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Explaining Students Revisit Intention via Scarcity Cues and Perceived Value: the Role of Sensory Brand Experience as Boundary Condition

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Explaining Students Revisit Intention via Scarcity Cues and Perceived Value: the Role of Sensory Brand Experience as Boundary Condition



SINTA 2

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ABSTRACT

In response to an empirical study on scarcity cues in COVID-19, the present study offers a model of the relationship between scarcity cues and revisit intention by integrating perceived value and sensory brand experiences (SBE). The moderation mediation model (MOD MED) was tested using 426 respondents who were university students in Jakarta. The results of the analysis show that scarcity cues have a negative impact on perceived value and revisit intention. The process model has been confirmed through the role of perceived value in the scarcity cues relationship. SBE in this study has an essential role as a bearing for the negative effect of scarcity cues on perceived value and revisit intention. Hence, this study offers a theoretical contribution to the proposed model and a practical one regarding the effectiveness of "scarcity cues" marketing strategies.

Keyword: Scarcity Cues; Sensory Brand Experiences; Perceived Value; Revisit Intention

INTRODUCTION

The hospitality industry has experienced the most setbacks due to COVID-19, which has occurred since 2020. The social distancing policy that applies to the entire industry has made restaurants that previously only provided dining-in services move to online ordering services. The shift in business mode has also caused restaurant business owners to make transformations in promotions, where using various platforms through social media (e.g., TikTok, Instagram) is increasingly popular. One of the promotional strategies is scarcity cues (Huang et al., 2020; Li et al., 2021), which marketers use as signals of popularity, high demand, and uniqueness of the products they offer (Wu & Lee, 2016). However, the scarcity cues strategy in several recent reports is only effective for online services and is irrelevant, especially for direct services (Li et al., 2021). In the present study, we focus on evaluating the effectiveness of promotional strategies using the scarcity cues approach on consumer attitudes and behavior (perceived value and revisit intention).

Theoretically, scarcity cues in business marketing strategy can be viewed as stimuli that may cause the consumer to have the desired reaction, like a high purchase intention (i.e., Barton

et al., 2022; Nazlan et al., 2018; Teubner & Graul, 2020). Scarcity signals indicate that goods or services are unavailable, which marketers commonly use to inform consumers about their products' uniqueness and high demand (Li et al., 2021). The assumptions underlying how scarcity cues influence consumer preferences are based on the stimulus-organism-response (S-O-R) model. This model explains how environmental stimuli affect an individual's affective (emotion) and cognitive (perception) reactions, which in turn affect behavior (Mehrabian & Russell, 1974). Moreover, scarcity cues are also often associated with the bandwagon effect, which explains the phenomenon where consumers tend to imitate the behavior and attitudes of others when making purchases of goods and services. It is typically brought on by demand-induced scarcity (Zhang et al., 2022).

Scarcity cues are generally grouped into two, based on demand and supply. Demand-based scarcity cues indicate high consumer interest, which can be seen in the order queue length. Meanwhile, supply-based scarcity cues are a marketer's policy regarding limited stock availability or limited service time service (Huang et al., 2020; Li et al., 2021). Previous research has documented the positive effects of scarcity cues on consumer purchasing decisions (Barton et al., 2022; Gabler & Reynolds, 2013; He & Oppewal, 2018; Nazlan et al., 2018; Teubner & Graul, 2020; Wu & Lee, 2016). However, recent studies have drawn different conclusions about the effects of scarcity cues during a pandemic. For example, Li et al. (2021) identified the effects of negative scarcity clues on consumer buying behavior in the hospitality sector. They argue that the COVID-19 pandemic has changed how consumers view scarcity cues, initially as a signal of popularity but also interpreted as a safety signal where consumers prefer to avoid crowded places to prevent virus transmission. In this sense, this shift in interpretation can cause consumers to make different purchasing decisions, especially in the restaurant business. Following Li et al. (2021), our study replicates and makes several extensions to consumer behavior based on scarcity cues due to the COVID-19 pandemic.

In the present study, we focused on demand-based scarcity cues to evaluate the effectiveness of this strategy in the restaurant business. This study contributes to the consumer behavior and promotion strategy literature. First, our study adds to the paucity of recent literature on the effects of scarcity cues in the context of a pandemic, where their effects may contradict theoretical assumptions (Li et al., 2021). However, in contrast to Li et al. (2021), our study integrates perceived value and sensory brand experiences as mediators and boundary conditions in the relationship between scarcity cues and revisit intention.

Second, our study offers an adequate explanation regarding the relationship between scarcity cues to revisit intention. In contrast to Li et al. (2021), who use the concept of safety inference as an intersection, we propose perceived value as a mediator between scarcity cues and revisit intention. Hence, this study provides empirical evidence regarding the mechanism of revisit intention based on scarcity cues via a perceived value that has not previously been explored.

Third, we specifically examine how sensory brand experience (SBE) plays a vital role in reducing the effects of negative scarcity cues on consumer behavior, especially in the restaurant business. SBE, in various studies, has been trusted as an antecedent of brand authenticity, loyalty, and brand love (Hwang & Lee, 2019; Safeer et al., 2021; van der Westhuizen, 2018). On the other hand, brand experience, in general, can also create perceptions of customer value, engagement, and revisit intention (Hwang & Lee, 2019; Safeer et al., 2021; van der Westhuizen, 2018). Unlike previous studies which placed SBE as an antecedent of consumer preferences, the present study examines the role of SBE as a boundary condition in

the relationship between scarcity cues and revisit intention. In this sense, scarcity cues based on experience can reduce consumer purchase intention in the future (Li et al., 2021), and SBE can stimulate revisit intention. Hence, our study offers new insights into identifying the role of SBE in forming perceived value and revisiting intention based on scarcity cues.

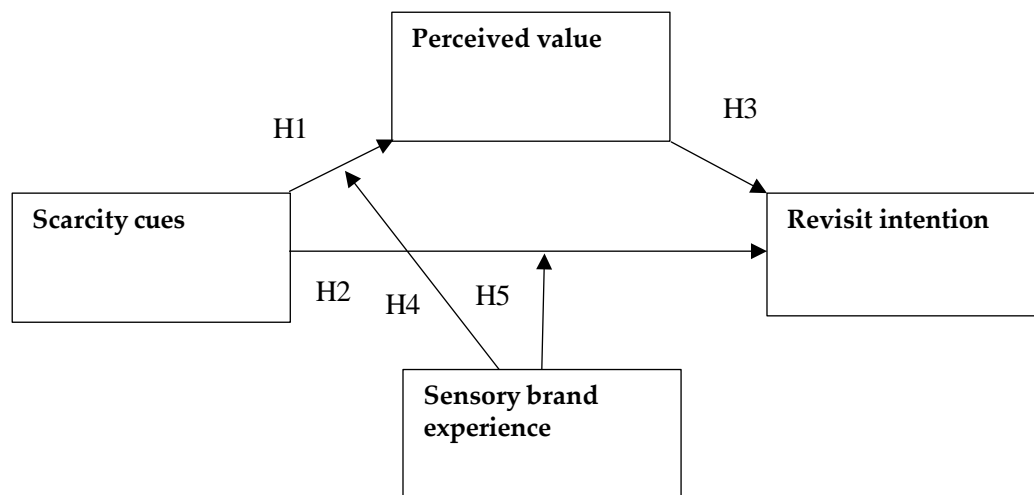


Figure 1. Research model

Source: hypothetical model developed by researchers

In sum, the current study aims to fill the gaps in the empirical study of scarcity cues in the literature on pandemic situations. This study proposes a model that explains the relationship between scarcity cues and revisits intention by integrating perceived value and SBE (see Figure 1). Specifically, the research objectives are: (1) Examine the effect of scarcity clues on perceived value and revisit intention; (2) Examine the relationship between perceived value and revisit intention and its role as a mediating agent for the relationship between scarcity cues to revisit intention; and (3) Examine the role of SBE as a boundary condition of the effect of scarcity cues on perceived value and revisit intention. The mediation model 8 moderation analysis procedure is applied using a macro process (Hayes, 2017).

The framework underlying scarcity and its effect on consumers is based on the commodity theory developed by Brock from 1968 to 1992. The initial idea of this theory is that anything that is transferrable from one person to another can be owned and has worth to its owner, increasing its value or desirability. The literature on commodity theory offers numerous further examples of how consumers react to resource scarcity in circumstances of extraordinary mutability. Brock (1968) suggested that people might seek rare goods more than equivalent available goods because owning scarce goods evokes sentiments of individuality or distinctiveness. This scenario would support the boundary conditions of the commodity theory since scarce products are only likely to result in positive expected sensations of distinctiveness if they are sought after and have the potential to be possessed. In the same vein, the literature on commodity theory offers numerous further instances of how consumers react to resource scarcity in circumstances of extraordinary mutability (Cannon et al., 2019; Shi et al., 2020). Moreover, this theory argues that the value of a commodity will change due to difficulties in

obtaining it (Kim et al., 2020). In other words, the message of scarcity makes it possible that some people may have the product and others may not; hence, it can increase greater preference for consumers to have the product.

Drawing on commodity theory, we formulate the relationship between scarcity cues and revisit intention and integrate perceived value and sensory brand experiences into the model. First, the relationship between scarcity sources has been confirmed as a determinant of customer purchase decisions (Barton et al., 2022; Gabler & Reynolds, 2013; Nazlan et al., 2018; Teubner & Graul, 2020; Wu & Lee, 2016). Although in the context of revisit intention scarcity cues have never been explored, we argue that the relationship between the two can be explicitly explained through the commodity theory, which explains that food is a commodity everyone needs. In addition, studies in similar sectors (e.g., Hwang et al., 2020) found that scarcity cues play an important role in restaurant menu selection. Nevertheless, Barton et al. (2022) note that scarcity sources can have different meanings for consumers. For example, scarcity from high demand indicates popularity and higher value compared to similar products. On the other hand, a scarcity that comes from the supply also trigger consumers' desire to buy quickly (Barton et al., 2022; Gabler & Reynolds, 2013; Nazlan et al., 2018; Teubner & Graul, 2020). However, scarcity cues originating from disasters or accidents that cause limited product offerings will have different respondents (Barton et al., 2022). Using the argumentation of Li et al. (2021), who examine consumer decisions in pandemic situations, the effect of scarcity on revisit intention is likely to differ from typical situations. In other words, the effect of scarcity cues on restaurants (for example, by limiting operating hours, number of products, and number of visitors) makes consumers prefer to buy through online applications compared to visiting restaurants directly. Thus, the hypothesis proposed is:

H1: Scarcity cues have a negative effect on revisit intention

H2: Scarcity cues have a negative effect on perceived value

The power of a product to influence attitudes and behavior is referred to as its value (Brock TC, 1968). The perceived value of this commodity comes from its utility, so consumers are interested in acquiring the goods. In the same vein, in previous studies (Ahn & Kwon, 2020; Damanik & Yusuf, 2022; Juliana et al., 2022), perceived value is the critical component for revisit intention it becomes a significant concern for business managers in the hospitality sector. Moreover, since scarcity affects perceived value, and perceived value can encourage the consumer to revisit intention, we also propose its role as a mediator. In this study, perceived value can mediate the relationship between scarcity cues and revisit intention.

H3: Perceived value have a positive effect on revisit intention

H4: Perceived value will mediate the link scarcity cues to customer' revisit intention

Sensory brand experience is one of the four dimensions of brand experience (i.e., sensory, affective, intellectual, and behavioral), which describes the consumer's sensory experience of a particular brand (Brakus et al., 2009). Because it involves sensory components, the consumer experience refers to the senses of smell, taste, sight, and hearing to give a memorable impression to the brand (Iglesias et al., 2019; van der Westhuizen, 2018). SBE has previously been confirmed to affect perceptions of customer value, consumption, engagement, and revisit intention (S.-L. Han & Kim, 2020; Husain et al., 2022; J. Hwang & Lee, 2019; Safeer et al., 2021; Shahid et al., 2022; van der Westhuizen, 2018). Furthermore, several recent studies

have also tested the role of SBE as a moderator (Klabi, 2020) on the relationship between self-image congruity and consumer-perceived quality. Hence, the proposed model places SBE as a moderator on the relationship between scarcity cues, perceived value, and revisit intention.

H5: SBE moderates the link scarcity cues to customers' perceived value

H6: SBE moderates the link scarcity cues to customer' revisit intention

METHODS

Sample and procedure

The target population for this study is students in Jakarta, while the reachable population is undergraduate and master's degree students from two private universities in Jakarta. A purposive sampling approach is used as a sampling technique, which involves lecturer collaborators who teach marketing management courses. In the first data collection stage, collaborators were contacted to confirm their willingness to participate in the research. Furthermore, online questionnaires were distributed to class groups using the Whatsapp application through collaborators. From the initial data collection, it was obtained that the number of respondents was 512 students covering nine classes of undergraduate students and four classes of master's degrees. The entire data collection process was carried out from April to August 2022, when the Indonesian government had yet to lift the social distancing rule for all sectors.

A total of 478 responded, but only 426 responses were processed after checking the completeness of the information. A total of 308 respondents (72.3%) were male students, and only 118 respondents (27.7%) were female students. Most respondents are undergraduate students (70.7%), and 29.3% are Master's students. Most respondents were not married/single (62.9%), 34.5% stated they were married, and 2.6% were unwilling to answer. The average age of respondents is 24 years, with a minimum age of 20 and a maximum of 39 years.

Measurement

All scales used in this study to measure variables use an adapting scale from existing studies. For example, sensory brand experience (SBE) is measured by three items (Brakus et al., 2009; Iglesias et al., 2019). Perceived value is adapted from Sweeney and Soutar (2001), and three items are used to measure scarcity cues (Li et al., 2021). Finally, revisit intention is adapted from three statements (H. Han et al., 2009). All items were responded to using a 5-point Likert-Type, starting from 1 = strongly disagree to 5 = strongly agree.

The validity and reliability of the scale using factor analysis and several other parameters to test reliability. As shown in Table 1, the loading indicator for all items has fulfilled the eligibility item validity (> 0.05) as Hair et al. (2019) recommend. The convergent validity of each construct was then evaluated based on the average variance extracted (AVE) value, resulting in all constructs meeting the minimum standard of 0.50 of AVE. Internal consistency was evaluated with Cronbach alpha (CA) and composite reliability (CR), indicating that all constructs met the cut-off value of 0.70 (Hair et al., 2019).

Table 1. Measurement evaluation

	Indicator loading	VIF	CA	CR	AVE
SBE1	0.86	1.75	0.77	0.87	0.69
SBE2	0.79	1.41			
SBE3	0.83	1.74			
SC1	0.88	2.39	0.86	0.92	0.78
SC2	0.90	2.16			
SC3	0.89	2.32			
VAL1	0.89	2.57	0.87	0.92	0.79
VAL2	0.91	2.53			
VAL3	0.87	1.99			
VIS1	0.90	2.19	0.83	0.90	0.74
VIS2	0.81	1.68			
VIS3	0.87	1.99			
AVE for single construct					0.22

Note: SBE = sensory brand experience, VAL = perceived value, VIS= revisit intention, SC= scarcity cues.

Source: results of analysis using SPSS version 23

Analysis technique

Before further data analysis is carried out, the common method bias (CMB) in the data is first evaluated. CMB is a threat that needs to be evaluated to ensure data is free from bias because it is obtained from a single source and cross-sectional design (Podsakoff et al., 2012). We use Podsakoff's guidelines to assess whether there is a possibility of bias in the data using control statistics with the Harman single-factor model approach. In addition, we used the guidelines of Kock et al. (2021) using the AVE value in the combined construct. In this study, the AVE value for a single factor was 0.22 (<0.40), according to Kock's recommendations (2021). It indicates that CMB in the data is not a severe threat in this study (Kock et al., 2021). Furthermore, the hypothesis in this study was tested with hierarchical regression with moderation, using the Macro process (Hayes, 2017). Model 8 Modmed is applied to examine the relationship between variables and the mediating and moderating role of perceived value and SBE.

RESULTS AND DISCUSSION

The descriptive statistics and correlations shown below will provide an overview of the data, including the direction of the relationship between variables as an initial identification of the study. Table 2 describes the data and the correlation between research variables. The mean scores for all constructs were in the range of 3.17 for scarcity cues, 3.52 for perceived value, 2.83 (SBE), and 3.67 (revisit intention), indicating that all were at the moderate level (median 2.50). All standard deviation values are less than the mean of the variables, indicating that the variability of the data is relatively low. In other words, respondents' answers to the four variables used in this study are relatively homogeneous.

Furthermore, the intercorrelation between variables provides an initial picture of the direction of the relationship. First, scarcity cues were identified as negatively correlated with perceived value ($r=-0.21$) and revisit intention ($r=-0.17$). Second, perceived value positively correlates with revisit intention ($r=0.19$) and SBE ($r=0.17$). From the correlation results, it can be predicted that the direction of the relationship between scarcity cues to perceived value and revisit intention is negative and significant at the 1 percent level ($p\text{-value} < 0.01$). Meanwhile, the relationship between perceived value and revisit intention is positive ($p\text{-value} < 0.01$) and is in line with the direction of the relationship stated in the hypothesis.

Table 2. Descriptive statistics

	Mean	Std. Deviation	SC	VAL	VIS	SBE
SC	3.17	1.08	1			
VAL	3.52	0.80	-.21**	1		
VIS	3.67	0.93	-.17**	.19**	1	
SBE	2.83	0.89	0.0	.17**	-0.02	1

Note: SBE = sensory brand experience, VAL = perceived value, VIS= revisit intention, SC= scarcity cues, ** $p\text{ value} < 0.01$

Source: results of analysis using SPSS version 23

After the descriptive and correlation analysis, hypothesis testing was carried out using the mediation moderation procedure (MODMED). This procedure tests models that place mediator and moderator variables together. The hypothesis was tested using two approaches: based on statistical significance ($p\text{-values}$) and bootstrapping (by comparing the low-level and upper-level of confidence intervals/ LLCI/ULCI) as recommended by Hayes (2017). The results of testing the hypothesis with the macro process model 8 (Hayes, 2017) are shown in Table 3. First, hypothesis 1 regarding the relationship between scarcity clues and perceived value is proven negative and significant ($\beta = -0.15$, $p\text{-value} < 0.01$). Scarcity clues are proven to impact revisit intention $\beta = -0.12$ negatively, and $p\text{-value} < 0.05$ is the answer to hypothesis 2. Furthermore, perceived value has been confirmed to be positively associated with revisit intention $\beta = 0.17$, $p\text{-value} < 0.01$; thus, hypothesis 3 is supported. The results of this study confirm the role of intermediate perceived value in the relationship between scarcity clues and revisit intention, supporting hypothesis 4. The indirect effect is -0.03 , and by bootstrap analysis, the value of LLCI = -0.05 and ULCI = -0.01 is obtained. These two non-zero values (LLCI/ULCI) provide the support that the indirect relationship is confirmed (Hayes, 2017).

