The coffee charm: understanding the relationship between product design dimensions and Willingness to buy from Starbucks

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Abstract

The growth of the hospitality industry calls for further understanding. The coffee shop sector is a large part of the hospitality industry in Indonesia, considering coffee consumption, exports, and interest. This study uses PLS-SEM to assess the relationship between product design dimensions in coffee shops and the Willingness to buy using Starbucks as a case. A purposive sampling method was utilized to gather respondents, that is, the customers of Starbucks and 119 respondents' data was used to test the hypotheses in this study. This study found that symbolic design significantly affects WOM and Willingness to buy. Functional design significantly affects WOM but not Willingness to buy. Lastly, WOM affects Willingness to buy with the largest effect size out of all the hypotheses. Coffee shops should consider the importance of product design and strategizes accordingly. Future research should consider expanding on this work with a consideration of this study's limitations. Coffee shops should consider the importance of product design and strategizes accordingly. Focusing on symbolic design can be a strategy worth considering for coffee shops that emphasize brand and meaning as their value proposition. Future research should consider expanding on this work with a consideration of this study's limitations.
Keywords: Product Design, Willingness to Buy, WOM, Starbucks

Introduction

The hospitality industry is rapidly growing, with an estimated 4% growth annually (Xu et al., 2022). The hospitality industry covers smaller sub-sector, from the beverages sector, which includes businesses in restaurants, cafes, pubs and quick-service/takeaways, to the accommodation sector (hotels), transportation services, travel agencies, and attraction sites (Aynalem et al., 2016; Hallak et al., 2019). In a developing country such as Indonesia, the hospitality industry has immense potential, bringing positive impacts to the locals, consumers, and the national economy. In 2019 alone, Indonesia attracted 16.1 million tourists from across the globe, indicating the considerable market potential for future growth of the Indonesian hospitality industry (The

Jakarta Post, 2020). This calls on the scientific community to complement the potential with an adequate understanding of the market, especially on the buyer or customer sides.

Research articles on the hospitality industry are rich, and researchers from around the world are interested in the many facets of the hospitality industry. Previous studies focused on sub-aspects such as consumer, supplier, operational, or financial aspects of the hospitality industry. The present study will focus on the consumer aspect of the hospitality industry, especially looking at a particular sub-sector, the coffee shop sector in Indonesia. This is due to how Indonesian are one of the largest coffee consumers and exporters (Sarirahayu & Aprianingsih, 2018). On top of the growing number of consumption and exports, the coffee trend in Indonesia has also been growing. According to the data from Google Trends. The search for the word "Kopi", the Indonesian word for "Coffee, has grown in the previous years. As shown in Figure 1, there is a consistent yearly growth for Google searches.
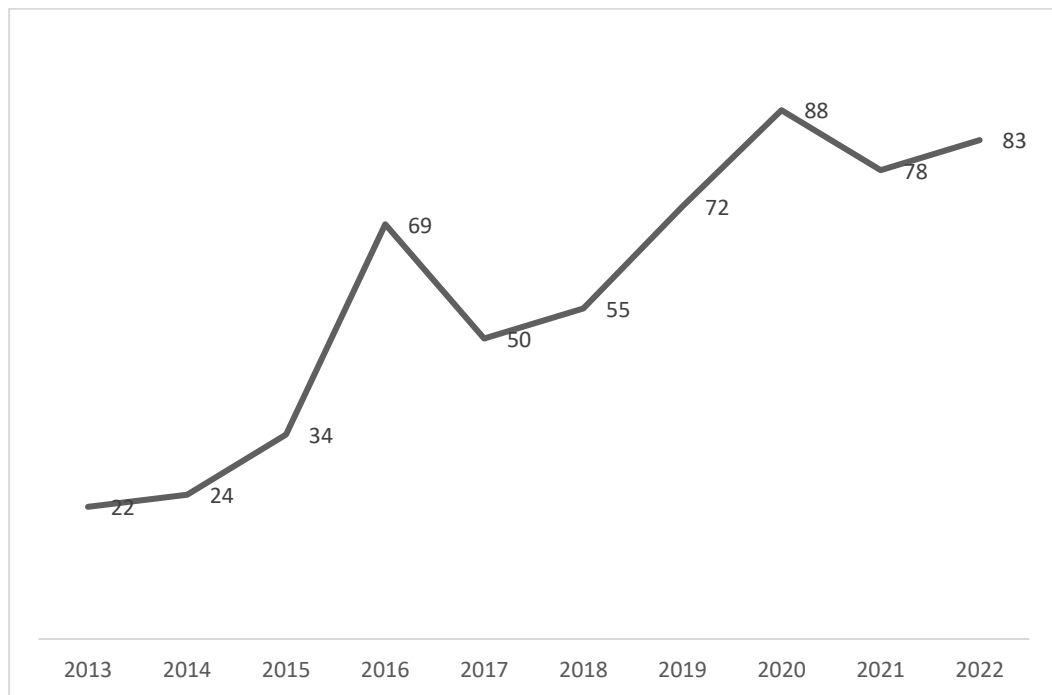

