influenced by product customization. Even if the impact is not as strong as Brand Experience, it is still a big deal.

c. A statistically significant influence is indicated by the positive path coefficient of 0.248 from Social Media Engagement to Generation Z Consumer Behavior. The conclusion that active participation on social media platforms influences the behavior of Generation Z consumers in the Indonesian food and beverage business is supported by the T statistics of 2.183 and a p-value of 0.003.

The percentage of the dependent variable's variance that the independent variables in the model can account for is shown by the R-Square, sometimes referred to as the coefficient of determination. An R-Square of 0.602 in the context of Generation Z Consumer Behavior suggests that the independent variables in the model (Product Personalization, Social Media Engagement, and Brand Experience) account for around 60.2% of the variability in Generation Z Consumer Behavior.

An alternative form of R-Square that accounts for the quantity of predictors in the model is called R-Square Adjusted. When irrelevant predictors are included in the model and do not make a meaningful contribution to the explanation of the dependent variable, the model is penalized. In this instance, the R-Square Adjusted score of 0.592 indicates that the model continues to account for a significant amount (about 59.2%) of the variability in Generation Z Consumer Behavior even after correcting for the number of predictors.

DISCUSSION

Effect of Product Personalization

The path coefficient indicates a moderate to strong positive influence of product personalization on Generation Z consumer behavior. This supports the hypothesis that personalized offerings significantly influence Generation Z consumers’ choices in the Indonesian food and beverage industry and is in line with previous research [32]–[34].

Impact of Social Media Engagement

The results of this study explain the influence of social media engagement on Generation Z preferences and choices and are in line with [23]. A positive and significant relationship would underscore the important role of online platforms in shaping consumer behavior supporting research [35]. This corroborates findings from a global study [36].

The Role of Brand Experience

A holistic brand experience that includes sensory, emotional, and cognitive elements has a great impact on Generation Z consumer behavior. This emphasizes the importance of creating comprehensive brand experiences that appeal to all aspects of consumer perception and cognition [37]–[39].

Implications for Businesses

The study's findings offer practical insights for businesses operating in the Indonesian food and beverage industry:

1. Strategic Personalization: Tailor products to individual preferences, embracing customization in menus and packaging.
2. Active Social Media Presence: Engage Generation Z consumers through vibrant and interactive social media campaigns to foster brand loyalty.
3. Enhanced Brand Experiences: Invest in creating positive and memorable brand encounters to influence consumer choices positively.

Limitations and Future Research

Despite the robustness of the findings, the study has limitations, including the sample size and reliance on self-reported data. Future research could expand the sample size and incorporate qualitative methods for a more comprehensive understanding of Generation Z consumer behavior in the Indonesian food and beverage industry.
5. CONCLUSION

In conclusion, this research contributes to the understanding of Generation Z consumer behavior in the Indonesian food and beverage industry. The study establishes the pivotal role of product personalization, social media engagement, and brand experience in influencing the choices of Generation Z consumers. Businesses are encouraged to adopt a holistic approach that integrates these factors into their marketing strategies to enhance brand loyalty and positively impact consumer behavior. The study acknowledges limitations, including sample size and reliance on self-reported data, and suggests avenues for future research to further refine and expand the model. Ultimately, this research equips businesses with actionable insights to navigate the evolving landscape of Generation Z consumer preferences in the dynamic Indonesian market.

REFERENCES