Table 3. Results of analysis

	Coeff	SE	t	p	LLCI	ULCI
Model 1: Perceived value as dependent						
SC	-0.15	0.04	-4.36	0.00	-0.22	-0.08
SBE	0.16	0.04	3.75	0.00	0.08	0.24
Int 1 (SBE x SC)	0.11	0.04	2.69	0.01	0.03	0.18
Model 2: Revisit intention as dependent						
SC	-0.12	0.04	-2.79	0.01	-0.20	-0.03
VAL	0.17	0.06	3.01	0.00	-0.06	0.28
Int 2 (SBE x SC)	0.17	0.05	3.72	0.00	0.08	0.26
Mediation analysis	-0.03	0.01	-	-	-0.05	-0.01

Note: SBE = sensory brand experience, VAL = perceived value, VIS= revisit intention, SC= scarcity cues, ** p value < 0.01

Source: results of analysis using Marcro Process 4.0

Next, the moderation hypothesis is assessed based on the interaction coefficient. As shown in Table 3, interaction 1 (SBE x SC) was positive and significant ($\beta = 0.11$, p-value < 0.05). Similarly, interaction 2 (SBE x SC) was also confirmed to be positive and significant ($\beta = 0.17$, p-value < 0.01). These results fully support hypotheses 5 and 6. Moreover, as shown in Table 4 and Figure 2, the effect of negative scarcity cues on perceived value decreases drastically with an increase in SBE. In other words, the effect of negative scarcity cues is only significant when SBE is at a low level ($\beta = -0.24$, p-value < 0.01) and becomes insignificant when SBE is at a high level ($\beta = -0.06$, p-value > 0.05).

Table 4. Conditional effect of scarcity cues on perceived value and revisit intention based on SBE scores

	Effect	SE	t	p	LLCI	ULCI
Model 1: Moderating effect of SBE on SC and VAL						
Low SBE	-0.24	0.06	-4.62	0.00	-0.38	-0.15
Mean SBE	-0.11	0.04	2.69	0.01	0.03	0.18
High SBE	-0.06	0.05	-1.15	0.25	-0.16	0.04
Model 2: Moderating effect of SBE on SC and VIS						
Low SBE	-0.29	0.09	-3.22	0.00	-0.39	-0.18
Mean SBE	-0.17	0.05	3.72	0.00	0.08	0.26
High SBE	0.04	0.06	0.63	0.53	-0.08	0.15

Source: results of analysis using Marcro Process 4.0

Similarly, SBE also has a moderating role in the relationship between scarcity cues and revisit intention. As shown in Table 4 and Figure 2, the effect of negative scarcity cues dramatically decreased as SBE increased. The analysis results demonstrate that the effect of scarcity cues is $\beta = -0.29$ when SBE is at a low level, and when SBE is at that level, the effect is positive but not significant ($\beta = 0.04$, p-value > 0.05). This condition indicates that the

strength of SBE can neutralize the adverse effects of scarcity cues based on consumer experience on their intention to revisit in the future.

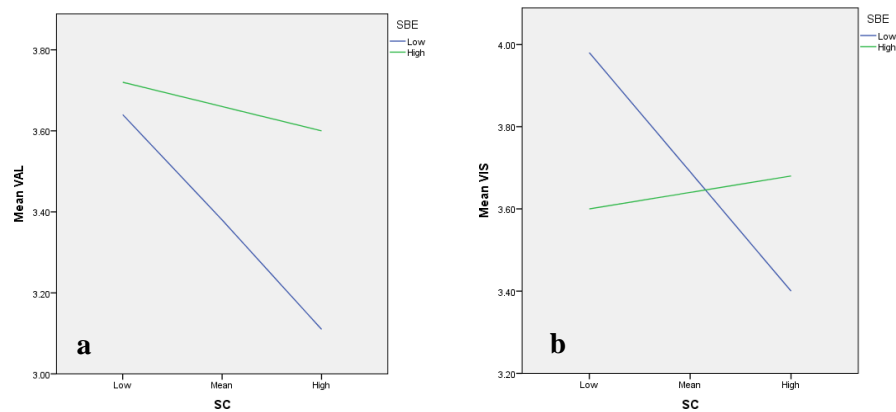


Figure 2. Condition effect of scarcity cues on perceived value (a) and revisit intention (b) base on SBE value

Source: results of analysis using Marcro Process 4.0

Scarcity cues in the marketing strategy have two components, based on demand and purely as a strategy to attract consumer interest. Demand-based scarcity cues lead to signals regarding the popularity of products/services, which causes high consumer demand. Meanwhile, scarcity cues based on strategy are marketers' efforts to provide scarcity information through various advertisements (for example, discounts only apply today, and tomorrow prices go up). In this study, we focused on demand-based scarcity cues at popular restaurants on social media. The results of this study indicate that scarcity cues during the transition period from the COVID-19 pandemic to the endemic have a negative effect on perceived value and revisit intention. Perceived value positively affects revisit intention and acts as a mediator between scarcity cues and revisit intention. Furthermore, sensory brand experience positively moderates the effect of scarcity cues on perceived value and revisit intention—an explanation of the theoretical and practical contributions we describe in the next section. The findings of this study make several significant contributions to the strategic marketing literature, particularly on scarcity cues.

First, this study adds to the recent literature on the adverse effects of scarcity cues on revisit intention decisions. Previous research has focused more on the positive effects of scarcity cues as a marketing strategy that can influence consumer purchasing decisions (Barton et al., 2022; Gabler & Reynolds, 2013; Nazlan et al., 2018; Teubner & Graul, 2020; Wu & Lee, 2016). In contrast to previous studies, which focused more on purchasing decisions, our research adds to the paucity of recent literature on the effects of scarcity cues on revisit intention, which has yet to be explored. Moreover, in the context of a pandemic, the results of this study add insight into the effects of scarcity cues on consumer behavior in a pandemic situation. Unlike the normal situation, the results of this study provide empirical support regarding the unfavorable effects of the scarcity strategy, where their effects may contradict theoretical assumptions (Li et al., 2021). For example, Li et al. (2021) found a negative effect of scarcity cues on purchase decisions for consumers in the hotel sector. However, in contrast to Li et al. (2021), our study integrates perceived value and sensory brand experiences as mediators and boundary

conditions. The results of this study indicate that scarcity cues are ineffective in all situations and for consumers. For example, consumers who have experienced scarcity cues may not view these cues as popularity but rather fail of services where slow processing of orders, waiting times, and limited stock availability will cause consumers to reduce their interest in revising. Moreover, in the COVID-19 situation, restaurant managers also limit the number of visitors to discourage consumers from visiting the location.

The second contribution, our study offers an adequate explanation regarding the relationship between scarcity clues to revisit intention. In contrast to Li et al. (2021), who use the concept of safety inference as an intersection, present study propose perceived value as a mediator between scarcity cues and revisit intention. Our findings show that instead of inferring scarcity cues as popularity and quality cues, scarcity cues based on the respondent's experience decrease their perceived value, which impacts decreased customers' revisit intention. In this sense, the impact of negative scarcity cues on perceived value has consequences for future consumer decisions. Hence, this study provides empirical evidence regarding the mechanism of revisit intention based on scarcity cues via a perceived value that has not previously been explored.

Third, we are one of the first to demonstrate how sensory brand experience plays a vital role in reducing the effects of negative scarcity cues on consumer behavior, especially in the restaurant business. Previous studies have confirmed various roles of SBE on consumer behavior (Han & Kim, 2020; Husain et al., 2022; Hwang & Lee, 2019; Iglesias et al., 2019; Safeer et al., 2021; Shahid et al., 2022; van der Westhuizen, 2018), however, in this study, we uncover the unique role of SBE as a moderator of the relationship between scarcity cues and revisit intention. The study's results provide additional knowledge about the previous role of SBE (Klabi, 2020) in between self-image congruity and consumer-perceived quality. SBE is a unique concept different from general brand experience (Zha et al., 2022) and is more towards a combination of ecological psychology, brand experience, and sensory marketing. Because theoretically, SBE has only recently been introduced, empirically, SBE is still relatively limited, and therefore this study fills this gap. Studies provide a specific role for SBE in the relationship between scarcity cues, perceived value, and visit intention. As shown in Figure 2, SBE acts as a cushion to reduce the effect of negative scarcity cues on perceived value and revisit intention. In other words, even though scarcity cues are proven to affect perceived value negatively, SBE can obscure the relationship. Practically this means that even though consumers respond negatively to scarcity cues, their previous sensory experience at the restaurant may attenuate this effect.

Besides having a theoretical contribution, our study offers a practical contribution, especially for marketing managers. The results of this study inform the restaurant business about the negative potential of scarcity cues during a pandemic which is different from the previous situation and was recognized as having a positive effect on consumer behavior. However, during the COVID-19 pandemic, there have been many changes in consumer behavior, including how they respond to scarcity cues. Consumers may prefer restaurants that provide faster service and are not too crowded, so this scarcity cues strategy is ineffective in the current pandemic. Considering these findings, several recommendations for restaurant business owners include: first, restaurant business owners carefully implement marketing strategies by sending signals to consumers regarding popularity based on scarcity clues. Scarcity and popularity are two different things, and they can contradict each other (Wu & Lee, 2016). In addition, popularity does not only result from scarcity messages; consumers may

understand popularity as easy access and not exclusive (Wu & Lee, 2016). Thus, implementing a scarcity strategy may only be effective during intense competition and many substitute products as it is today.

Second, marketing managers need to understand that giving the impression of scarcity may cause consumers to move locations, especially consumers who have a short time to wait in line. For this reason, marketing managers need to understand promotional strategies using scarcity cues in various situations and a variety of consumers. Such knowledge allows management to understand clearly when and where to use the scarcity strategy over other strategies. Finally, marketing managers need to conduct continuous evaluations to determine their brand's strength in the eyes of consumers. The scarcity strategy might be effective for consumers who positively perceive the brand. However, it will only be effective for companies with strong brands in the eyes of consumers.

CONCLUSION

This study aims to evaluate restaurant business owners' "scarcity cues" marketing strategy to attract consumer interest. In contrast to previous studies that investigated the positive effects of scarcity cues on consumer decisions, our study offers a new perspective that scarcity cues are ineffective, especially in pandemic situations. The current study proves that scarcity cues have a negative effect on perceived value and revisit intention. Moreover, perceived value is a mediator for scarcity cues and revisit intention. Most importantly, the results have confirmed that sensory brand experience is a boundary condition that can reduce the adverse effects of scarcity cues on perceived value and revisit intention.

Despite revealing theoretical and practical contributions, this study has weaknesses that can be of particular note to future researchers. First, this study was only conducted in Indonesia, especially in the restaurant industry. Thus, generalizations about other industries need to be made with caution. Second, the model we propose is an initial result where empirical evidence in other regions and sectors needs to be considered to broaden the scope of the background in this study. Third, the data were collected using a cross-sectional approach, so we cannot confirm the causal effect of scarcity cues on perceived value and revisit intention. We suggest future studies use a longitudinal design to examine the long-term effects of scarcity cues on consumer buying behavior.

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New Brand Ride-Hailing Apps' Continuance Intention of Gen Z: The Role of Personal Innovativeness in Information Technology

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SINTA 2

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ABSTRACT

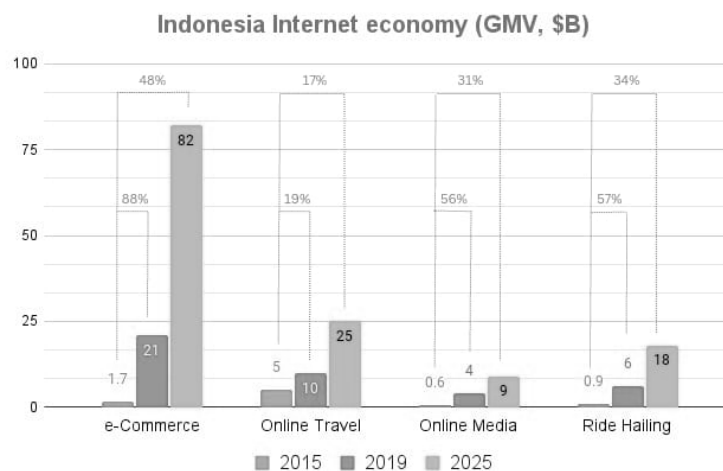
The tight competition in the ride-hailing service industry has made Super App digital companies in Indonesia vie to attract public interest to become their regular customers. As new players, Super App Maxim and/or InDriver companies need insight into what factors can make their applications accepted by Generation Z as the largest consumers in Indonesia. So, this study aims to investigate the role of performance and expectations of effort and social influence on continuing intentions to use new online transportation applications through the mediating role of personal innovation in information technology (PIIT). This study used the SEM technique with the SMART PLS 3.3.0 application, with 553 respondents using Maxim and/or InDriver. The study results show that performance, effort expectations, and social influence significantly affect the intention to use online transportation applications. Expected effort is the most significant factor affecting PIIT and intention to continue, followed by social influence and performance expectations.

Keywords: Continuance Intentions; Generation Z; Personal Innovativeness In Information Technology; Ride-Hailing Apps; UTAUT

INTRODUCTION

The ride-hailing industry in Indonesia began with the establishment of a shuttle service call center by GO-JEK in 2010 (Salim et al., 2021). In 2014, an American company, Uber, introduced a mobile-based ride-hailing service in Indonesia. GO-JEK followed this step by establishing a mobile application that supports its benefits in Jakarta in 2015 (Almunawar et al., 2021). Ride-hailing services continue to be a fast-growing business in Indonesia in line with the growth of the young population and the growing number of smartphone users (Fauzi, 2018).

Based on data from research by Google, TEMASEK, & Bain & Company in 2019, it is estimated that Indonesia's internet economy will reach around \$40 billion in 2019, where Indonesia has four leading sectors that have a significant impact on the growth of the internet economy. One is ride-hailing, which is at a percentage of 57% after e-commerce.

**Figure 1. Indonesia Internet Economy***Source:* Kumala (2019)

In the first phase of this industry (see table 1), more than 15 ride-hailing service providers competed for market share in big cities in Indonesia. Unfortunately, until 2022, only five to six ride-hailing service providers operate their businesses in many cities in Indonesia, one of which is Maxim and InDriver. The intense competition in the ride-hailing industry in Indonesia was increasingly felt with the closure of the ride-hailing giant start-up Uber business activity in Indonesia in 2018. There are complex reasons behind the closure of Uber's business activities and other ride-hailing service providers in Indonesia. It is common knowledge that people in Indonesia have more than one ride-hailing application for daily use. It is due to the perfectly competitive market (winner takes all) of the ride-hailing industry, which creates very rational consumer behavior. Defeating the two significant dominances of Gojek and Grab is very difficult, given their extraordinary power to provide travel subsidies through promotions to customers as a strategy to take advantage of market rationality. The challengers to these two big start-ups must be able to design the right plan to be accepted by ride-hailing users in Indonesia (Alananto & Wahyudi, 2021).

Table 1. List of Ride-Hailing Applications in Indonesia (Continue)

Category	Early Phase 2010-2018	2019-2020	Ride-Hailing Application (2022)	New Competitors (2021-2022)
Market Leader	Uber, Grab, Gojek	Grab, Gojek	Grab, Gojek	
Market Followers	BajajApp, Transjek, Wheel Line, Bangjek, Ojek Syar'I, Bluejek, Call Jack, Ojekko, Topjek, OjekArgo, Taxi Motor, Ladyjek, Smartjek, Ojek Kampung, Pro-Jek	BajajApp, Transjek, Wheel Line, Ojek Syar'I, Ojek Kampung, Pro-Jek	BajajApp, Transjek, Wheel Line, Ojek Syar'I, Ojek Kampung, Projek	Go Bitcar, Maxim, Anterin, Bonceng, Asia Trans, FastGo, Via, InDriver, Air Asia

Source: Fauzi & Sheng (2021)

Previous studies have been investigating continuance intentions in many technological apps and products. One of the essential factors is personal innovativeness in information

technology. Fauzi & Sheng (2021) observed the link between personal innovativeness, perceived value, and continuance intentions in ride-hailing applications and the disparities in customer behavior between metro and non-metro consumers. Sair & Danish (2018) scrutinized relationships between performance expectancy, effort expectancy, personal innovativeness, and behavioral intentions in the Pakistani consumer market. They also observed how personal innovativeness mediates the relationship between performance, effort expectancy, and behavioral intentions. In addition, Lu (2014) presented findings from research that looked at the impact of personal innovativeness in information technology (PIIT) and social influence on user retention intentions for mobile commerce (m-commerce) in the United States.

To our best knowledge, the research talks about the specific market object in terms of generation, especially the Z generation in ride-hailing app continuance intentions are still very rare. Z generation is known for its open nature, daring to try new things, and being very rational about choices. They are very open to change. Z generation also has the largest market share in the ride-hailing industry. They have a great sense of innovativeness and are close to the revolution of technology usage (Petro, 2020). Attracting the attention and interest of the Z generation to try to use and grow their awareness to continue using the application is very important for the continued expansion of the ride-hailing application business.

Based on Gen Z's characters above, the research proposed that performance and effort expectancy, as well as a social influence, would be a significant predictor of PIIT and continuance intentions. Therefore, this research aims to examine whether personal innovativeness in information technology can influence the continuance intentions to use a new ride-hailing app of the Z generation. This research also examines what factors can affect and generate the sense of innovativeness of the Z generation to try and continue to use a new brand.

The ease to use and perceived usefulness are alleged to become the most consideration for young users as they want everything to be simple, compact, easy to use, and useable. As they live in the internet era, they are passionate about technology and are adept at using it. They are intelligent and swiftly capture information. The surroundings readily impact them regarding good products and value freedom and opportunity to grow. Hence, social influence will be a very significant factor in generating their sense of innovation.

Knowing what factors encourage passengers to try and continue using new brand applications is very important, especially for new ride-hailing companies in Indonesia, so that they can be accepted by the market and get a good first impression from application users. Previous studies on this issue focused on giant existing ride-hailing apps such as Gojek, Grab, Uber, or Didi Chuxing. This research tried to fill the gap by observing gen Z's continuance intentions and behavior toward a new brand of the ride-hailing app. MAXIM and InDriver apps have been chosen as the research subject in this study.

These two Russian-originated super app companies have been severe competitors for Gojek and Grab as the existing players in the ride-hailing industry in Indonesia for the last three years. In short, this research will answer the question, "*Does personal innovativeness in information technology of Gen Z will affect continuance intention to use a new brand of ride-hailing app? Will effort, performance expectancy, and social influence generate or affect personal innovativeness and continuance intentions?*"

The ride-hailing application is a platform that makes it easy for drivers and passengers to communicate efficiently by involving three parties. Among them are passengers, drivers, and application service providers, where requests from passengers and driver availability can be met and provided by online transportation service providers (He & Shen, 2015; Pham et al., 2017). A survey conducted in the United States in 2016 stated that one of the most users of ride-hailing services is the millennial and Z generation as the primary

users of super apps in developing and developed countries (Davis & Neves, 2021). Nowadays, ride-hailing services provide alternative transportation for students and young professionals in urban areas where ride-hailing applications are trendy (Bomey, 2016).

Attracting the attention and interest of the Z generation to continue using the application is very important for the continued expansion of the ride-hailing services companies. In the literature, the desire to try new technologies, concepts, or products can be called personal innovativeness in information technology. Personal innovativeness can be interpreted as an individual's enthusiasm to try new technologies and tendency to accept innovations earlier than others (Yusra & Agus, 2019; Simarmata & Jaya Hia, 2020). When a user attempts a new ride-hailing app, the user's perception will be created from various points of view. Starting from perceived performance expectancy, social influence, and perceived effort expectancy on the system used are some examples of perceptions that will arise (Achiriani & Hasbi, 2021; Chen et al., 2019). In the end, these formed perceptions will encourage them to continue using new brand applications or, in the literature, continuance intention (Fauzi & Sheng, 2021).

Conversely, (S. Sair & Danish (2018) showed in their research that PIIT is a consequence, not a precedent factor. When users have experienced the benefits, convenience, and performance of a digital app or product both from others and themselves, their sense of innovativeness and curiosity will emerge to use it. When they have experienced it, they will be interested in becoming regular customers of the new brand of a new digital app or product. Therefore, literature has shown that personal innovativeness, effort, and performance expectancy have a reciprocal relationship.