Figure 1. Google Trends Interest
Source: trends.google.com

This study tries to complete the growing interest in the coffee shop field, focusing on the area of product design in which studies relating to it are limited. This study utilizes Homburg et al. product design dimensions and relates them towards Willingness to buy, giving theoretical contribution and practical implications on the body of knowledge (Homburg et al., 2015). As a case study, this study will use Starbucks, the world's most prominent coffee shop franchise.

Previous studies in Indonesia have put an interest in the coffee shop market, shown by literature investigating topics ranging from customer behaviour, business model analysis, and other topics (Adhi & Yunus, 2022; Kasnaeny et al., 2013; Nurhasanah & Dewi, 2019; Rahardjo et al., 2019). The product's design impacts many aspects, as the previous literature suggests.

According to Kumar et al., "product design is an important tool for driving differentiation, creating value for both the consumer and the firm, driving consumer preferences, and creating a sustainable competitive advantage "(Kumar et al., 2015). Following Kumar et al. (2015) it is also suggested by Xia et al. (2016) suggest that product design determines a product's success, directly affecting the cost and revenue associated with the product (Xia et al., 2016). Various dimensions and perspectives can be used to assess a product's design. Researchers have tried to develop conceptual frameworks that can be used to measure product design. Gilal et al. (2018) implemented a conceptual framework developed by Homburg et al. to correlate product design dimensions towards Willingness to buy electronic word-of-mouth (WOM) in the fashion apparel industry (Gilal et al., 2018).

The present study intends to expand the scope of what Gilal et al (2018 have done and apply it to the hospitality industry, specifically in coffee shops. This is due to how Gilal et al. (2018) have successfully applied the conceptualization of Homburg et al. (2015) framework of product design in the fashion apparel industry context. Furthermore, previous researchers have made similar approaches in other settings, such as in furniture product design, hotel booking, and online reviews (Baek & Ok, 2017; Barbaritano & Savelli, 2021; Candi et al., 2017). These use of product design dimensions to answer many marketing-related cases has also been reviewed by (Henseler et al., 2021), which stated that "marketing theory needs to expand and re-evaluate the inclusion of design as a critical concept," this statement is in line with the aim of the present study.