Meanwhile, continuance intention to use is when users of information systems are satisfied with the information system used so that they intend to use it continuously (Kordina et al., 2019). The variety of innovations in ride-hailing services will undoubtedly impact customers' behavior in the future. Customers will consider continuing to use existing ride-hailing services or trying new brands that have just emerged. Previous research has tried to observe consumer behavior by building a model to explain the factors that encourage people to continue using ride-hailing applications. From an economic, geographic, financial, and psychological, it has been proven to influence people's intentions and habits to continue using ride-hailing applications (Ma et al., 2019; Nguyen-Phuoc et al., 2021; Ofori et al., 2021).

This research contributes by explaining how PIIT significantly influences continuance intentions to use a new brand of the ride-hailing app among Gen Z. The Z generation is known for their open nature, daring to try new things, and very rational choices. They are very open to change and always curious about the latest technology that appears in the market (Petro, 2020). In this study, the extended model of UTAUT has been used. UTAUT is a framework for explaining user behavior to information technology. Four primary intention and usage determinants: performance expectancy, effort expectancy, social influence, and facilitating conditions: make up the foundation of UTAUT. However, by including personal innovativeness as a mediating component in the model, this study will expand the UTAUT framework.

The research object is the ride-hailing application of MAXIM and or InDriver. These Russian-generated ride-hailing apps started operating in Indonesia in 2018 (Maxim) and 2019 (InDriver) (Setyaningsih et al., 2019). In Indonesia, Maxim and InDriver are widely found in big cities such as Jakarta, Pekanbaru, Batam, Bandar Lampung, Yogyakarta, and Solo. Maxim and InDriver develop their applications and create hardware and software

systems that allow partners to connect to the company's services, process millions daily to monitor the quality of work and services, and analyze their business.

There are three determinant factors of continuance intentions, including effort and performance expectancy, and social influence. Effort Expectancy is the comfort, and convenience feeling associated with using a system (Venkatesh & Smith, 2003). Technology Accepted Model (TAM) explains that a person's intention to use a system is primarily determined by the effort expended to use it. The more accessible a system is to use, the more users are believed to be interested and love in accepting the plan. This statement is supported by research from Palau-Saumell et al. (2019), which examines the factors that influence continuance intention in restaurant reservation applications. They concluded a positive relationship between effort expectancy and continuance intentions. Research conducted by Indrawati & Putri (2018) concluded that effort expectancy positively affects the intention to continue using the Go-Pay app. Thus, the proposed hypothesis is as follows:

H1a: Perceived effort expectancy of Gen Z affects the continuance intention to use a new brand of ride-hailing app significantly

As explained earlier, effort expectancy talks about how comfortable and easy it is when using a system. It is, of course, very closely related to the role of personal innovativeness in technology, considering that it talks about the enthusiasm of individuals to try new technologies and the tendency of individuals to accept innovations earlier than others (Yusra & Agus, 2019). Research conducted by S. Sair & Danish (2018) concluded that there is a positive influence between effort expectancy on personal innovativeness in technology. So that the proposed hypothesis is as follows:

H1b: Perceived effort expectancy affects personal innovativeness in information technology of Gen Z significantly

While the Performance expectancy variable means the extent to which, if individuals use the system, the system can increase their performance (Venkatesh et al., 2003). Palau-Saumell et al. (2019) found a significant positive relationship between performance expectancy and continuance intentions. Then the research (Indrawati & Putri, 2018) also concluded that performance expectancy positively affected continuance intention. A previous study by S. A. Sair & Danish (2018a) concluded that the performance expectation variable significantly affected the personal innovation variable in technology. Thus, the proposed hypothesis is as follows:

H2a: Perceived performance expectancy of Gen Z affects the continuance intention to use a new brand of ride-hailing app significantly

H2b: Perceived performance expectancy affects the personal innovativeness in information technology of Gen Z significantly

Aside from effort and performance expectancy, social influence has also proven to be an essential driving factor of continuance intention and personal innovativeness in information technology. Social influence can be defined as the extent to which consumers feel their closest people (family and friends) believe they should use the technology (Venkatesh & Smith, 2003). Research conducted by Chauhan et al. (2021) concluded that there is a positive relationship between social influence on personal innovativeness in information technology in the case of purchasing green products online. Furthermore, social influence has been proven to significantly affect continuance intention to use online-to-offline delivery services (Roh & Park, 2019) and shopping applications (Chopdar & Sivakumar, 2019). Thus, the proposed hypothesis is as follows:

H3a: Social influence positively affects personal innovativeness in information technology of Gen Z significantly

H3b: Social influence affects the continuance intentions of Gen Z to use a new brand of ride-hailing app significantly

A study by Thakur & Srivastava (2014) showed that personal innovativeness in IT significantly influences continuance intention in adopting mobile payments in India. When consumers are encouraged to test and embrace a digital app or product, it affects their desire to continue using it since they have experienced both the positive and negative aspects. So based on the research above, the proposed hypothesis is:

H4: Personal innovativeness in information technology of Gen Z affects continuance intention in using a new brand of ride-hailing app

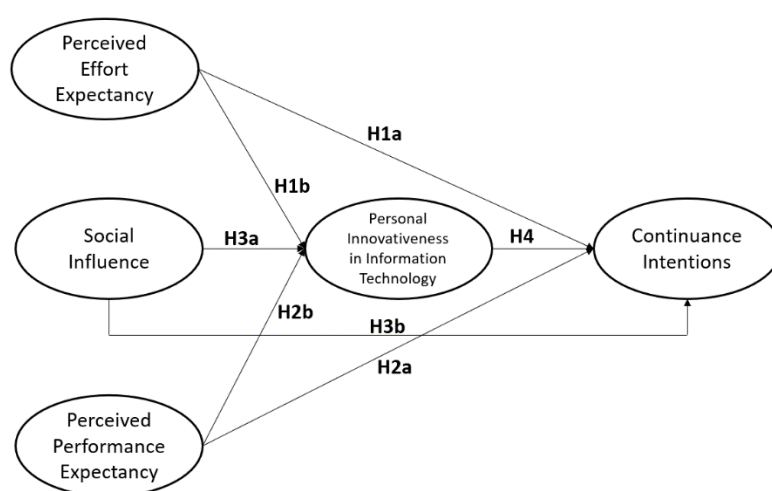


Figure 2. Proposed Model

Source: Development of previous research study

METHOD

This study is based on primary data collected via online self-reported questionnaires. The surveys were distributed in Bahasa Indonesia for two weeks (12 - 26 August 2022), and 553 answers from generation Z respondents were gathered. Google forms are used to make the survey easier. The writers wrote the questions in a concise, straightforward, and transparent manner. Respondents were instructed to use initials rather than their full names to guarantee anonymity and that they felt comfortable completing the questionnaire correctly. This study used purposeful sampling, creating essential criteria to support the study aims (Gozali, 2018). The following are the respondents' selection criteria: 1) Born between 1996-2010 (12-26 years old), 2) have a personal cell phone, 3) have / are using the MAXIM or InDriver application, 4) have/often used online ride-hailing services in the MAXIM or InDriver application.

The UTAUT framework was utilized and modified in this study. As noted in the research gap, this study incorporated PIIT as a new variable. The authors did not include enabling circumstances and user behavior in their suggested model, instead replacing them with continuation intents. In doing so, the authors closely followed earlier studies (Fauzi & Sheng, 2021; S. Sair & Danish, 2018). A systematic questionnaire was developed to measure

respondents' opinions and attitudes on the construct indicators (Gozali, 2018). Before the release of the official questionnaire, a pilot study was conducted by distributing questionnaires to colleagues with Ph.D. degrees in management and behavioral economics who have considerable research skills to peer-review each indicator item. The conclusions of the peer review were then used as corrective material to improve the redaction of the questions for each indicator.

All variable indicators were assessed on a Likert scale of one to five, with one indicating strong disagreement and five indicating strong agreement. There are five latent variables which consist of exogenous (PPE, PEE, and SI), endogenous (CI), and mediating variable (PIIT). Those variables are adopted from previous studies. Perceived performance and effort expectancy variables are adopted from research conducted by (Ghalandari, 2012a; Onaolapo & Oyewole, 2018; Rahi et al., 2019; S. Sair & Danish, 2018). PIIT and CI were adopted from the research conducted by (Fauzi & Sheng, 2021; Hwang, 2014; Yusra & Agus, 2019) While SI was adopted from the study conducted by (Ghalandari, 2012a; Lu, 2014).

A mix of partial least squares and structural equation modeling was used to examine the data (PLS-SEM). SMART PLS 3.3.0 is used to perform the PLS-SEM analysis. The Confirmatory Factor Analysis (CFA) approach was used in this study since each latent variable's developed model and indicators were founded on a solid theoretical foundation in previous investigations. The PLS-SEM analysis is divided into two steps: the outer / measurement model and the inner/structural model test. Two approaches were used to establish the instrument's validity in the outer model test: convergent and discriminant validity. The Average Variance Extracted (AVE) value must be greater than 0.50 to determine convergence validity (Gozali, 2018). Instrument reliability was determined using the Composite Reliability (CR) and Cronbach's alpha (CA) scores. In the CFA approach, each latent variable with a CR and CA value larger than 0.70 is considered trustworthy. The discriminant validity was determined using the Heterotrait-Monotrait (HTMT) value. For an instrument to be legitimate, the HTMT ratio must be less than 0.90. The HTMT ratio, according to Henseler, Ringle, and Sinkovics (Henseler et al., 2009), is more reliable in determining discriminant validity in PLS-SEM analysis.

The inner model underwent four measurement assessments. The R^2 value is calculated to test the coefficient determination. Second, the bootstrapping method was employed with a subsample of 5000 to determine the importance of the direct and indirect route coefficients. The t-statistical value or p-value is examined, which must be less than 0.05/0.10 for a path connection between latent variables to be pronounced significant. Third, as a complement, model fit analysis (goodness of fit) and the multicollinearity assumptions were tested. The SRMR, NFI, and Chi-Square ratios were calculated to determine the goodness of fit. The inner VIF test result is used to assess the multicollinearity assumption. Fourth, predictive relevance is determined by a blindfolding method based on cross-validated redundancy (J. F. Hair et al., 2018; Henseler et al., 2009).

RESULT AND DISCUSSION

Table 2 summarizes the profile of the respondents. Male and female respondents were equally represented in this survey. The gender split was 24.4:75.6, with 135 males and 418 females. 84.60% of respondents are undergraduate students, and 11.90% possess a diploma/bachelor's degree and are pursuing master's degrees. Meanwhile, 2.20% of respondents graduated from junior high school, while 0.4% are pursuing a doctoral degree. As the subject of this study was Z generations and pursuing a bachelor's degree, most respondents (72.90%) have a monthly expense budget of 500,000 – 1,000,000 rupiah. A hundred and twenty respondents (21.70%) have a monthly expense of 1,500,000 – 3,000,000

rupiah. It is referred to as the "students" budget. While 28 respondents have a monthly expense of 3,500,000 – 10,000,000 rupiah, only two have an expense budget of more than 10,000,000.

Table 2. Respondent Profile

Profile	Frequency	Percentage (%)	Profile	Frequency	Percentage (%)
Expenses per Month (in Rupiah)			Gender		
500,000 – 1,000,000	403	72.9%	Male	135	24.4%
1,500,000 – 3,000,000	120	21.7%	Female	418	75.6%
3,500,000 – 10,000,000	28	5.1%	Experience Using Ride-Hailing App		
>10,000,000	2	0.4%	1 – 2 years	272	73.68%
Education			3 – 4 years	181	17.01%
Junior High School	11	2.20%	4 – 5 years	58	5.26%
Senior High School / College Student	468	84.60%	> 5 years	42	3.95%
Diploma/ Bachelor	66	11.90%	Vehicle Ownership		
Master – Doctor	7	1.30%	Yes	321	58%
			No	232	42%
			The Number of Ride-Hailing Apps Used		
			Only 1	160	28.9%
			> 1	393	71.1%

Source: The result of data analysis

In addition, 393 respondents (71.1%) have more than one ride-hailing app. At the same time, 160 respondents (28.90%) have only one app. Besides, 321 respondents have their vehicle or belonging to the parent (guardian) whose use rights are handed over to them. At the same time, 232 respondents are not having a private vehicle (42%). Most respondents (73.68%) have been using ride-hailing apps for 1-2 years. One hundred eighty-one respondents (17.01%) used for 3-4 years, and the rest have been using ride-hailing apps for more than four years. According to the respondents' profiles, it can be concluded that all characteristics of Z generations are accommodated in the research survey.

SEM-PLS has at least two requirements. SEM-PLS testing requires the absence of missing values and outliers (J. Hair et al., 2017). Out of 553 completed surveys, none of them are missing values. Following the screening procedure, the final sample size for this study is still 553 respondents. The 553 samples utilized in this investigation follow the suggestion of (J. Hair et al., 2017), who said that the number of samples appropriate for data analysis using the SEM-PLS technique should be 5-10 times the number of indicators. There are 28

indicators from five variables in which the minimal sample is 160 - 280. As a result, the overall sample size of this study met the requirement.

Second, SEM-PLS necessitates that the construct variables and indicators be multicollinearity. This requirement may be satisfied by utilizing the PLS technique to calculate the value of the inner VIF. If the Variance Inflation Factor (VIF) value is more than 3, it is assumed that the indicators are multicollinear (J. Hair et al., 2017). The inner VIF value among the variables and indicators is less than three, as shown in Table 3. As a result, this study finds that there is no multicollinearity assumption.

Table 3. Inner V.I.F. Test Result

	Continuance Intentions	Personal Innovativeness in Information Technology
Continuance Intentions to Use a New Brand		
Perceived Effort Expectancy	2.448	2.387
Personal Innovativeness in Information Technology	1.390	
Perceived Performance Expectancy	2.329	2.418
Social Influence		1.462

Source: The result of data analysis

Third, the model fit evaluation should assess the combined performance of the outer/measurement and structural/inner models (J. F. Hair et al., 2018). The SMART PLS official website describes the different threshold value requirements. It specified that the RMS (Root Mean Square) Theta value should be less than 0.102, the SRMR (Standardized Root Mean Square) value should be less than 0.10 or 0.08, and the NFI value should be more than 0.9 or close to one (Henseler et al., 2014). The calculated model's NFI value is 0.8710 (near 1), and the SRMR value is 0.0580 (<0.10), as shown in Table 4. Consequently, the model constructed in this study satisfied the Goodness of Fit (GoF) assumption.

Table 4. Model Fit Test Result

	Saturated Model	Estimated Model
SRMR	0.0540	0.0580
d_ULS	1.2000	1.3670
d_G	0.3600	0.3700
Chi-Square	1097.1180	1120.3270
NFI	0.8740	0.8710

Source: The result of data analysis

The CA, CR, AVE, and HTMT scores should be used to analyze instrument reliability, convergent validity, and discriminant validity. Table 5 shows that all of the indicator items in this study have an outer loading value of more than 0.70, indicating that all indicators included accurately characterize the construct. According to the table, the CR and CA values for each latent variable in this study are more than 0.70. Each hidden variable

has an AVE value greater than 0.50. The results above imply that the instrument built from these latent variables and indicators is trustworthy and valid.

Table 5. Convergent Validity and Reliability

Variable	Code	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
Continuance Intentions to Use New Brand	CI 1	0.862	0.902	0.928	0.719
	CI 2	0.858			
	CI 3	0.844			
	CI 4	0.817			
	CI 5	0.858			
Perceived Effort Expectancy	PEE 1	0.783	0.91	0.928	0.650
	PEE 2	0.838			
	PEE 3	0.859			
	PEE 4	0.827			
	PEE 6	0.769			
	PEE 7	0.742			
	PEE 8	0.820			
Personal Innovativeness in Information Technology	PIIT 2	0.729	0.87	0.902	0.602
	PIIT 3	0.762			
	PIIT 4	0.812			
	PIIT 5	0.764			
	PIIT 6	0.801			
	PIIT 7	0.797			
Perceived Performance Expectancy	PPE 1	0.800	0.863	0.897	0.593
	PPE 2	0.763			
	PPE 3	0.762			
	PPE 4	0.775			
	PPE 5	0.770			
	PPE 7	0.748			

Source: The result of data analysis

Table 5. Convergent Validity and Reliability (Continue)

Variable	Code	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
Social Influence	SI 1	0.794	0.801	0.869	0.624
	SI 2	0.811			
	SI 3	0.824			
	SI 4	0.726			

Source: The result of data analysis

On the other hand, the Heterotrait-Monotrait (HTMT) value was used to measure the instrument's discriminant validity. For a tool to be legitimate, the HTMT ratio must be less than 0.90 (Henseler et al., 2009). The total value of the HTMT ratio for each latent variable in Table 6 is less than 0.90, showing that this research instrument is adequate and valid for measuring the model constructed.

Table 6. Discriminant Validity (HTMT Ratio)

	Continuance Intentions	Perceived Effort Expectancy	Personal Innovativeness in Information Technology	Perceived Performance Expectancy	Social Influence
Continuance Intention					
Perceived Effort Expectancy	0.680				
Personal Innovativeness in Information Technology	0.485	0.566			
Perceived Performance Expectancy	0.655	0.838	0.533		
Social Influence	0.614	0.613	0.552	0.628	

Source: The result of data analysis

The initial stage of structural model analysis is determining the coefficients. The R² value acquired by the PLS algorithm stages determines it. R² values are divided into three categories: 0.75 (strong), 0.50 (moderate), and 0.25 (weak) (J. F. Hair et al., 2018). According to Table 7, the R² values of continuance intentions (0.4320) and PIIT (0.3330) are weak since they are lesser than 0.50 but more significant than 0.25. As a result, independent factors have little role in explaining the dependent variable. It is understandable as the study on continuance intentions to use ride-hailing apps has a comprehensive explanation and driving factors. The R² value of PIIT is 0.3330 means that SI, PPE, and PEE contributed 33.30% to influencing personal innovativeness in information technology. At the same time, the factors outside the model explain the rest (66.70%). At the same time, the R² value of CI is 0.4320 means that SI, PPE, PEE, and PIIT contributed 43.20% to influence the behavioral intentions as endogenous variables. The factors outside the model explain the rest (56.80%).

Table 7. R² Results

	R Square	R Square Adjusted
Continuance Intentions	0.4320	0.4280
Personal Innovativeness in Information Technology	0.3330	0.3290

Source: The result of data analysis

The inner model test evaluates the blindfolding outcome in the second part. Blindfolding is a method of determining the level of relevance of predictions from a construct model using the value of Q². If Q² is more than 0.05, we can conclude that a construct model is significant. Table 8 shows that the Q² value of the two endogenous variables in this study is more than 0.05. (0.3040 & 0.194). Consequently, the exogenous variables employed in this study to anticipate endogenous variables are exact.

Table 8. Blindfolding Test Results

	SSO	SSE	Q ² (=1-SSE/SSO)
Continuance Intentions	2630	1831.504	0.304
Perceived Effort Expectancy	3682	3682	
Personal Innovativeness in Information Technology	3156	2545.24	0.194
Perceived Performance Expectancy	3156	3156	
Social Influence	2104	2104	

Source: Result Analysis Data (2022)

The inner model analysis procedure concludes with hypothesis testing using the bootstrapping approach. The researcher used 5,000 sub-samples to check the data's stability level to assess the structural model's applicability (J. F. Hair et al., 2017). The significance threshold in this study was 10%. It is a frequently regarded degree of significance in economics and management sciences.

Table 9 displays the results of the direct connection. PEE positively and substantially affects PIIT and CI ($\beta = 0.297, 0.397$ p-value = 0.000, 0.000). Similarly, PPE significantly and positively influences PIIT and CI ($\beta = 0.1180, 0.2740$ p-value = 0.097, 0.000). A similar conclusion is obtained in social influence, which has a positive and significant effect on PIIT ($\beta = 0.2770$ p-value = 0.0000). SI impacts CI indirectly through the mediating effect of PIIT ($\beta = 0.036$, p-value = 0.0510). As a mediator variable, PIIT impacts continuation intentions positively and significantly in a direct connection ($\beta = 0.128$ p-value = 0.0150).

Table 9. Direct Effect Test Results

Hypothesis	Path	Original Sample	Standard Deviation	T Statistics	P Values	Decision
H1a	PEE → CI	0.397	0.053	7.555	0.0000	Supported*
H1b	PEE → PIIT	0.279	0.073	3.814	0.0000	Supported*
H2a	PPE → CI	0.274	0.055	4.938	0.0000	Supported*
H2b	PPE → PIIT	0.118	0.071	1.661	0.0970	Supported**
H3a	SI → PIIT	0.277	0.047	5.865	0.0000	Supported*
H3b	SI → CI	0.036	0.018	1.954	0.0510	Supported**
H4	PIIT → CI	0.128	0.052	2.439	0.0150	Supported*

*5% significant level

**10% significant level

The data suggest that the model's mediation relationship requirements have been satisfied. The independent variable must impact the mediator variable, and the mediator variable must affect the dependent variable concurrently for the intervening variable's mediating effect to operate (Hayes, 2018). As a result, PIIT likely mediates the interaction between PPE, PEE, and SI on continuance intentions to adopt a new brand of ride-hailing apps. To demonstrate this, we must examine the outcomes of the specific indirect effect.

Table 10 depicts the indirect relationship between latent variables. The table demonstrates that PIIT substantially mediated the link between SI and CI ($\beta = 0.0360$, p-value = 0.0510). PIIT also mediates the connection between PEE and CI ($\beta = 0.0360$, p-value = 0.0320). PIIT, on the other hand, did not moderate the link between PPE and CI ($\beta = 0.0150$ p-value = 0.2010). It concludes that the PIIT (as a research gap) strongly mediates SI but not

PEE. All hypotheses (H1a, H1b, H2a, H2b, H3a, H3b, and H4) are supported based on the results above. The research question of this study has also been answered.

Table 10. Indirect Effect Test Results

Path	Original Sample	Standard Deviation	T Statistics	P Values
PEE→ PIIT→ CI	0.036	0.017	2.141	0.032
PPE→PIIT→CI	0.015	0.012	1.279	0.201
SI → PIIT →CI	0.036	0.018	1.954	0.051

The finding shows that effort expectancy became the most significant factor in influencing continuance intentions to use a new brand of the ride-hailing app ($\beta = 0.297, 0.397$ p-value = 0.000, 0.000). This research has strongly supported previous findings. It revealed that effort expectancy indeed has a significant effect on behavioral intentions to adopt mobile commerce (S. Sair & Danish, 2018), mobile learning (Onaolapo & Oyewole, 2018), and ride-hailing apps (Rahi et al., 2019). Like the previous studies, this research has also proven that effort expectancy has significantly affected the personal innovativeness of Gen Z to try to use a new brand of ride-hailing app. The finding supported the research from S. Sair & Danish (2018), who found the same result in the issue of mobile commerce adoption.

The flexibility, ease to use, and comfortability of MAXIM and InDriver have attracted Gen Z ride-hailing users to use their ride-hailing services. The more easily known an application is to be used, the more it makes Gen Z interested in trying to use the application. When they have experienced and confirmed that the application is indeed easy to use, they decide to continue using it. It validated the finding from the IBM study, as cited by Froehlich (2022), which stated that for Gen Z, apps on mobile devices should be simple to use even with one hand. Important buttons should be located near the bottom of the screen, where the user can quickly access them with one thumb. As a result, the first hypotheses (H1a and H1b) are fully validated since the behavioral intention to continue using ride-hailing apps is a function of ease of use, implying that PPE is a substantial predictor of personal innovativeness and continuance behavior.

The finding also revealed that performance expectancy had influenced continuance intentions to use a new ride-hailing mobile app. The positive coefficient value ($\beta = 0.274$ p-value = 0.000) indicates a positive and significant relationship between performance expectancy on continuance intentions. This research has supported previous findings revealing that performance expectancy (perceived usefulness) significantly affects behavior intentions to use E-banking services (Ghalandari, 2012), fashion brand websites (Loureiro et al., 2018), and mobile commerce (S. Sair & Danish, 2018).

This research has provided additional evidence in the case of the ride-hailing app industry. Conversely, this research has also rejected the study from Verkijika (2018), who revealed that performance expectancy has no significant direct relationship with consumers' behavioral intentions. This research also found that performance expectancy has significantly affected the personal innovativeness of Gen Z to use MAXIM / InDriver as a new ride-hailing app. As a result, the first hypotheses (H1a and H1b) are fully validated.

The special features offered by MAXIM / InDriver have been affecting Gen Z users to continue to use their ride-hailing apps. MAXIM offers a reservation feature where users can order drivers' services before the departure time. MAXIM also provides a feature where users can give tip money to get them faster. While InDriver offers a feature where users can pick and choose their drivers and bid the tariff. It is something that has never been provided by ride-hailing services before. Those unique features have encouraged gen Z users to continue to use the ride-hailing service from MAXIM / InDriver. It is concluded that a unique

feature that gives additional function and value to users will be a significant factor for users to use a new brand of digital app. As a result, the first hypotheses (H2a and H2b) are fully supported.

The same result has been found in the case of social influence. It is proven in this research to influence continuance intentions significantly and the personal innovativeness of gen Z. Social factors significantly impact cognition and information processing, which in turn affects the development of cognitive personality traits. Users of ride-hailing apps communicate essential information and impressions on social networks. Feedback from others on whether to utilize specific new or updated services and brands eventually influences the level of confidence and readiness to cope with changes in the mobile setting (Lu, 2014).

The intense information from social networks, both real life and online social network, will generate the personal innovativeness of Gen Z users to use a new brand of ride-hailing app. Combined with positive performance and effort expectancy, they finally decide to continue using it. These findings theoretically have supported the previous research from Ghalandari (2012) and Lu (2014), who found the same result in the context of mobile commerce and E-banking services. As a result, the first hypotheses (H3a and H3b) are fully validated.

The last, personal innovativeness, has been found to substantially mediate the relationship between social influence and effort expectancy on continuance intentions in table 10. In a direct connection, the personal innovativeness of Gen Z influences their continuance intentions to use MAXIM / InDriver. This research has supported previous research (Fauzi & Sheng, 2021; Lu, 2014; Yusra & Agus, 2019). As a result, the first hypotheses (H4) are fully supported. Generating a sense of innovativeness in Gen Z is one of the fundamental ways and a first step to making them continue to use a new ride-hailing app. Youngsters will immediately know the drawbacks and excesses of the new app when they have experienced a new digital app. They will decide to continue using the app. In this study, social influence and performance, and effort expectancy are the triggering factors of Gen Z to innovatively dare to try and use a new brand of ride-hailing app (personal innovativeness).

CONCLUSION

The intense competition between super app companies in providing online motorcycle taxi services in Indonesia has prompted many researchers to investigate what factors make users want to become loyal customers of an application. The investigation findings in this issue are beneficial in practice for digital companies providing online motorcycle taxi services. For new companies, knowing the factors driving the use of new brand applications allows them to develop effective marketing and market penetration strategies to be accepted by the public. Existing companies can strategize from the research findings on how to keep their regular customers from switching to new brands.

This study specifically examines the role of personal innovativeness in information technology in mediating the relationship between social influence and perceived performance and effort expectancy on continuance intentions to use MAXIM / InDriver application among Z generations in Indonesia. The results have answered the research questions by showing that the three predictor variables (SI, PPE, and PEE) positively and significantly influenced continuance intention to use the new ride-hailing app via the mediating role of PIIT (except PPE). The ease of using the application perceived by users

is the most substantial factor in influencing their desire to try and innovate (PIIT) to use and become regular customers of new branded online motorcycle taxi applications, followed by social influence and perceived benefits and performance expectations of the application.

When the surrounding environment influences users, and they have experienced the benefits, convenience, and performance of the new online motorcycle taxi application both from others and themselves, their innovative and curious souls will emerge to use it. When they have experienced it, they will be interested in becoming regular customers of the new brand of online motorcycle taxis. This research contributes to the theory building that has been built by explaining how personal innovativeness is a significant influence in explaining continuance intentions to use a new brand of the ride-hailing app.

Although this study effectively addressed the challenges and aims, it still has shortcomings requiring additional investigation. First, the driving factors of continuance intentions to use ride-hailing apps vary. This research only investigates the role of personal innovativeness in information technology with three exogenous variables (SI, PEE, and PPE). Future studies must explore other essential factors by utilizing other theoretical frameworks, such as expectation-confirmation theory (ECM) and the or even integrated model (UTAUT X ECM). Second, this research specifically observed the behavioral continuance intentions to use the new brand of the ride-hailing app of the Z generation. Future studies must investigate other generational groups or geographical-segmented consumers.

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Risk Perception as Mediator in the Effect of Financial Literacy to Entrepreneurial Orientation among MSMEs

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ABSTRACT

This study aims to analyze the mediating role of risk perception on the effect of financial literacy to entrepreneurial orientation. From a total population of 32,026 MSMEs in Denpasar, 244 samples were taken through purposive sampling. Data were collected through the administration of Financial Literacy Instruments ($r_{xx}=0.639-0.891$; $r=0.974$), Risk Perception Instruments ($r_{xx}=0.873-0.956$; $r=0.989$), and Entrepreneurship Orientation Instruments ($r_{xx}=0.894-0.988$; $r=0.988$). According to data analysis with Partial Least Square (PLS), it was found that financial literacy significantly affects entrepreneurial orientation; financial literacy significantly influences risk perception; risk perception significantly influences entrepreneurial orientation; and risk perception partially mediates the effect of financial literacy to entrepreneurial orientation in MSMEs in Denpasar. It was found that 49.8% of the variation in the entrepreneurial orientation variable is explained by financial literacy and risk perception variables, while the remaining 50.2% is contribution of other variables outside this research.

Keyword: risk perception; financial literacy; entrepreneurship orientation; MSME

INTRODUCTION

A country might be referred as prosper if it has at least 2% of entrepreneurs of the total population according to McClelland (Suparno & Saptono, 2018). Micro, Small and Medium Enterprises (MSMEs) are the biggest part of Indonesia's economic development. MSMEs are profitable companies that conform to Indonesian law's definition of an MSME which possessed by individual or group of people. Owning a limited 1 billion asset, receiving a limited 50 billion income, and empowering a limited of 99 employees are criterias of MSMEs (Tanjung, 2017). MSMEs contributes 61.07% of GDP or worth 8,573.89 trillion rupiah with total number of MSMEs registered in Department of Cooperatives and SMEs currently reaches 64.2 million.

During the Covid-19 pandemic, Bali's economy decreased by 10.98 percent compared to the previous year (Kristanto, 2020). This decline is very significant and has a negative impact on all business fields. Many business sectors, including MSMEs, experienced negative growth due to not being able to survive the crisis. To be able to remain from these conditions, MSME managers need a good entrepreneurial orientation. According to the in-depth interviews, MSME owners still lack the necessity of entrepreneurial orientation to survive from the change caused by the pandemic. It is shown by the MSME owners who were not able to creatively produce more attractive product, could not forecast demand in the future market, and did not

dare to take risk because of the uncertain situation. The lack of entrepreneurial orientation is a problem that needed to be solved to support Bali's economic growth during pandemic.

For a firm to succeed and function well, entrepreneurial orientation is crucial for business' owners or managers (Mahmood et al., 2013; Zainol & Ayadurai, 2011). The approach used by a company or business when it enters a new state is referred as entrepreneurial orientation (Lumpkin & Dess, 2001; Lee & Peterson, 2000). Entrepreneurial orientation variable consists of five dimensions, which consists of autonomy, innovation, risk-taking behavior, proactiveness, and competitive aggressiveness (Lumpkin & Dess, 1996).

The idea of entrepreneurship, which assesses an individual's level of entrepreneurship based on innovation, proactiveness, and risk-taking behavior, is the source of entrepreneurship (Miller, 1983). Innovation demonstrates the ability to explore creativity by funding R&D projects (Hossain & Azmi, 2021). Being proactive means anticipating and acting on market demands and wants in order to outperform rivals as soon as possible (Lumpkin & Dess, 1996). Risk-taking behavior has been proposed by Wang & Poutziouris (2010) as a strategic thinking to support company growth that might provide a potential source of competitive advantage with favorable consequences that last for a long time on financial value and performance of a business.

The ability of MSMEs to innovate, manage their staff and customers, and recoup their initial investment are indicators of their sustainability (Fitria et al., 2018). This demonstrates that the business is growth-oriented and recognizes chances for further innovation (Hudson et al., 2001). Enhancing MSME actors' financial literacy is one approach to do this, enabling improved management and responsibility of MSME players, similar to what happened in large corporations. Financial literacy can help MSME owners to make best decision to get source, spend and manage financial sources to manage their business. Previous study revealed that financial literacy significantly and positively correlates entrepreneurial characteristics (Sarsale, 2021).

H1. Financial literacy influences entrepreneurial orientation.

Laily (2013) suggests that financial literacy is an individual's intelligence about finance and financial management skills. Financial literacy includes knowledge related to financial topics, such as an introduction to financial service institutions, kind of financial products and services, the features attached in financial products and services, the benefits and risks of financial products and services, in addition rights and obligations as consumer users of financial services. Financial literacy is an important factor for individuals who want to be entrepreneurs and reduce the risk of entrepreneurship failure (Avlijaš & Avlijaš, 2014).

Financial literacy is the ability to handle money intelligently through understanding of facts, concepts, principles, and technology (Garman & Raymond, 2010). A person's capacity to handle common financial issues and assist in making financial decisions can be improved by someone who is financially literate. According to Xu & Zia (2012), the term "financial literacy" refers to a variety of concepts, including financial awareness and knowledge of financial institutions, products, and concepts; financial skills, such as the capacity to calculate complex interest rates; and general financial capacity, which includes the ability to manage money and make financial plans. General financial knowledge, savings and loans, investments, and insurance understanding are the four components that make up financial literacy (Chen & Volpe, 1998).

Financial literacy positively influences risk tolerance (Permanasari et al., 2020). Based on behavioral finance theory, individual behavior in making financial decisions is rational, which means acting based on logical and reasonable considerations (Nosffinger, 2018). Risk must be considered when making decisions in times of crisis, therefore the perception of an entrepreneur's risk plays a very important role in determining the orientation of an entrepreneur.

H2. Financial literacy influences risk perception.

Risk perception is defined as an individual's subjective estimate to get the consequences of losses in receiving a desired outcome (Pavlou, 2003). Risk perception is measured through 6 dimensions, namely social risk, time risk, financial risk, physical risk, functional risk, and psychological risk (Wulandari, 2012). Social risk is the risk that comes from making a wrong decision that causes embarrassment about considering what other people think about the choice, the potential for losing people's recognition, or appreciation from friends. Time risk is the limited time to make decisions to satisfy needs, time consumption of product use, and potential loss of time when searching for information. Financial risk refers to financial loss due to mis-allocation of investments and indiscretion in making decisions. Physical risks are health and safety risks. Functional risk is defined as the loss that occurs when a decision does not go as expected. Psychological risk generally describes how a decision may hurt individual's self-esteem or certain perception of themselves (Cases, 2002).

According to Ajzen (1991), theory of planned behavior assumed that humans act rationally according to their attitudes and normative beliefs. Individual with better risk perception will be able to run business with confidence as an individual with high entrepreneurial orientation do. Entrepreneurship can not be separated from risk-taking behavior, while the risk-taking behavior often refers to their perception of risk (Agustina, 2021). Previous study confirmed the effect of entrepreneurial risk perception to entrepreneurial intention (Shah et al., 2019).

H3. Risk perception influences entrepreneurial orientation.

Studies conducted to predict the effect of financial literacy to entrepreneurial orientation are very limited. Financial literacy is an important factor to support entrepreneurial advancement. Business owners are frequently involved in decision making regarding purchasing, allocating, and take advantage of their financial resources (Pandey & Gupta, 2018). Contrary to these results, some entrepreneurs in previous study have deficient understanding of bank and equity finance while running a business. It is stated that new micro-entrepreneurs in South Africa have low level of financial literacy (Fatoki, 2014). Therefore, research on the direct relationship between financial literacy and entrepreneurial orientation requires mediating factor. Risk perception is variable that needed to be examined as mediator between the relationship of financial literacy and entrepreneurial orientation.

H4. Risk perception mediates the effect of financial literacy to entrepreneurial orientation.

According to the background and the results of previous studies, the influence of financial literacy and risk perception on entrepreneurial orientation needs to be analyzed. Through this study, researchers also want to explore the mediating role of risk perception in the effect of financial literacy to entrepreneurial orientation among MSMEs in Denpasar.

METHODS

This research method is inferential quantitative research that focuses on analyzing the influence of financial literacy and risk perception on entrepreneurial orientation, as well to explore how risk perception mediates the effect of financial literacy to entrepreneurial orientation among MSMEs in Denpasar.

The population of this research were 32,026 MSMEs in Denpasar which were registered in the Denpasar City Cooperatives and SMEs Department data. The samples of this study were chosen by purposive sampling, a sampling method that takes certain factors into account to improve the research data representativeness (Sugiyono, 2008). MSMEs which selected as samples must be registered in the Denpasar City Cooperatives and SMEs Department and

having a business which have been running for at least one year when the research data was collected. The number of samples used is 244 samples using the formula by Isaac and Michael (Sugiyono, 2008).

$$s = \frac{\lambda^2_{N,P,Q}}{d^2(N-1) + \lambda^2_{P,Q}} \dots\dots\dots (1)$$

$$= \frac{1.96^2 \times 32026 \times 0.5 \times 0.5}{0.05^2 \times (32026 - 1) + 1.645^2 \times 0.5 \times 0.5}$$

$$= 243.9968 \approx 244$$

The primary data in this study were obtained through in-depth interviews with MSMEs in Denpasar as an initial study and FGDs with the Denpasar City Cooperatives and SMEs Department. Primary data was also collected through the administration of the research variables, which consists of adaptation of Financial Literacy Instruments with dimensions of general knowledge about finance, savings and loans, investment, and insurance (Elvara & Margasari, 2019), adaptation of Entrepreneurial Orientation Instruments with dimensions of innovation, proactiveness, and risk-taking behavior (Covin et al., 2020), as well as modification of Risk Perception Instruments consisting of dimensions of social risk, time risk, financial risk, physical risk, functional risk, and psychological risk (Wulandari, 2012). The research instruments use likert scale in the measurement consisting of a score of 1 to 4 which describes as strongly disagree (STS = score 1), disagree (TS = score 2), agree (S = score 3), and strongly agree (SS = score 3) 4). Secondary data in this study was acquired from Denpasar City Cooperatives and SMEs Department which is about the number of MSMEs in Denpasar which registered at the department.