In Gilal et al. (2018) model, three main components constitute product design as a whole: aesthetic design, functional design, and symbolic design. Functional product design refers to the functional aspect of a product: what a product is designed to do. Even for a product with a higher emphasis on aesthetics, functionality is still seen to be a significant predictor of Willingness to buy. This is because the functional aspect of a product hints the specific needs of customers (Cheah et al., 2015). Functional design can also trigger customer response, this in turns could stimulate positive WOM (Xue, 2019). Aesthetic design refers to the visual perception of a product's appearance. Aesthetic design is able to influence Willingness to buy since it is a core aspect that signals differentiation, even in an unknown brand (Reimann et al., 2010). Visually appealing products are also encouraging customer to comments more positively (positive WOM). Lastly, the symbolic design focuses not on the product itself but on how it can communicate meanings, image, or status. The fulfilment of customers' need for meaning, belongingness, and expression will translate to their Willingness to buy since those are important psychological needs (Gilal et al., 2020). Symbolic design which can also represent uniqueness of a product has also been found in a previous study to have a positive influence towards WOM (Hartono & Holsapple, 2019). The relationship between these three dimensions of product design has been studied in previous studies, relating it to both Willingness to buy and WOM (Baek & Ok, 2017; Barbaritano & Savelli, 2021; Candi et al., 2017). This study also hypothesizes the positive relationship between WOM and Willingness to buy as shown by previous studies (Firman et al., 2021; Tajuddin et al., 2020).

Thus these three hypotheses are proposed (see also Figure 2)

H1a: Aesthetic design of a product positively affects Willingness to buy Starbucks's product.

H2a: Functional design of a product positively affects Willingness to buy Starbucks's product.

H3a: Symbolic design of a product positively affects Willingness to buy Starbucks's product.

H1b: Aesthetic design of a product positively affects WOM.

H2b: Functional design of a product positively affects WOM.

H3b: Symbolic design of a product positively affects WOM.

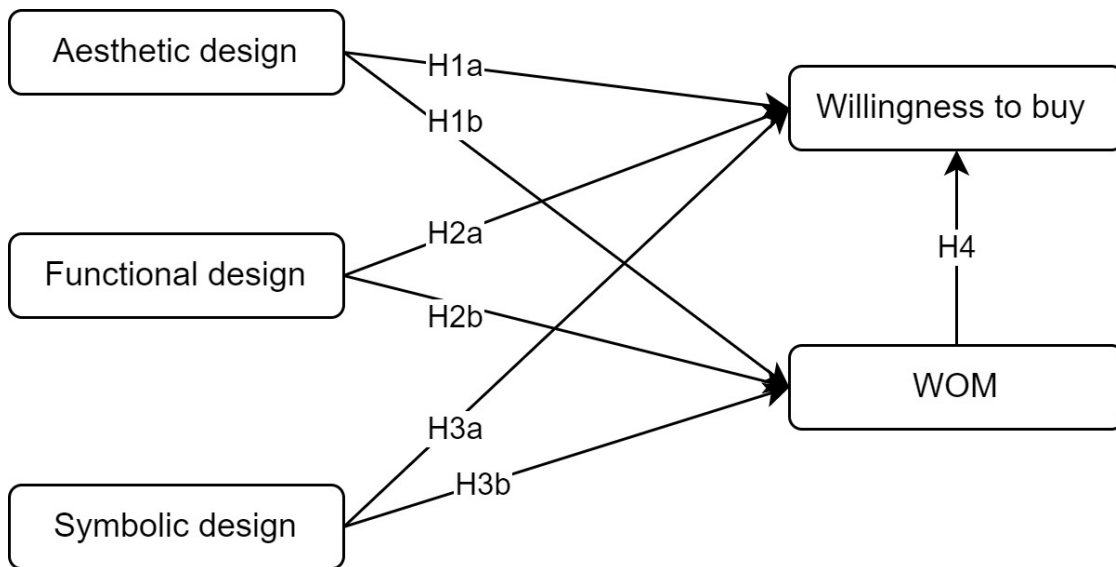H4: WOM positively affects Willingness to buy.

Figure 2. Research Framework.