Instrument Validity and Reliability Test Results

Table 1. Financial Literacy Instruments Validity Test Results

Item	Corelation Coefficient	Description
Finl 1	0,843	Valid
Finl 2	0,772	Valid
Finl 3	0,891	Valid
Finl 4	0,856	Valid
Finl 5	0,825	Valid
Finl 6	0,870	Valid
Finl 7	0,859	Valid
Finl 8	0,820	Valid
Finl 9	0,833	Valid
Finl 10	0,821	Valid
Finl 11	0,829	Valid
Finl 12	0,800	Valid
Finl 13	0,800	Valid
Finl 14	0,750	Valid
Finl 15	0,688	Valid
Finl 16	0,683	Valid
Finl 17	0,639	Valid
Finl 18	0,795	Valid
Finl 19	0,889	Valid
Finl 20	0,842	Valid
Finl 21	0,839	Valid
Finl 22	0,849	Valid

Table 2. Risk Perception Instruments Validity Test Results

Item	Corelation Coefficient	Description
Risk 1	0,873	Valid
Risk 2	0,935	Valid
Risk 3	0,956	Valid
Risk 4	0,927	Valid
Risk 5	0,938	Valid
Risk 6	0,919	Valid
Risk 7	0,917	Valid
Risk 8	0,874	Valid
Risk 9	0,916	Valid
Risk 10	0,921	Valid
Risk 11	0,949	Valid
Risk 12	0,900	Valid
Risk 13	0,937	Valid
Risk 14	0,925	Valid
Risk 15	0,944	Valid
Risk 16	0,889	Valid
Risk 17	0,904	Valid
Risk 18	0,912	Valid

Table 3. Entrepreneurial Orientation Instruments Validity Test Results

Item	Corelation Coefficient	Description
Ent 1	0,938	Valid
Ent 2	0,933	Valid
Ent 3	0,988	Valid
Ent 4	0,988	Valid
Ent 5	0,946	Valid
Ent 6	0,977	Valid
Ent 7	0,977	Valid
Ent 8	0,977	Valid
Ent 9	0,894	Valid

A total of 30 respondents were used in the trial of the research instrument. According to the results of SPSS program analysis, all items in Financial Literacy Instruments, Risk Perception Instruments, and Entrepreneurial Orientation Instruments are declared valid because they have a correlation coefficient > 0.3 . The correlation coefficients of valid items are listed in the table 1, 2 and 3.

Table 4. Reliability of Research Instruments

Variable	Cronbach Alpha Coefficients	Item Total
Financial Literacy	0,974	22
Risk Perception	0,989	18
Entrepreneurial Orientation	0,988	9

The reliability test of Financial Literacy Instruments, Risk Perception Instruments, and Entrepreneurial Orientation Instruments were carried out using a single trial administration method with the alpha coefficient formula (Azwar S., 2013: 115). The research instrument can be declared reliable if the Cronbach Alpha coefficient value is above 0.6. Based on the table 4,

because the three research instruments have a Cronbach Alpha coefficient > 0.6 , they are claimed as reliable research instruments.

In this study, partial least squares (PLS) methodology is used in conjunction with structural equation modeling (SEM) analysis tool. PLS is known as a powerful analytical procedure since it doesn't need that the data be measured on a specific scale, the number of samples used can be low, it can be applied to test a theory, and it aids in the extraction of latent variables for prediction purposes (Ghozali, 2011). The SEM-PLS analytical procedure employs probability to test hypotheses (p-value). The test shows a significant relationship between the latent variables of risk perception, financial literacy, and entrepreneurial orientation if the p-value of 0.05 (alpha of 5%) is attained.

Two approach methods can be used to determine the role of mediation in the model, namely examination and testing. The examination method is done by looking at the difference in path coefficients, while the testing method is done by testing the indirect effect path coefficients. In this study, the role of mediation is seen using an examination approach with the following steps (Solimun et al., 2017): investigate the direct relationship between the exogenous variable and the endogenous variable in the model without the mediating variable; investigate the relationship between the exogenous variable and the endogenous variable in the model with the mediating variable; investigate the relationship between the exogenous variable and the mediating variable; and investigate the relationship between the mediating variable and the endogenous variable.

According to the results of the four hypotheses examination, then the intervention of the mediating variable can then be determined with the following stages of analysis:

- 1) The analysis' findings, specifically the path coefficient in H1, must be significant.
- 2) The risk perception is referred to as a complete mediation variable if path coefficients in H3 and H4 are both significant but H2 is not.
- 3) The perception of risk is said to as partial mediation if H3 and H4 are confirmed significant and H2 is also significant as well, where H2's path coefficient is smaller than H1's.
- 4) The perception of risk is stated to not be a mediating variable if H3 and H4 are significant and H2 is also confirmed significant, where the path coefficient of H2 is nearly identical to H1.
- 5) Risk perception is not a mediating variable if either H3 or H4 or both are not significant.

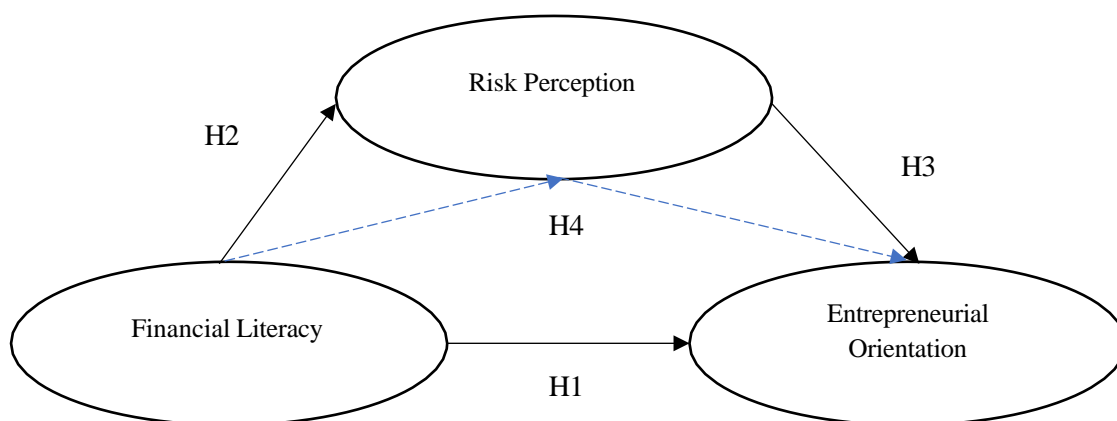


Figure 1. Conceptual Framework

Source: hypothetical model developed by researchers

RESULTS AND DISCUSSION

Characteristics of Research Respondents

The demographic factors of gender, age, and business location were analyzed to explain the traits of respondents in this research. This study has 244 respondents. Table 5 details the characteristics of the respondents as well as the respondent's identification.

Table 5. Respondent's Characteristics

Characteristics	Classification	Number of Respondents	Percentage (%)
Gender	Male	68	27,9
	Female	176	72,1
	Total	244	100,0
Age	13 - 18 years	8	3.3
	19 - 40 years	212	86.9
	41 - 60 years	24	9.8
	Total	244	100.0
Business Location	Denpasar Utara	50	20.5
	Denpasar Timur	78	32.0
	Denpasar Barat	71	29.1
	Denpasar Selatan	45	18.4
	Total	244	100.0

Source: data analyzed, 2023

In Table 5, it can be seen that there are more female respondents than male respondents. In terms of age, the largest number of respondents were in the age range of 19-40 years which can be clustered in the early adult stage as many as 212 people, followed by the age group of 41-60 years and the least in the age range of 13-18 years. The business location of respondents in this study were evenly distributed in all sub-districts in Denpasar City.

Research Model Analysis Using PLS Method

Structural Equation Modeling (SEM) and the Partial Least Squares (PLS) method were used to examine this study. There are two basic model evaluations in this test, the outer model and the inner model.

Outer Model Evaluation Results

Latent variables in this study, which consists of entrepreneurial orientation (Y), financial literacy (X), and risk perception (M) are measurement models with reflective indicators. Convergent and discriminant validity, as well as composite reliability are analyzed to evaluate reflective indicator in this research model.

Convergent Validity

According to the results of testing the convergent validity using PLS, outer loading value of the indicators of financial literacy are range from 0.783 to 0.852; the indicators of entrepreneurial orientation have outer loading value range from 0.792 to 0.966; and the indicators of risk perception have outer loading value range from 0.812 to 0.925. All of the indicators for the latent variables of financial literacy, risk perception, and entrepreneurial orientation have an outer loading value greater than 0.5, indicating that they are all valid indicators for determining each variable's value.

Discriminant Validity

The measurement model's cross loading evaluation is used to determine whether the construct has strong discriminant validity. When each indicator is cross loaded onto the relevant variable, which has the highest value if it is set side by side with the cross loading

value of another latent variables in this research, discriminant validity is said to be valid. Based on the data analysis performed using PLS, conclusion can be drawn that the three instruments exercised in this study have achieved discriminant validity because the cross loading correlation score of each indicator in the pertinent variable has the highest score when it is compared to the cross loading of other latent variables.

Examining the average variance recovered for each concept in the model is another technique to judge the discriminant validity of the model. If the AVE value is greater than 0.50, the model's discriminant validity is satisfactory. Table 6 displays the findings of the discriminant validity test.

Table 6. AVE Value

	Average Variance Extracted (AVE)
Financial Literacy	0.654
Entrepreneurial Orientation	0.851
Risk Perception	0.785

According to Table 6, the AVE value of each research instrument has been above 0.50, hence a conclusion can be drawn that the instrument in this study has matched the criteria of adequate discriminant validity.

Composite Reliability

By examining the composite reliability value, researchers can assess the instrument reliability of the measurement model with reflected indicators. If the composite reliability number is at least 0.70, it is considered to be good. The results of the instruments' reliability are shown in Table 7.

Table 7. Composite Reliability

	Composite Reliability
Financial Literacy	0.976
Entrepreneurial Orientation	0.981
Risk Perception	0.985

Table 7 shows that the composite reliability value for financial literacy, entrepreneurial orientation and risk perception constructs has a value of greater than 0.7. Hence, each instrument in this research has good reliability.

Structural Model Evaluation Results (Inner Model)

Based on the substantive theory of research, the inner model is a structural model that describes the link between latent variables (Solimun, et al., 2017). In PLS, before interpreting the results of hypothesis testing, the model must be ensured to have a good Godness of Fit. By computing the Q-Square value, godness of Fit model is measured. The formula for Q-Square is: $Q^2 = 1 - [(1-R_1^2) (1-R_2^2)]$. This formula requires an R-Square value to be inputted, which has a function to find out how much the contribution of the X variable to the Y variable.

From the R-Square value researchers can see how the exogenous variable affects the endogenous variable. The R-Square value can be grouped into strong category, moderate category and weak category. The score of R-Square from 0.75 to 1 is classified in the strong category, the R-Square value from 0.5 and above is in the moderate category and the R-Square value of 0.25 is included in the weak classification (Hair et al., 2011).

Table 8. R Square Test

	R Square	R Square Adjusted
Entrepreneurial Orientation	0.516	0.512
Risk Perception	0.563	0.561

In Table 8, the R-Square value for the variable Financial Literacy on Entrepreneurial Orientation is 0.516 which is included in the moderate category. It indicates that the contribution of the financial literacy variable affects the entrepreneurial orientation of 51.6%. Meanwhile, the effect of financial literacy variable on risk perception is included in the moderate category which can be seen by the R square value of 0.563. This value shows that the risk perception variable affects the entrepreneurial orientation variable by 56.3%.

Godness of Fit is used to validate the overall structural research model which identified by calculating the Q-Square value. A model has a relative relevance value if the Q-Square value is more than 0 (zero), whereas a model lacks a relative relevance value if the Q-Square score is below 0. Calculating a Q-Square can be done as shown below:

$$Q\text{-square} = 1 - [(1-R_1^2) (1-R_2^2)] \dots\dots\dots (2)$$

$$Q\text{-square} = 1 - [(1-0,516^2) (1-0,563^2)]$$

$$Q\text{-square} = 1 - [(0,734) (0,683)]$$

$$Q\text{-square} = 1 - 0,501$$

$$Q\text{-square} = 0,498$$

According to the calculation, the Q-Square value is obtained at 0.498, which is greater than 0, hence the model in this research has a predictive relevance value of 49.8%. This means that variations in the entrepreneurial orientation is explained by financial literacy variable and risk perception variable, while variables not included in this research model are responsible for explaining the remaining 50.2%.

Hypothesis Testing Results

Probability values are seen to test the hypothesis. To reject or accept the hypothesis, using an alpha value of 5%, then H_0 is rejected if the p-values < 0.05 .

Table 9. Direct Effect Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Financial Literacy -> Entrepreneurial Orientation	0.214	0.219	0.069	3.084	0.002
Financial Literacy -> Risk Perception	0.750	0.755	0.030	25.004	0.000
Risk Perception -> Entrepreneurial Orientation	0.544	0.537	0.069	7.879	0.000

Based on Table 9, the p-values of the effect of financial literacy to entrepreneurial orientation are 0.002, where $0.002 < 0.05$, it means that having a strong financial literacy foundation has a significantly favorable impact on having an entrepreneurial orientation. The p-values of financial literacy to risk perception are 0.000, where $0.000 < 0.05$, it can be said that risk perception is significantly and positively influenced by financial literacy. The p-values of the effect of risk perception to entrepreneurial orientation are 0.000, where $0.000 < 0.05$. This leads to the conclusion that risk perception significantly enhances entrepreneurial orientation.

Table 10. Indirect Effect Test Results

			Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Financial Perception	Literacy ->	Risk Orientasi	0.408	0.405	0.053	7.695	0.000
Kewirausahaan (OK)							

The p-values of the financial literacy variable on entrepreneurial orientation through risk perception in Table 7 are 0.000 which is $0.000 < 0.05$. According to the value found, risk perception has a positive and significant mediating role in the influence of financial literacy on entrepreneurial orientation.

According to the mediation test criteria, the results of hypothesis testing using PLS analysis are in accordance with the criteria for point 3 where P2, P3 and P4 are significant and $P2 < P1$, consequently it can be concluded that there is partial mediation model in this study.

The Effect of Financial Literacy on Entrepreneurial Orientation

Based on Table 9 in results, the coefficient of financial literacy path towards entrepreneurial orientation is 0.214 and the p-values are 0.002. This shows that entrepreneurial orientation is positively affected by financial literacy. The higher score of financial literacy will make an impact on the higher score of entrepreneurial orientation of MSME owners in Denpasar. A person's capacity to solve practical financial issues and assist in entrepreneurial decision-making can both be improved by having a solid understanding of finance. MSME owners will be more active in innovating, more proactive in taking steps in business development, and have a better risk taking in making business decisions. Segura & Zamar (2019) supports this study results which states that there is a relationship between financial education and creative entrepreneurship. Laiea et al. (2020) also supported this research results, which stated that financial resources, orientation, and performance affects entrepreneurial orientation in research that takes place in Europe, Asia, and Africa. Good financial literacy can help MSMEs increase their business performance and innovate (Yuliati et al., 2022).

The Effect of Financial Literacy on Risk Perception

The influence of financial literacy on risk perception can be seen from the path coefficient score of 0.750 and p-values of 0.000 which indicates that financial literacy positively affects risk perception. The better the financial literacy will affect to the higher perception of risk owned by MSMEs. This shows that having good financial knowledge can make MSMEs increase subjective estimates to avoid the consequences of losses in achieving company goals. MSMEs owners may fail growing business because they do not have a good risk perception while running the company. Better financial knowledge will help them in risk-taking action, because the increasing of financial literacy leads to the better risk perception. The results of research by Bannier & Neubert (2016) show that both actual and perceived financial literacy are relevant for financial risk taking. Investment risk perceptions were affected by financial knowledge in the research of Aren & Dinç Aydemir, (2015). Another previous research also supported this research results which stated that financial literacy encourages risk-taking behavior (Korkmaz et al., 2021).

The Effect of Risk Perception on Entrepreneurial Orientation

The influence of risk perception on entrepreneurial orientation can be seen from the path coefficient value of 0.544 and p-values of 0.000 which indicates that risk perception has a positive effect on entrepreneurial orientation. The better an individual's risk perception, the better his entrepreneurial orientation will be. Individuals who have a positive perception of risk tolerance tend to have entrepreneurial intentions (Wijaya et al., 2015). Individuals often do not want to start a business for fear of failing or suffering losses, so this individual will not want to become an entrepreneur. Meanwhile, individuals who have a positive tolerance for risk will be able to become entrepreneurs. Traditionally, the tendency of individuals to take risks is an individual personality characteristic that is considered to be able to influence an individual's decision to start a business (Annisa et al., 2021). Therefore, an individual's assessment of risk can affect his mindset in building a business. Individuals who assess risk positively will not be afraid to start a business or innovate in a business that he knows is likely to fail.

Mediating Role of Risk Perception on the Effect of Financial Literacy on Entrepreneurial Orientation

Based on the results of data analysis, it is found that risk perception is able to positively mediate the influence of financial literacy on entrepreneurial orientation which can be seen from the path coefficient value of 0.408 and p-values of 0.000. The better financial knowledge they have, the MSMEs will be able to better assess the risks that their business may face in the future. This will make MSMEs not afraid or hesitant to start a business or innovate in their business to achieve their business goals. Groups with entrepreneurial activities have quite prominent characteristics in terms of their tendency to take risks than other groups (Hariani & Irfan, 2021). This research is in line with (Bezzina, 2010) which stated that an entrepreneur will accept risks after thoroughly evaluating the circumstance and developing a plan to lessen the risk's effects. It takes a high level of entrepreneurial orientation for people to handle crises effectively (Carina & Mentari, 2021). Increasing risk perception should be taken into an account to increase entrepreneurial orientation in MSMEs because of its mediating role on the influence of financial literacy to entrepreneurial orientation.

CONCLUSION

According to this study results, some conclusions can be drawn, which financial literacy significantly affects the entrepreneurial orientation of MSMEs in Denpasar; financial literacy significantly influences risk perception on MSMEs in Denpasar; risk perception significantly influences entrepreneurial orientation among MSMEs in Denpasar; and risk perception significantly mediates the effect of financial literacy to entrepreneurial orientation among MSMEs in Denpasar.

The results of this study can contribute to management science, especially in the field of financial and human resources management regarding the relationship between financial literacy, risk perception, and entrepreneurial orientation. The results of this study can also be a reference for MSME owners to improve financial literacy and risk perception to improve entrepreneurial orientation, so that they can become MSMEs that are more resilient in facing various challenges that may occur. The results of this study can also be a guide for the government, especially the Ministry of Cooperatives and SMEs to increase the number of MSMEs in Denpasar because of the significant contribution of MSMEs to economic growth in

Indonesia. The government can provide training on financial literacy and risk perception for MSMEs to increase entrepreneurial orientation. Business incubators can also use the results of this research as a guide in making programs for MSMEs that are fostered to have a high entrepreneurial orientation, so that they can survive in all conditions.

There are several limitations in this study that can be taken into consideration for subsequent research. This research is a cross sectional study, which carried out to examine the relationship between variables at only one time. In addition, the scope of the research is only on MSMEs in Denpasar area only, so it cannot be generalized to a wider scope. Only financial literacy, risk perception, and entrepreneurial orientation were the variables addressed in this study; additional characteristics that may have an impact on entrepreneurial orientation were not examined. This can be a consideration for the next researcher to examine different model, wider scope, and more variables studied in the future.

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Determining Value Co-Creation Behaviour toward Customer Loyalty and Customer Retention on the SRC's Business Platform



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ABSTRACT

Customer retention is the maintenance of long-term customer-company relationships through customer satisfaction thereby creating loyalty. Value co-creation is proven to have a significant role in creating customer loyalty, so that customer loyalty becomes actual retention for the company. The role of shared value creation should be considered in customer relationship mechanisms. This study aims to produce an analysis of the role of value co-creation behavior on customer retention. This focus is novelty in research, because no confirmation was found in previous studies that produced a relationship between the two. Customer loyalty is the variable that mediates the relationship between value creation behavior and customer retention. This research produces findings regarding the positive influence of customer involvement through value co-creation behavior on retention as a long-term customer relationship mechanism with the company.

Keywords: Value Coreation Behaviour; Customer Loyalty; Customer Retention.