Research Methods

This research uses a survey as an instrument to collect data. The respondent in this study is limited to the consumer of Starbucks. The questionnaire was distributed purposively to individuals who have consumed a Starbucks product. Respondents who never buy a Starbucks product are excluded from the data. An age filter was also a criterion for our study; respondents should be at least 17 years old. The scales used in this study follow the measures developed by Homburg et al. (Homburg et al., 2015). Questions related to functional design include questions such as "Starbucks brand is likely to perform well." questions related to aesthetic design include "Starbucks brand is good-looking". Lastly, questions related to symbolic design include "Starbucks brand would be helpful to distinguish me from the mass". Aside from these questions, demographic questions were also asked. The hypothesis is tested using SmartPLS, which utilizes the PLS-SEM estimation method.

Result and Discussions

Before analyzing the hypotheses, Table 1 illustrates the demographic of the respondents from the collected data. A total of 119 respondents was

gathered from the distributed questionnaire. Male dominates the respondents, with 73.1% of the total respondent. The majority of the respondents have Bachelor's degree as their latest education. Students dominate the demographics of this study, and lastly, monthly expenditure from the respondents is dominated by respondents that spend 3 million to 5 million IDR.

Table 1. Respondent's Demographic

		Frequency	Percentages
Gender	Male	87	73.1%
	Female	32	26.9%
Education	Bachelor's degree	108	90.8%
	High school	11	9.2%
Employment	Civil employee	2	1.7%
	Employed	2	1.7%
	Students	114	95.8%
	Self employed	1	0.8%
Monthly expenditure	< IDR. 3.000.000	28	23.5%
	> IDR 5.000.000	16	13.4%
	IDR3.000.000 – Rp. 5.000.000	75	63.0%

After describing the demographic, an assessment of the model is required before the hypothesis testing. Table 2 shows the result of reliability and validity measure.

Table 2. Construct Reliability and Validity

Variable	Indicators	Cronbach's α	CR	AVE	Outer Loadings
Aesthetic design	AES1	0.668	0.853	0.744	0.917
	AES2				0.804
Functional design	FUNC1				0.801
	FUNC2	0.650	0.805	0.582	0.634
	FUNC3				0.839
Symbolic design	SYM1	0.673	0.859	0.753	0.880
	SYM2				0.855
Willingness to buy	WTB1				0.861
	WTB2	0.686	0.828	0.621	0.860
	WTB3				0.618
eWOM	EWOM1				0.636
	EWOM2	0.646	0.808	0.588	0.809
	EWOM3				0.839

The outer loadings of each indicator surpass the required value of 0.5. The lowest loadings is from the Willingness to buy variable (WTB3 = 0.618), and the

highest loadings is from the aesthetic design variable (AES1 = 0.917). Each variable also shows enough adequate construct reliability and convergent validity indicated by the Composite Reliability (CR) measure and Average Variance Extracted (AVE) measure, as shown in Table 2. Since indicators and construct surpasses the requirements, hypotheses testing can be conducted. Fig 2 shows the results of the hypothesis testing.
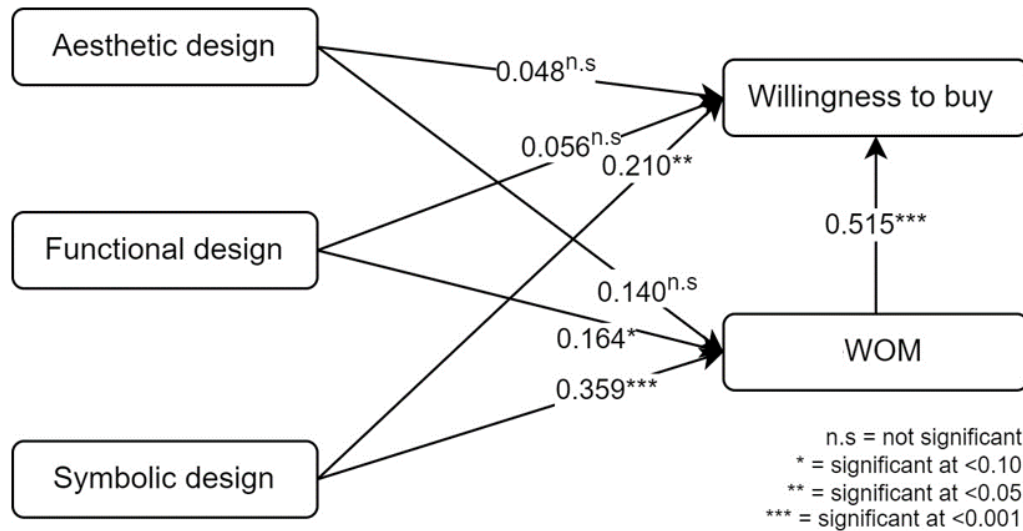