INTRODUCTION

The role of customers in the industrial world has changed from isolated to connected, from unaware to informed, and from passive to active (Prahalad & Ramaswamy, 2004a). This reveals the development of customer behaviour that demands involvement with a larger of roles of customers. Several studies (Spena et al., 2012; Vivek et al., 2012) have confirmed changes in the role of customers as a consequence of information disclosure and the development of relationship models for technological support. Customers have access to information, dialogue, experimentation, global views, community and activism that lead to changes in the mechanism of relationships and roles towards the environment and companies (Prahalad & Ramaswamy, 2004a), Verhoef et al., 2010). Customers have changed from requesters of value to actors who create value (Baehaqi, 2018). Companies cannot act independently without customer intervention. The activities of designing products, developing production processes, compiling marketing messages, and controlling sales channels cannot be separated from the role of the customer (Prahalad & Ramaswamy, 2004a; Grönroos, 2012; Kotler et al., 2017).

The development of customer behaviour has an impact on the company's treatment of customers. This study will focus on two approaches in responding to changes in customer behaviour. *First*, the customer engagement approach through value co-creation (Prahalad & Ramaswamy, 2004; Verhoef et al., 2010; Vivek et al., 2012) which emphasizes customer value collaboration, experience building, and resource collaboration in the service chain

(Vargo et al., 2008). The importance of value co-creation and its impact on customer behaviour has been widely presented in various academic studies such as *customer loyalty* (Lam et al., 2004); (Cossío-Silva et al., 2016); (Lee et al., 2018), *sharing economy* (Zou & Shao, 2022), *perceived value* (Solakis et al., 2022), and *customer satisfaction* (Woratschek et al., 2020; Hong et al., 2021). There is no confirmation of rejection from the results of these studies, so it can be said that value co-creation has become a major current of thought in relation to customer behaviour. *Second*, the relationship marketing approach (Vivek et al., 2012) which emphasizes the efforts of business people in anticipating change through maintaining relationships or customer retention. The link between value co-creation on customer retention is a new focus in the literature, because it was not found in previous research studies that presented the implications of value co-creation on customer retention. Some researchers believe that customer loyalty is actual retention in business (Gustafsson et al., 2005), so the study focuses more on the impact of value co-creation on customer loyalty. This study is a pioneer in examining the relationship between value co-creation and customer retention. The both approaches to the relationship model are considered strategic choices, given the dynamic development of the marketing environment, more substantial changes in customer behaviour.

The idea of value co-creation pioneered by Prahalad & Ramaswamy, (2004) and Vargo & Lusch, (2004) fundamentally places customers as a source of competence for companies. With their knowledge and skills, customers are in the building blocks of the engagement chain that play an active role in determining the expected value (Vivek et al., 2012). Customer value is determined individually so as to create a unique experience for customers. Companies cannot create something of value without individual involvement, so co-creation replaces exchange processes (Prahalad & Ramaswamy, 2004b). Adaptation of theories, models and frameworks of value co-creation has resulted in academic performance, especially in relation to customer loyalty and customer relationship mechanisms (Woratschek et al., 2020; Hilton et al., 2012; Saarijärvi et al., 2013). Customer loyalty has been recognized as a very valuable tangible asset for the company. Loyal customers not only generate profits for the company, but also become a bulwark against attacks by opponents, and even become a source of competitive advantage (Sashi, 2012; Cossío-Silva et al., 2016). Recognizing the importance of customer loyalty for companies, loading the right model and framework is a vital requirement for companies. This study proposes value co-creation as a framework that influences customer loyalty. As a source of competence, customers are active value creators who collaborate with companies and other actors in creating customer value (Vargo & Lusch, 2004; Grönroos & Ravald, 2011; Baehaqi, 2017). This is a novelty value in the study of customer behaviour, considering that various previous studies of customer loyalty resulted more from antecedents such as *satisfaction* (Banyte & Dovaliene, 2014); (Woratschek et al., 2020), *perceived value* (Ruiz-Molina & Gil-Saura, 2008), *service quality* (Zeithaml et al., 1996; Bloemer, Josee, Odekerken, 2020), also *commitment and trust* (Alkitbi et al., 2021; Gustafsson et al., 2005).

Establishing long-term relationships is necessary to maintain a loyal customer portfolio. Customer retention and customer share are important metrics in the context of customer relationship management (Verhoef, 2003). Customer share is defined as the ratio of customer purchases to products or services in total. Customer retention is associated with customer commitment, both affectively and calculatedly (Ndubisi et al., 2010). To maximize these metrics, companies usually use relationship marketing instruments such as loyalty

programs and direct mailing (Verhoef et al., 2007). The goal is to establish close relationships with customers, acquire customers and retain customers as long as possible. But as product preferences and the number of providers grow, there is scepticism about whether the program can be a successful tactic and strategy. Another framework needs to be prepared to anticipate this scepticism. This study proposes value co-creation as a customer relationship model in creating customer retention. Evidence that customer involvement can increase satisfaction and encourage customer loyalty (Higgins & Scholer, 2009), then value co-creation can be developed into a framework that needs to be tested for its impact on customer retention.

The existence of grocery retail in Indonesia are coloured by the domination of two big semi-modern players, namely Indomaret and Alfamart. As long of the second quarter of 2022, it is reported that Indomaret has 19,891 outlets and Alfamart has 18,810 outlets. The total of the both are 38,810 outlets spread throughout Indonesia (<https://databoks.katadata.co.id>). This numbers not include of modern outlets in big cities in Indonesia. The vast expanse of Indonesia's territory and the concentration of population settlements are spread out, the numbers of outlets not able to reach all of corners of the population. Outside the outlets of the two big players, we can find a large number of traditional outlets and an undetectable numbers. Intense competition occurs among traditional retail outlets as well as with semi-modern retail outlets. This condition invites the interest of PT. Sampoerna Tbk. to form a community for retail business people. Sampoerna Retail Community (SRC) was formed with the aim of conducting business collaboration and providing business assistance to traditional retail businesses so they can compete in the grocery retail competition. SRC built a strategy with the tagline "*thrifty, close, friendly*". The goal is to retain customers by closer relationships with customers. By placing retention as a strategy implemented by SRC, this study focuses on determining the relationship between value co-creation and customer retention.

Value Co-Creation Behaviour (VCB). Customers have developed as active actors who can create shared value, collaborate with companies in creating innovations, and become active partners of companies (Bijmolt et al., 2010). According to Vivek et al., (2012), these changes are a form of customer engagement. Customers have unlimited needs and wants, while companies have limited resources to meet customer expectations and desires. This idea requires a relationship model that provides space for both parties to exchange information, provide access, build the trust and share of risks (Prahalad & Ramaswamy, 2004a). Between the customer and the company has an agreed value that is co-created as expected value. A very influential notion in this regard is Service Dominant (S-D) Logic (Vargo et al., 2008; Vargo & Lusch, 2004). The core concept of S-D logic is that the customer is always a value creator. Customers are active actors and collaborative partners in relational exchanges, customers create shared corporate value through involvement in the entire service value chain (Grönroos, 2012; Merz et al., 2009).

Value co-creation is a process in which customers integrate their knowledge and experience to participate in the products, services or designs offered by the company, thereby generating their own preferences and fulfilment of needs as expected value (Prahalad & Ramaswamy, 2004b). The concept of value co-creation according to Vargo & Lusch, (2004) refers to the process of exchanging resources carried out between customers and companies, enabling both parties to obtain greater benefits.

Yi & Gong, (2013) have developed a dimensional scale of customer co-creation behavior into two parts, namely; participation behaviour and citizenship behaviour. Customer participation behaviour refers to the behaviour required (in roles) for the successful creation of shared value. In a broad sense, participation behaviour refers to all customer involvement behaviours in the expected value creation process. Meanwhile, in a more specific sense, the dimension of customer participation behaviour includes responsible behaviour, where the customer is an active actor who participates in carrying out tasks, and is also responsible for

the success of the service (Yi et al., 2011). Furthermore Yi & Gong, (2013) identified customer participation behaviour including information seeking, information sharing, responsible behaviour, and personal interaction.

While customer citizenship behaviour is voluntary behaviour (extra role) that provides extraordinary value to the company but is not always necessary for shared value creation (Bove et al., 2009; Yi et al., 2011; Yi & Gong, 2013). Previous researchers used a lot of citizenship behaviour to measure employee involvement in organizations that are more familiar with the term organizational citizenship behaviour (OCB) (Bove et al., 2009; Yi et al., 2011; Yi & Gong, 2013). Three dimensions in OCB include participation, loyalty and cooperation (Bettencourt, 1997). In the context of customers, these dimensions are then developed into three other dimensions, namely making recommendations, providing feedback to the organization, and helping other customers (Groth, 2005). Referring to these various opinions, Yi & Gong, (2013) further identified customer citizenship behaviour including feedback, advocacy, helping and tolerance.

Customer Loyalty. Customer loyalty is described as a multidimensional construct consisting of purchase intention, recommendation, price tolerance, word of mouth, complaint behaviour, and tendency to leave (Zeithaml et al., 1996; Bloemer, Josee, Odekerken, 2020; Schirmer et al., 2018). Loyalty involves the customer's feelings towards the business, which then drives the intention to repurchase, recommendations, and even the willingness to become part of the business (Cheng, 2011). It is therefore important to identify how customers feel about the business in order to understand this multidimensional construct. Kumar et al., (2006) identified loyalty into two dimensions, namely the attitude dimension and the behavioural dimension. Attitude loyalty is defined as a customer's feelings towards a product or service, while behavioural loyalty is indicated by repeat purchases and specific intentions for the product or service (Kumar et al., 2006). The attitude dimension is a psychological construct while the behavioural dimension is a substantial element (Cheng, 2011). Multidimensional identification of different customer loyalty shown by Ganesh et al., (2000) who identified loyalty into two constructs of loyalty behaviour namely; active and passive. Active loyalty behaviour is a conscious behaviour that is deliberately carried out. His actions are reflected in purchases and purchase intentions. Passive behaviour is identified when purchase intention or behaviour is influenced by switching and price changes. However, it is not easy to explain these various loyalty constructs as standard dimensions. Another opinion emerged from Dick & Basu, (1994) who considered loyalty as multidimensional which was not only measured by repeated purchases. In terms of customer loyalty, Dick & Basu, (1994) identifies customers with four categories namely; loyal, latent loyalty, false loyalty and no loyalty. The measurement is based on the relative attitude of customers and repeat patronage (Dick & Basu, 1994; Rowley & Dawes, 1999; Lam et al., 2004).

Customer Retention. Customer retention is generally understood as part of relationship marketing where customers are placed as the focus of long-term relationship maintenance (Verhoef, Reinartz, et al., 2010). Other studies confirm that customer retention can be created if the company is able to fully meet customer expectations, so that customer satisfaction is met (Ndubisi et al., 2010). Satisfaction is a customer's emotional reaction to what they receive, the purpose of the transaction and the fulfilments of customer needs (Alkitbi et al., 2021). Customer retention expresses the future desired result for satisfaction, so long-term relationship is indicated by satisfaction. Other studies also show that retention is

not only influenced by customer satisfaction, but also related to trust and commitment (Nasir & Morgan, 2017).

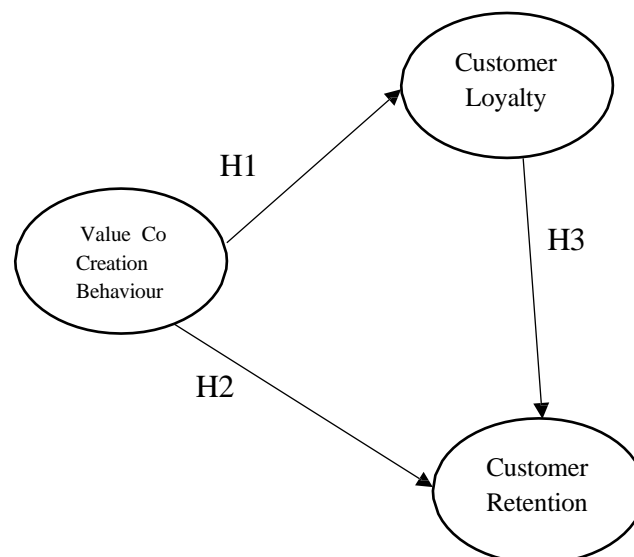
VCB Toward Customer Loyalty. Customer involvement is very important to create customer loyalty (Banyte & Dovaliene, 2014). The modern customer requires involvement in determining expected value. The higher their engagement, the higher their perceived value (Higgins & Scholer, 2009), creating customer satisfaction and ultimately driving customer loyalty (Velázquez et al., 2011). Customer engagement is implemented through VCB. The two behavioural dimensions (Yi & Gong, 2013), namely participatory behaviour and citizenship behaviour represent the value co-creation constructs whose implications will be tested for customer loyalty. Thus the hypothesis can be formulated as follows:

Hypothesis 1 (H1): *Value co-creation behaviour has a positive effect on customer loyalty.*

VCB Toward Customer Retention. Verhoef, (2003) shows that customer retention and customer share can be influenced by affective commitment and loyalty programs that provide economic incentives to customers. However, the effect is very small. Companies can use other approaches to create greater customer retention (Verhoef, 2003; van Doorn et al., 2010). VCB with its behavioural dimensions (Yi & Gong, 2013) has been recognized as a construct that has a positive influence on various retention antecedents such as *customer satisfaction* (Alkitbi et al., 2021), *customer loyalty* (Cossío-Silva et al., 2016), and *commitment customers* (Ndubisi et al., 2010). This study proposes the VCB dimension as a variable that influences customer retention. The hypothesis; Hypothesis 2 (H2): *Value co-creation behaviour has a positive effect on customer retention.*

Customer Loyalty Toward Customer Retention. Customer retention is understood as a form of long-term relationship with customers, therefore building a dynamic and sustainable framework is a strategic step for business people (Lemon & Verhoef, 2016; Verhoef, 2003). Besides being able to reduce costs, long-term relationships are believed to be able to generate company profitability (Lee et al., 2018; Ruiz-Molina & Gil-Saura, 2008). Some researchers argue that long-term relationships can occur when customers have loyalty to the company, because loyalty is actual retention in business (Gustafsson et al., 2005). Loyal customers will provide long-term affective benefits through positive advocacy and word of mouth, and provide benefits from repeat purchase behaviour (Cossío-Silva et al., 2016). Through the dimensions of attitude and behaviour (Kumar et al., 2006), customer loyalty makes an important contribution to customer retention. The formulation of the hypothesis is: Hypothesis 3 (H3): *Customer loyalty has a positive effect on customer retention and mediates the relationship between value co-creation behaviour and customer retention.*

Figure 1. Theoretical Framework



METHODS

This research was conducted in 6 provinces in Indonesia namely; DKI Jakarta, West Java, Banten, Central Java, DI Yogyakarta and East Java. With the distribution of respondents in 6 provinces, this research sample is considered to represent Indonesian customers. The samples collected were 336 respondents, then processed using the PLS-SEM method through the WarpPLS version 7.0 software. The choice of the PLS-SEM method in this study is because the PLS-SEM method is considered to have a high level of precision in the case of predicting customer behaviour (Sholihin & Ratmono, 2013).

The demographic profile of the respondents is shown in table 1. The characteristics of the respondents show that 60% of the respondents are women and the majority are housewives (45%). Meanwhile, in terms of age, the majority of respondents were aged 31-40 years (30%) with the education level of the majority being senior high school graduates (36%).

Table 1. Characteristics of Respondents

Characteristics	Category	Frequency	Percentage
Gender	Male	134	40
	Female	202	60
Age	16-20 years old	48	14
	21-25 years old	61	18
	25-30 years old	84	25
	31-40 years old	102	30
	> 40 years old	41	12
Education	Junior High School	94	28
	Senior High School	114	36
	Diploma/Bachelor	62	19
	Others	56	17
Job	Housewife	151	45
	Student	92	27
	Private/Government Employees	53	16
	Entrepreneur	32	10
	Others	8	2

Source: Data Analysis of WarpPLS

Evaluation of the outer model is intended to demonstrate the validity and reliability of the data obtained. The factor loading approach is used to show the reliability of the data provided that the factor loading has a coefficient > 0.7 (Sholihin & Ratmono, 2013). Table 2 presents the structure of loading and cross loading where validity is considered satisfactory because factor loading has a coefficient of > 0.7 . While discriminant validity can be seen through cross loading in table 2 where the square root AVE value must have a higher number than the value of other constructs that are on the diagonal or below it. Table 2 already shows conformity with the indicators, so that discriminant validity is considered satisfactory.

Tabel 2. Combined Loadings and Cross-Loadings

	VCB	CL	CR	Type (a)	SE	P Value
X1	0.765	0.018	-0.179	Reflect	0.049	<0.001
X2	0.853	0.235	-0.266	Reflect	0.048	<0.001
X3	0.694	-0.581	0.209	Reflect	0.049	<0.001
X4	0.727	0.048	0.481	Reflect	0.049	<0.001
X5	0.884	0.223	-0.276	Reflect	0.048	<0.001
X6	0.849	0.067	0.137	Reflect	0.048	<0.001
X7	0.793	-0.125	-0.004	Reflect	0.049	<0.001
Y11	0.259	0.912	-0.280	Reflect	0.048	<0.001
Y12	0.116	0.910	0.061	Reflect	0.048	<0.001
Y13	0.074	0.922	0.037	Reflect	0.048	<0.001
Y14	-0.087	0.908	-0.100	Reflect	0.048	<0.001
Y15	-0.369	0.898	0.286	Reflect	0.048	<0.001
Y21	-0.015	-0.172	0.925	Reflect	0.048	<0.001
Y22	-0.158	0.256	0.911	Reflect	0.048	<0.001
Y23	0.171	-0.080	0.929	Reflect	0.048	<0.001

Notes: Loadings are unrotated and cross-loadings are oblique-rotated. SEs and P values are for loadings. P values < 0.05 are desirable for reflective indicators.

Table 3 shows the value of convergent validity as measured by the Cronbach's Alpha value indicator > 0.7; Composite Reliability > 0.7; and Average Variances Extracted (AVE) > 0.5 (Sholihin & Ratmono, 2013). According to Imam, (2011) the Cronbach's Alpha (CA) value is closer to 1, the more it has perfect reliability. In the case of CA = 0.575, the reliability value is considered moderate, but the data can still be said to be valid. Of all the measurement indicators, the results are in accordance with the required values. Therefore it can be said that all variables in this study are valid and reliable.

Table 3. Validity and Reliability Test Result

Variable	Sources	Number of Indicators	Cronbach's Alpha	Composite Reliability	Average variances extracted (AVE)	Square Roots of AVE
Value Co-Creation Behaviour	(Yi & Gong, 2013)	7	0,903	0,924	0,637	0.798
Customer Loyalty	(Kumar et al., 2006); (Cheng, 2011)	5	0,948	0,960	0,828	0.910
Customer Retention	SRC Platform	3	0,944	0,944	0,850	0.922

Source: Data Analysis of WarpPLS

The results of testing the hypothesis in this study can be seen in table 4. Value co-creation behaviour has a positive influence on customer loyalty (H1). The coefficient variable is 0.85 with a p-value of 0.01. The relationship between value co-creation behaviour and customer retention (H2) is indicated by a variable coefficient of 0.23 with a p-value of 0.01. Meanwhile, the relationship between customer loyalty and customer retention (H3) directly or as mediation has a coefficient of 0.63 with a p-value of 0.01 and an adjusted R² of 0.72. From the overall test, all hypotheses in this study are acceptable.