Figure 3. Hypothesis testing results.

From Figure 3, four out of seven hypotheses are accepted. This result is interesting since coffee shops, especially Starbucks, might consider aesthetics one of the most important aspects of their product design. However, this study has found that the relationship between aesthetic design and Willingness to buy and WOM is non-existent. Functional design significantly affects WOM with an effect size of 0.164 and significant at $p = 0.080$. The result shows that functional design does not affect Willingness to buy, contrary to the result from the previous study. Symbolic design significantly affects both Willingness to buy and WOM. Symbolic design affects Willingness to buy with an effect size of 0.210 and significant at $p = 0.030$. Symbolic design also affects WOM with an effect size of 0.359 and significant at $p < 0.001$. Lastly, WOM affects Willingness to buy with the largest effect size of 0.515 and significant at <0.001.

The rising trends of coffee shops should be accompanied by market understanding in order to achieve ideal industry growth. The result of this study implies that coffee shops should understand how important product design is in their effort to increase sales. Focusing on the right aspect of product design can also be very important for coffee shop businesses. Emphasizing design on functionality and symbolism can be the right strategy to drive customers' Willingness to buy, especially for coffee shops that have value proposition specific to their brands and product. A previous study has also noted the importance of symbolism in Starbucks, not just in terms of product design but also in terms of brand symbolism (Dalal & Aljarah, 2021). In a previous study, the relationship between aesthetic design and Willingness to buy is also weak (Candi et al., 2017), indicating that aesthetic design has a lower effect compared to functional and symbolic design. The other rejected hypothesis,

which is the relationship between functional design and Willingness to buy, is also apparent in a previous study by Baek and Ok (2017). An argument for the rejection of the hypothesis is functionality can be seen to have more utility than the design aspect of a product. However, functional design still affects Willingness to buy indirectly through the WOM variable. The rest of the hypotheses are consistent with the literature reviews, especially with the study conducted by Gilal et al (2018) which provide the present study the theoretical foundation.

The present study adds to the growing literature on the coffee shop industry and the body of knowledge on product design and its role in shaping customer preferences. Theoretically, this study contributes by utilizing Homburg et al. framework and expands the framework by hypothesizing the relationship between WOM and Willingness to buy, which this study found a positive relationship in the hypothesized relationship.

Conclusion

This study examines the relationship between product design and Willingness to buy in coffee shops using Starbucks as a case study. Using PLS-SEM, this study founds that out of the three dimensions in product design, two significantly affect Willingness to buy, which are functional and symbolic design. This study contributes by theoretically strengthening the product design dimensions developed by Homburg et al (2015) and expanding the application of product design dimensions in the hospitality sector. Three of the seven hypotheses are rejected: the relationship between aesthetic design towards Willingness to buy and WOM and functional design to Willingness to buy. There are limitations in this study, first related to the demographic imbalance due to the purposive sampling method, and second the use of a particular brand which can limit result generalization. Future studies should employ the same or improved approach using different cases and scenarios, such as in coffee shops with different value propositions than Starbucks or in different markets, such as in the cosmetics industry. Exploring product dimensions and their applicability in different settings, such as employing non-design variables (e.g. quality dimensions), can be insightful for further understanding in the product design field.

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