Table 4. Hypothesis and Test Result

	Hypothesis	Coefficient of Variable	P Value	R ² Adjusted
H1	Value Co-Creation Behavior → Customer Loyalty	0.85	0.01*	-
H2	Value Co-Creation Behavior → Customer Retention	0.23	0.01*	-
H3	Customer Loyalty → Customer Retention	0.63	0.01*	0.72

Note: Significant at $P < 0.05$

RESULTS AND DISCUSSION

This research yielded interesting findings. The characteristics of the respondents were dominated by housewives, namely 45%. This indicates that the products purchased are products related to household needs. Because this research does not contain the types of products available at SRC outlets, a probability perspective is used to summarize the research results. The availability of household products is one of the characteristics of SRC outlets. The differentiation that gives SRC outlets added value compared to other grocery retail outlets is the availability of daily necessities such as rice, cooking oil, vegetables, spices and other staples which are presented in bulk (non-packaged). The advantages of non-packaged products are cheaper prices with product sizes or dosages that can be adjusted according to the needs of the customer. Non-packaged products are products that are usually found in traditional markets, where buyers can determine the size or dose they want. Because it takes active interaction between buyers and waiters. It is this traditional behaviour that SRC retail outlets adopt as product and service differentiation in creating customer relationships.

"Thrifty, close, friendly" is SRC's business platform as a tagline designed to attract and build relationships (retention) with customers. As a business strategy, retention is built through price factors (*thrifty*), proximity to where you live (*close*) and ease of communication between customers and providers (*friendly*). Providing products in non-packaged form is proof that the business strategy tagline is applied operationally. Besides demonstrating competitive advantage through differentiation, it has been shown effective relationships with customers. These results indicate that customer retention can be created through differentiation in the provision of products and services. The fact that housewives prefer to shop at SRC outlets that are close to their homes proves that customer retention is successful. SRC outlets have emerged as an alternative that diverts customers from traditional markets. Unfortunately, so far no previous research has been found that can be used as a comparison of the findings of this study. Theoretically, The findings in this study confirm the theoretical truth that service is the basic unit of exchange (Vargo & Lusch, 2004). The SRC business platform provides knowledge and experience to customers, so that it becomes a factor that greatly influences the achievement of value co-creation (Prahalad & Ramaswamy, 2004a; Vargo et al., 2008; Grönroos, 2012). The greater the space for VCB, the greater the potential for retention through the service value chain (Sashi, 2012).

This research also shows evidence that strengthens the relationship between VCB and customer loyalty (H1). VCB explains 85% of the customer loyalty variance and has high statistical significance. These results confirm previous studies which integrated the multidimensional concept of loyalty into one concise construct, namely repurchase intention,

recommendation intention, customer retention, or price tolerance (Cheng, 2011). Referring to the opinion of Kumar et al., (2006) regarding customer loyalty, the study of Cossío-Silva et al., (2016), has proven a significant relationship between VCB and customer loyalty in both attitudinal and behavioural dimensions. In a different perspective, the study of Lee et al., (2018) also produced the same findings in the fitness centre case. Customer participation through VCB benefits both the customer and the company, and in turn positively influences customer loyalty to the fitness club. Although this study does not contain the dimensions of loyalty separately, in the case of retail SRC shows findings that corroborate the studies conducted by Cossío-Silva et al., (2016) and Lee et al., (2018). This study also confirms that the dimensional behavioural scale (Yi & Gong, 2013) adopted in this study and also used in the studies of Cossío-Silva et al., (2016) and Lee et al., (2018) confirms a positive impact on customer loyalty.

The results also show that there is a positive effect of VCB on customer retention (H2). VCB explains 23% of the customer retention variance with significant. Even though the test results show a low correlation coefficient value, these results still provide a significant aspect of knowledge on the development of customer behaviour. There was no confirmation from previous research in a similar study, so there were no findings that could be used as comparisons. This research is the first to examine the relationship between VCB and customer retention, so the results of this study can be used as an initial reference in the context of the relationship between VCB and customer retention.

There is a positive relationship between customer loyalty and customer retention (H3). This result is not surprising because various previous studies (Gustafsson et al., 2005; Ranaweera & Prabhu, 2003; Zou & Shao, 2022) have produced many findings indicating a positive effect of this relationship. With a variable coefficient of 63%, customer loyalty is a strong antecedent of customer retention. Considering the low effect of the VCB relationship on customer retention (H2), it is necessary to consider mediating the relationship between the two. This study shows positive findings of customer loyalty as a strong mediator in creating customer retention. This result also reinforces the view that loyalty is the actual retention of customers (Gustafsson et al., 2005). By creating customer loyalty, customer retention is automatically formed through a long-term relationship mechanism. Theoretically, the research results answer the notion that customer participation through VCB will have a positive impact on maintaining long-term customer relationships (Verhoef, Venkatesan, et al., 2010; Ndubisi et al., 2010; Grönroos, 2012). With an R^2 value of 73%, it means that the various indicators in this study make a major contribution in creating customer retention.

CONCLUSION

Customer retention is an active company action in creating maintenance of long-term relationships with customers. Customer retention can be implemented through VCB in the dimensions of participate behaviour and citizenship behaviour. VCB make customer loyalty which has the potential to result in customer retention. The higher the customer's VCB level, the stronger loyalty to the company will result. This research has proven practically and theoretically the role of VCB in the mechanism of maintaining long-term customer relationships with companies either directly or through mediation of customer loyalty.

This research contributes both practically and academically. Practically the research results provide additional knowledge about customer loyalty which has been considered as actual customer retention. Customer retention can be developed as a business strategy just like the SRC tagline, namely frugal, close, friendly. As a strategy, the SRC business platform is proven to make a practical contribution for community members to develop competitively. While contributing academically, this research provides significant novelty to marketing

studies, especially towards the development of customer behavior. The development of technology has an impact on changes in customer behavior that are very significant, so that research contributes to a broader study of customer behavior developments. The limitation of this study is the use of a non-probability sample, which tends to compromise and generalize the results, so that the transverse nature of the study precludes establishing a causal relationship. The research is unidirectional because it measures from the customer's perspective, so there is a possibility of hindering the emergence of valuable findings from other interest groups such as employees, store owners, and association officials.

This limitation opens up the possibility of more interesting further research in the future. Further research is still needed with a more integrative model so as to clarify and perfect this research. In addition, the very broad notion of co-creation allows future research on the factors that may act as antecedents of customer behaviour and its attachment to value co-creation. It is possible that differences in demographic characteristics in other regions will find different research results, so that replication of the questionnaire is interesting to do to enrich academic and practical values.

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Expanding Supply Chain Performance in Logistic and Forwarder Companies: How Collaboration Enhance Capabilities and Innovation Performance



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ABSTRACT

The changes in the business landscape between supply chains and the lack of literature on supply chains encourage scholars to investigate the relevant topic. The study aims to investigate the linkage between supply chain collaboration, capabilities, and innovation performance on supply chain performance in emerging country Indonesia. This study distributed questionnaires to 358 logistics managers and forwarders as research samples using a quantitative approach in Bali, Indonesia. The study's results showed that supply chain collaboration significantly affected innovation performance, supply chain capabilities, and supply chain performance. In addition, innovation performance insignificant effected supply chain performance. Another crucial finding was supply chain capabilities partially mediate relationship between supply chain collaboration and supply chain performance. This result enhanced logistic and forwarder companies manager to strengthen their collaboration among partners. Theoretical and managerial implications were also discussed in this paper.

Keywords: Innovation Performance; Supply Chain Capabilities; Supply Chain Collaboration; Supply Chain Performance.

INTRODUCTION

The current business landscape is transforming from intercompany competition to supply chain-based competition (Baah, Acquah, et al., 2021; Baah, Opoku Agyeman, et al., 2021). Given the critical function of the supply chain in improving operational performance (Truong et al., 2017) and other essential aspects of organizational agility (Arsawan, Hariyanti, et al., 2022) and sustainability performance (Salam et al., 2017). Thus, organizations must collaborate intensely with stakeholders involved in the supply chain mechanism, i.e., producers, entrepreneurs, governments, and logistics companies (Y. Huang et al., 2020). Given the vital function of the supply chain and all parties involved, developing a collaboration structure will improve performance and minimize multiple disruptions that may occur (L. Huang et al., 2020). In the existing literature, the supply chain is a dynamic construct influenced by various determinants and viewpoints. For example, a study conducted by Rajaguru & Matanda (2019) found out how the role of collaboration forms a network that strengthens supply chain capability. Furthermore, collaboration improves coordination which has implications for increasing capabilities, innovation (Asree et al., 2018), and performance (Liu et al., 2020; Mandal, 2017).

The present study bridges the gaps in studies as follows. First, a previous study reveals that supply chain capabilities' roles as a predictor of supply chain performance have yet to be extensively

explored (Hsin Chang et al., 2019). At the same time, supply chain capabilities provide a strong foundation for building supply chain performance (S. H. Liao & Kuo, 2014) and holistic organizational performance (Aslam et al., 2020). Second, in the literature regarding the supply chain, the role of innovation performance needs to be investigated and explored adequately (Hong, Liao, et al., 2019) because innovation performance has not been considered an essential trigger in building sustainable performance and competitiveness (Arsawan, Koval, et al., 2022). Third, considering that Indonesia has a low ranking in terms of supply chain performance with very high logistics costs, strategic efforts are needed to improve this circumstance.

Fourth, there is a significant gap in supply chain management. Although the researchers can explain the effect of supply chain management activities on the operational performance of companies, they have yet to explore how supply chain management activities affect innovation performance to build competitive advantage. Cooperation between supply chain members can also generate a higher rate of transaction costs due to weak networking flexibility (Schmidt & Wagner, 2019) and make collaborative innovation and knowledge sharing in the supply chain more complex. They were constructed to reduce transactional costs and unpredictability, and the relationship quality between supply chain members is essential for collaborative innovation and knowledge sharing (Jean et al., 2014). Related studies addressed the linkage between the quality of supply chain linkages and supply chain performance (Schmidt & Wagner, 2019; Tigga et al., 2021; Tsai & Hung, 2016). Nevertheless, insights into the baseline mechanisms by which relationship quality affects firm innovation performance and the role of mediation are lagging. (Rungsithong et al., 2017).

Thus, investigating the determinants of supply chain performance in Indonesia is based on three main reasons. First, having 17,000 islands requires Indonesia to build solid logistics and supply chain collaborations because it impacts operational costs, coordination costs, and performance. The ability to manage coordination and collaboration between supply chain partners will have a positive effect on strengthening cooperation and strengthening collaboration that it is inline with stakeholder theory (Freeman, 1998). Second, logistics companies are the backbone of the distribution of goods and services in archipelagic countries. It occurs because only logistics companies can do good inter-regional cooperation through networking and collaboration (Paula et al., 2019; Pomponi et al., 2015). Third, Indonesia needs infrastructure and comprehensive studies to build a supply chain to increase the global competitiveness index while reducing logistics costs (WEF, 2019).

The existing literature reveals that supply chain collaboration aims to identify, use, and assimilate resources internally and externally and information to promote activities of the entire supply chain (S. H. Liao & Kuo, 2014). Furthermore, collaboration is a mechanism for combining and testing capabilities that affect organizational operations (do Canto et al., 2020). Interaction and collaboration between supply chain partners form a network that can help increase capability, effectiveness, and efficiency throughout the supply chain (Rajaguru & Matanda, 2019). Intense cross-organizational collaboration, collaborative, and coordinating efforts enable organizations to build resources that enhance organizational capabilities, processes, and performance (Soosay & Hyland, 2015). Furthermore, collaboration with stakeholders helps achieve the required supply chain coordination (Mandal, 2017) to enhance supply chain performance (Liu et al., 2020). It aligns with previous findings (I. Wu et al., 2014) that the critical role of collaboration determines supply chain performance.

For logistics and forwarder companies, supply chain collaboration's vital role is to enhance innovation performance sustainably (Cheng et al., 2014). Organizations with solid collaboration with supply chain associates tend to have high innovation performance (Nguyen et al., 2019a). It occurs because of the diffusion and transfer of knowledge information, which has implications for collaborative innovation (Shin et al., 2019). The quality of collaboration is an essential trigger for innovation performance because it involves collaboration, commitment, and communication (Li, 2020); thus, by supporting a collaborative relationship in the long term, innovation performance will be accomplished (Asree et al., 2018). Therefore, these are the formulated hypotheses:

H1: Supply chain collaboration positively affects supply chain capabilities

H2: Supply chain collaboration positively affects supply chain performance

H3: Supply chain collaboration positively affects innovation performance

Organizations develop their capabilities to meet the dynamic market to allow effective resource configuration (J. B. Barney, 2001). Supply chain capability identifies, utilizes, and assimilates resources internally and externally to encourage these activities (S.-H. Liao et al., 2021). Supply chain capabilities will improve operational capabilities and enable organizations to coordinate comprehensive resources to improve innovation performance (Y. Liao & Li, 2019). Furthermore, previous studies found that supply chain capabilities considerably affect supply chain performance and organizational performance (Yu et al., 2018). On the other hand, organizations with more outstanding SCM capabilities in flexibility, integration, and responsiveness have a significant supply chain performance (Flöthmann et al., 2018). Thus, supply chain capabilities assist organizations' accomplishment by increasing product availability, on-time shipments, and reducing inventory positions to boost supply chain performance (Asamoah et al., 2020). The discussion leads to the formulated hypotheses:

H4: Supply chain capabilities positively affect innovation performance

H5: Supply chain capabilities positively affect supply chain performance

Innovation performance is an organization's capability to enhance its products and services' significance, usability, and performance (Hong, Liao, et al., 2019). Improved supply chain performance can be acquired by encouraging relational exchange and innovation and collaborating with associates to detect areas needed for enhancement (Seo et al., 2014). Innovation can affect interactions between producers, suppliers, and customers. Although there is extensive supply chain management literature, researchers seem to overlook the linkage between innovation performance and supply chain performance. To the authors' knowledge, innovation performance will positively impact supply chain performance, especially in logistics. Eventually, the formulated hypothesis is:

H6: Innovation performance positively affected supply chain performance

Supply chain collaboration with stakeholders (i.e., producers, suppliers, competitors, and other organizational units) will improve innovation performance (Cheng et al., 2014) in building a competitive advantage for the members of the supply chain (Lim et al., 2017). Enhancement of the quality of collaboration through networking, commitment, and building effective communication to reduce uncertainty is required to build sustainable innovation performance (Li, 2020). Thus, it enhances supply chain capabilities and forms an effective and efficient network throughout the supply chain (Rajaguru & Matanda, 2019). Finally, intense and robust collaboration improves the supply chain enabling organizations to increase innovation (Y. Liao & Li, 2019). Hence, this is the formulated hypothesis:

H7: Supply chain capabilities partially mediate the linkage between supply chain collaboration and innovation performance

Collaboration in the supply chain system will increase incremental and radical continuous innovation (Nguyen et al., 2019b; Yunus, 2018), which improves supply chain performance (Asamoah et al., 2020). The role of supply chain collaboration in this mediation framework is to improve innovation performance in building supply chain performance. Cooperation with supply chain associates will provide insight and experience to create innovation (Paula et al., 2019) to build sustainability among partners (Chen et al., 2017), which generate supply chain performance (Baah, Opoku Agyeman, et al., 2021; Cheng et al., 2014). Based on the description, the formulated hypothesis is:

H8: Innovation performance partially mediates the linkage between supply chain collaboration and supply chain performance.

Therefore, the study examines logistics and forwarder companies' supply chain performance determinant model. Figure 1. depicts the research model.

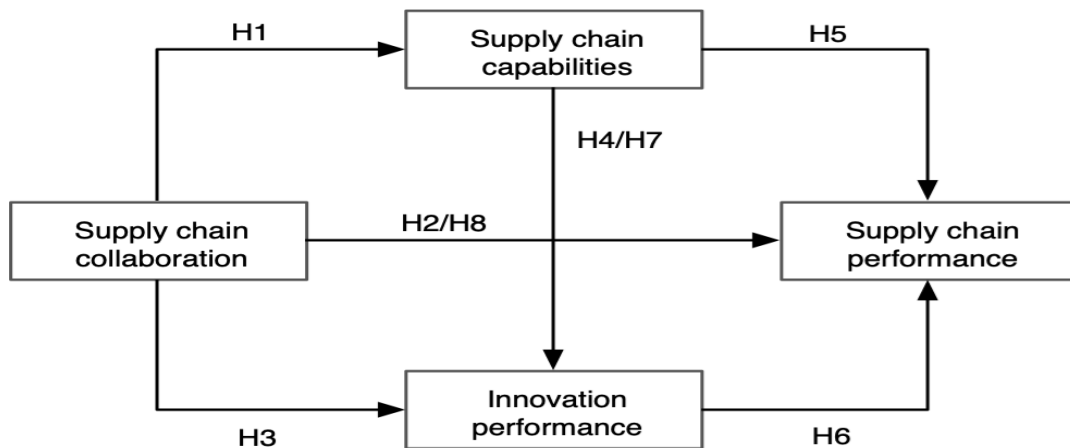


Figure 1. Supply chain performance model

METHODS

The population was 179 companies affiliated with the Indonesian logistics and forwarder association. The sampling was a saturated sample, with the respondents being operational managers and chief directors. A total of 358 respondents were assumed to know strategic policies regarding the supply chain. Research variables measurement adopted previous research using a 1-7 Likert scale (“1-strongly disagreed – 7-strongly agreed”). Questionnaires were distributed online via Google Forms and collected for 3 months (October-December 2022).

To measure the variables, we used the outputs of several empirical studies. Supply chain collaboration measurement was 4 dimensions and 16 indicators, i.e., 1) internal collaboration (3 indicators), 2) collaboration with suppliers (6 indicators), 3) collaboration with customers (4 indicators), and 4) collaboration with competitors and others (3 indicators) was adapted from Chen et al. (2017). Supply chain capabilities measurement was 4 dimensions with 17 indicators, i.e., 1) information exchange (4 indicators), 2) integration (4 indicators), 3) coordination (5 indicators), and 4) responsiveness (4 indicators) adapted from the study Asamoah et al. (2020) and F. Wu et al. (2006). Innovation performance measurement 3 dimensions and 9 indicators, i.e., 1) product innovation (3 indicators), 2) process innovation (3 indicators), and 3) management innovation (3 indicators) adapted from Hong et al. (2019). Supply chain performance measurement was 3 dimensions and 14 indicators, i.e., 1) reliability (5 indicators), 2) efficiency (4 indicators), and 3) flexibility (5 indicators) adapted from previous studies (Asamoah et al., 2020; Koçoğlu et al., 2011; Lee et al., 2007).

Furthermore, the data were analyzed using SEM-PLS (Hair Jr et al., 2017) and was predictive to test the model proposed in this study. In addition, with its soft assumptions, PLS provides strength power to explain research models (Hair et al., 2019).

RESULTS AND DISCUSSION

This study involved 358 respondents from 179 companies engaged in logistics and forwarders in Bali Province by distributing questionnaires to operational managers and chief directors regarding strategic policies regarding supply chain management. The results of descriptive statistics revealed <5 years (5%), 6-10 years (32.7%), 11-15 years (15.3%), 16-20 years (30.4%), and >20 years (20.3%) based on experience. When viewed from the age, the statistics indicated <25 years (5.7%), 25-30 years

(29.2%), 31-35 years (30.2%), 36-40 years (26.3%), and 41- 45 years (8.8%). The statistics showed males (66.7%) and females (33.3%) based on gender. Further, from educational level, the statistics denoted bachelor (81.6%), master (17.7%), and doctoral (0.7%).

Furthermore, to achieve the objectives of this research, we initially carried out the outer model measurement. Table 1. illustrates that the 69 items of the four key variables were the base of the present research model. This research model's reliability was evaluated by Cronbach's alpha (Hair Jr et al., 2016). Table 1. reveals that Cronbach's alpha values exceeded 0.7. Furthermore, the research model's convergent validity was examined using average variance extract, composite reliability, and item reliability variable, respectively. According to experts' suggestions (Hair Jr et al., 2017), CR and AVE values must exceed 0.7. Thus, AVE and CR values met the criteria. The loading factors of the individual-level items exceeded 0.7.

Table 1. Instrument reliability test

Second order constructs	Items*	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)
Supply chain collaboration	Collaboration		1.000		
	IC	0.766	0.847	0.876	0.710
	CWS	0.889	0.921	0.934	0.681
	CWC	0.857	0.868	0.897	0.678
	CWCO	0.847	0.851	0.912	0.765
Supply chain capabilities	Capabilities		1.000		
	IC	0.842	0.966	0.894	0.724
	INTEG	0.843	0.877	0.883	0.693
	COOR	0.856	0.879	0.877	0.632
	RESP	0.861	0.887	0.921	0.735
Innovation performance	Innovation P		1.000		
	PROD	0.855	0.874	0.922	0.786
	PROC	0.875	0.892	0.939	0.823
	MAN	0.898	0.879	0.932	0.836
Supply chain performance	Performance		1.000		
	REL	0.821	0.825	0.869	0.633
	EFFIC	0.880	0.887	0.924	0.733
	FLEX	0.865	0.872	0.921	0.667

Table 2. Perbandingan $\sqrt{\text{AVE}}$ dengan Korelasi Antar Variabel

Variables	AVE	$\sqrt{\text{AVE}}$	Coefficient of Correlation*			
			SCCo	SCCs	IP	SCP
Supply chain collaboration	0.541	0.736	1.000			
Supply chain capabilities	0.591	0.769	0.417	1.000		
Innovation performance	0.532	0.729	0.387	0.564	1.000	
Supply chain performance	0.549	0.741	0.268	0.532	0.323	1.000

Furthermore, according to experts' criteria (Fornell & Larcker, 1981), upon evaluating the square root of the AVE of each variable, when the first value of the upper side of the respective column

is the highest, it indicated the formation of discriminant validity (Fornell & Larcker, 1981; Hair et al., 2016). Table 2. depicts correlation analysis based on the criteria.

The next step was to investigate the structural model to test the accuracy of the predictions and the associations between the variables, following the experts' advice (Tenenhaus et al., 2005) using the goodness of fit with a value of 0.486 which signified high fitness. Furthermore, using R^2 showed that the supply chain performance model was fit (27.6%). Meanwhile, the Q^2 score was positive (0.913), and all components have good predictive power (Chin et al., 2020). After testing the outer and inner models, the next step was testing the research hypotheses. Table 3. presents information on the coefficient of the direct linkage between variables through the original sample and t statistics > 1.96).

The data analysis showed that 5 of the 6 direct linkages supported the hypotheses (see Table 3.) The linkage between supply chain collaboration and supply chain capabilities was significant ($\beta=0.462$, t-statistic 12.538); thus, hypothesis 1 was accepted. These results supported previous studies (Baah, Opoku Agyeman, et al., 2021; S. H. Liao & Kuo, 2014) that effective and efficient collaboration will improve supply chain capabilities through the integrity of resources to achieve supply chain capabilities (Rajaguru & Matanda, 2019) in planning, procurement, and sales targets (Chand et al., 2020). The linkage between supply chain performance and supply chain collaboration ($\beta=0.239$, t statistics 6.160) was significant; hence, hypothesis 2 was accepted. The research results aligned with previous studies (Mandal, 2017; Mandal & Saravanan, 2019) that explained collaboration is a competitive area to improve performance by expanding mutually beneficial resources (Um & Kim, 2019).

Table 3. Path coefficients

Constructs	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Decisions
Supply Chain Collaboration -> Supply Chain Capabilities (H1)	0.462	0.463	0.037	12.538	0.000	Supported
Supply Chain Collaboration -> Supply Chain Performance (H2)	0.239	0.238	0.039	6.160	0.000	Supported
Supply Chain Collaboration -> Innovation Performance (H3)	0.304	0.298	0.048	6.300	0.000	Supported
Supply Chain Capabilities-> Innovation Performance (H4)	0.252	0.256	0.047	5.345	0.000	Supported
Supply Chain Capabilities -> Supply Chain Performance (H5)	0.454	0.450	0.055	8.298	0.000	Supported
Innovation Performance -> Supply Chain Performance (H6)	0.006	0.004	0.039	0.165	0.876	Not Supported

Furthermore, the linkage between innovation performance and supply chain collaboration ($\beta=0.304$, t-statistic 6.300) was significant; thus, hypothesis 3 was accepted. It reinforced the finding that collaboration is the basis for continuous innovation (Nguyen et al., 2019b). Collaborative relationships with key partners enabled innovation performance to be created due to creation (Asree et al., 2018). The establishment of innovation performance through partner relationships enhanced the competitive advantage of the supply chain (Cheng et al., 2014). Supply chain capabilities and innovation performance ($\beta=0.252$, t-statistics 5.354) had a significant linkage; thus, hypothesis 4 was accepted. It

supported the findings (Hong, Liao, et al., 2019), which explained that supply chain capabilities increased value creation and innovation acceleration.

The linkage between supply chain capabilities and supply chain performance ($\beta=0.454$, t statistics 8.298) was significant; hence, hypothesis 5 was accepted. These results supported the findings (Asamoah et al., 2020; Rajaguru & Matanda, 2019) that supply chain capabilities helped organizations assimilate, identify, and use internal and external resources to facilitate all activities to achieve performance. Further, innovation and supply chain performance ($\beta=0.006$, t statistic 0.165) was insignificant; therefore, hypothesis 6 was rejected. It signified that innovation performance did not affect supply chain performance in logistics and forwarder companies. The result of the present study was contrary to previous studies (Seo et al., 2014; Singhry, 2015) that innovation was a vital predictor in building supply chain performance.

Furthermore, to evaluate mediation with the variance accounted for (VAF) (Hair Jr et al., 2016). (referensi) method. There were two mediation pathways evaluated in this study. First, supply chain capabilities in the linkage between innovation performance and supply chain collaboration (0.116/0.420). The VAF value was 0.276 (27.6%), which indicated a partial mediation; thus, hypothesis 7 was accepted. If the collaboration between supply chains goes well, it will increase capability, increasing innovation performance (Hong, Zheng, et al., 2019; Maldonado-Guzmán et al., 2019). Second, we concluded that innovation performance did not mediate the linkage between supply chain performance and supply chain collaboration (0.001/0.240). With the VAF value = 0.007 (7%), hypothesis 8 was rejected. The calculation results are illustrated in Table 4. and Figure 2.

Table 4. Mediation effects

Link*	Mediator	Independent Variable→ Mediator	Mediator→ Dependent Variable	Direct	Indirect	Total effect	VAF (%)	Decisions
SCCol-IP	SCCap	0.462	0.252	0.304	0.116	0.420	0.276	H7=Partial mediation
SCCol-SCP	Innov	0.304	0.006	0.239	0.001	0.240	0.007	H8= No mediation

The analysis denoted that this study enriched the insight into supply chain management in five aspects. First, the results of this study revealed that collaboration develops supply chain capabilities (Biotto et al., 2012; Shin et al., 2019) and innovation performance (Ferraris et al., 2021; Hong, Zheng, et al., 2019). Consequently, this study contributed to a comprehensive understanding of improving supply chain performance (Baah, Opoku Agyeman, et al., 2021; Cheng et al., 2014; S. H. Liao & Kuo, 2014). Second, the study showed that innovation performance was affected by supply chain collaboration and supply chain capabilities, which answered the gaps in the literature from Y. Liao & Li (2019). To the authors' knowledge, there has yet to be a study that attempts to initiate an evident linkage between different types of collaboration and capabilities to achieve innovative performance and eventually gain a more comprehensive understanding (Bravo et al., 2017; Zimmermann et al., 2016). An integrated perspective was required to understand how collaboration and capabilities mutually reinforced innovation performance in the supply chain context (Asree et al., 2018).

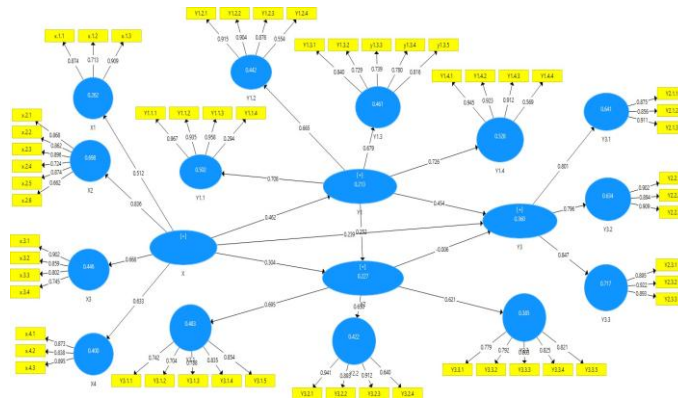


Figure 2. SmartPLS Output analysis

Third, unexpectedly, the innovation performance effect was insignificant on supply chain performance. It implied that innovation performance did not affect supply chain performance in logistics and forwarder companies. The results contradicted previous studies, which stated that innovation is a primary predictor in establishing supply chain performance (Seo et al., 2014; Singhry, 2015). The possible explanation was that logistics and forwarder companies focused more on distributing products and services. Subsequently, they only required innovation occasionally.

Fourth, supply chain capabilities partially mediated the linkage between supply chain collaboration and innovation performance. If the collaboration between supply chains goes well, it will increase capability, increasing innovation performance (Hong, Zheng, et al., 2019; Maldonado-Guzmán et al., 2019). Fifth, in the aspect of the theory, this study enhanced stakeholder theory (Freeman, 1998) through mutually beneficial collaboration configurations between associates. The strength of collaboration provides superiority in knowledge and dynamic capabilities to generate a sustainable competitive advantage (J. Barney, 1991).

CONCLUSIONS

Three crucial conclusions were yielded from this study. First, collaboration is the foundation for building supply chain capability, innovation, and performance. Second, innovation performance insignificantly affects supply chain performance. Third, supply chain capabilities partially mediate the linkage between supply chain collaboration and innovation performance. Although this study offers theoretical and managerial significance, there are limitations to be addressed. First, supply chain collaboration has several dimensions, such as customer integration, internal integration, and supplier integration have yet to be explored in this study. Hence, we recommend re-examining the above model by splitting these dimensions into key variables for further research. Second, this study is based on 358 responses from 179 logistics and forwarder companies in Bali, Indonesia to evaluate the hypotheses. Thus, the forthcoming study must consider acquiring diverse data from different countries to increase generalizability.

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Bootstrap Financing as a Capital Raising Strategy in *Ikat* Weaving Enterprises

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ABSTRACT

Financial bootstrapping is a creative and non-conventional financing strategy by MSME actors to reduce dependence on external funding sources. This study aims to describe the implementation of the bootstrap financing method in obtaining a source of capital for MSMEs running the ikat weaving businesses. Using the samples of 167 ikat business owners in the district of Kampera of the regency of Sumba Timur in the province of Nusa Tenggara, this study used quantitative descriptive analysis techniques. The results show that ikat businesses use bootstrap financing strategies, including independent funding of the owners (including borrowed or invested funds from relatives), receivables management, sharing resources with other businesses, delaying payments to protect cash, and making use of subsidies. From the six indicators of bootstrap financing, the study found that the ikat businesses do not implement one strategy regarding inventory management.

Keyword: Bootstrap Financing; MSME; Capital

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) have played a critical role in developing the economy. In the Indonesian context, MSMEs have contributed to the country's Gross Domestic Product (GDP); and have survived the global monetary crisis. Additionally, MSMEs have also absorbed numerous workforces in the country. According to the data from the Ministry of Cooperatives and SMEs of The Republic of Indonesia (Kementrian Koperasi dan Usaha Kecil dan Menengah Republik Indonesia), there were 64.194.056 MSMEs in 2018, which were classified into the following details: 63.350.222 micro businesses, 783.132 small businesses, and 60.702 medium businesses. This data shows an increasing number compared to the previous year, which was 62.922.617. In other words, the business has experienced a significant increase of 2.02%. The record also shows that the business units have absorbed 97% of the total 116.978.631 workforce (Kementrian Koperasi dan Usaha Kecil dan Menengah Republik Indonesia, 2018). On 31 December 2019, the Office of Cooperatives Manpower and Transmigration (Nakertrans) of NTT province recorded 104.188 MSMEs (Tuames, 2019).

The data shows that MSMEs have played a crucial role in Indonesian economic development because they provide employment for the community and become the source of earnings for low-income groups of people (Ratnawati & Hikmah, 2012). MSMEs have also been the means for the community to meet their daily needs. Despite their potential, MSMEs are facing several challenges, including capital (Mazzarol & Reboud, 2017), human resources (Saini & Budhwar, 2008), relatively low education level (Efrata & Herdinata, 2012), and

issues related to business management. This study is going to focus on capital problems because they have become the main issue faced by MSMEs in developing countries, such as Indonesia (Ebben, 2009; Nguyen & Nghiem, 2016; Rao et al., 2019).

One of the indicators to determine a progressive business is its performance. In other words, a thriving business always keeps its performance by generating high income and obtaining profits larger than the expenses. The government expects that a region can increase its economic potential through the entrepreneurial community that utilizes local resources so local funding is well-absorbed and useful (Hendriyanto, 2015).

Financial bootstrapping was first coined by Auken (2005), who stated that *bootstrapping* is favorable because of some reasons: 1) accessible source of funds, 2) ease of use, and 3) less complicated requirements. Further, Rita (2019) suggests that the creative funding strategy and non-conventional funding sources may help MSME actors to reduce their dependence on external funding. The goal of *financial bootstrapping* is to help MSME actors enhance their businesses without the burden of the high cost of bank interest rates. Winborg & Landström (2001) categorize financial bootstrapping into six indicators: 1) independent funding from the owners, including borrowed or invested funds from relatives, 2) minimizing accounts receivable, 3) sharing resources with other businesses, 4) delaying payments to protect cash, 5) inventory management, 6) making use of subsidies. The method of financial bootstrapping is favorable to help MSMEs grow sustainably and create competitive excellence.

Based on the record, there are 4.830 employments in the existing 2.741 MSMEs in the Regency of Sumba Timur of the Nusa Tenggara Timur province (BPS Kabupaten Sumba Timur, 2020). The data shows that most of the MSMEs in the area are working in the traditional *ikat* weaving business. They are spread in two districts, namely Kampera, the largest center of *ikat* weaving; and Umalulu, the center for *songket* weaving. This study uses MSME actors in the Kampera district as respondents. *Ikat* is one of the local businesses in the Regency of Sumba Timur that still preserves its tradition regarding the production process. Therefore, the existence, operation, and sustainability of the *ikat* business are influenced by capital availability. Regrettably, similar to other MSMEs, *ikat* entrepreneurs in the area are facing challenges in obtaining capital to run the business. Pakereng (2017), found that capital is a classic problem faced by *ikat* businesses in the Regency of Sumba Timur; thus, the businesses hardly grow. For that reason, this study aims to analyze the use of bootstrap financing by *ikat* businesses in the district of Kampera in the regency of Sumba to obtain capital for their businesses.

It is common to find small businesses, especially private enterprises, face challenges in making financial decisions. Obstacles include practices of mixing business and personal goals, taxes, and personal or two-way transactions. Previous studies confirmed that maximizing wealth is not the main objective of small enterprises (Watson & Wilson, 2002). Information asymmetry, high transaction costs, credit rationing, and bad credit ranking, have also impeded MSMEs from obtaining capital. Further, MSME owners may: a) need external funding, but they are limited (Winborg & Landström, 2001), b) choose not to seek business credit, and c) opt for using internal funding.

Researches show that the preference of entrepreneurs has a significant impact on their capital gain. Watson & Wilson, (2002) argue that the *pecking order framework* (POF) is useful in understanding the capital acquisition of a business. They also found that POF is suitable for small businesses because of the owner-manager practices. Besides capital,

financial resources from personal asset support from friends and relatives, amenities, credibilities, and reputations, are valuable elements to help MSMEs grow (Bhide & Stevenson, 1992). Financial resources that are outside the financial structure of traditional enterprises are included in the integrated financing. Among informal resources, business owners usually have the highest preference for trade credits, which is then followed by the preference for having financial support from friends and relatives, and creditors. Meanwhile, external equity is usually the least preferred (Kent Baker et al., 2020).

A successful entrepreneur must be able to address any challenges in creative ways. It begins with the way they obtain resources to run the business. Since funding is the most critical resource for MSMEs, entrepreneurs are required to seek for alternative fundings to reduce their dependence on external parties. A well-known method of alternative funding is financial bootstrapping. It refers to a process where business owners collect funding resources without relying on debts, equity funding from banks, or external investors (Vanacker, 2011). According to Barra & Zotti (2016); Rita (2019), financial bootstrapping is a creative funding strategy and non-conventional funding sources to reduce dependence on external funding. The strategies can support MSMEs in developing their businesses without the burden of the high cost of bank interest rates. Although it is common to find small and medium entrepreneurs are having problems obtaining traditional funding resources such as bank loans and capital markets, financial institutions do not seem to see the opportunities. There are not many financial institutions providing financial support to growing small and medium enterprises (SMEs). Hence, SMEs have limited access to and little trust in traditional finances (Bhide & Stevenson, 1992). Dwelling on the problems, MSMEs are prone to bankruptcy because they are not able to collect direct or indirect funding. This is in line with the results of previous studies that found a correlation between a lack of funding and business failures (Carter & Van Auken, 2005).

The inability of financial institutions to provide support to MSMEs may be caused by information asymmetry and the theory between MSMEs and financial institutions. As one of the financial institutions, a bank may expect entrepreneurs to have adequate knowledge of banking requirements. However, it is frequent to find that the MSMEs cannot meet the requirements (Vanacker 2011). This study is going to investigate the implementation of bootstrap financing by MSMEs, especially in *ikat* businesses.

METHODS

Using a quantitative method, this study used numbers for data collection, data interpretation, and result presentation. Begun with a common theory, the study then described it deductively. The theory's validity was tested through observations before concluding. Eventually, the study described the data to find solutions to the problems.

The object of this research was MSMEs running *ikat* businesses in the district of Kambara in the regency of Sumba Timur or Nusa Tenggara Timur province. They are chosen as the respondents because this district is the largest *ikat* industries in the area. As it is suggested by (Sekaran & Bougie, 2016), the population of the research is not only humans, but it includes objects and other natural objects. Populations are not only related to numbers, but also all characteristics or characteristics related to objects.

Using purposive sampling, the final samples in this study were 167 respondents, who were chosen using criteria. Samples were those who are: 1) owners of *ikat* industries residing and running their business in the district of Kambara; 2) having the businesses run for at least

3 years (because bootstrap financing was used in pre-existing businesses, not the new ones); and 3) orienting the industries for pure business, not personal use.

As for data, this study used primary data through questionnaires. Data were collected with the support of enumerators, who are students living in the area. Analysis was performed in a quantitative-descriptive manner using tables and diagrams then described them descriptively before making conclusions (Anderson et al., 2017). Finally, data processing was performed through four steps. First, questionnaires were scrutinized to minimize errors. The second was coding. In this step, the researchers coded each response to allow smooth analysis. The coding mechanism was 1 – agree to the provided statement to 0 – disagree. The third step was moving the required data (numbers) into tables and then classifying the data into six categories of bootstrap financing. As a final step, the researchers descriptively analyzed data in tables and graphs to draw conclusions.

RESULTS AND DISCUSSIONS

Since it is a quantitative study, the result was in numeric data, which was then descriptively analyzed. The study aims to investigate how MSMEs in the district of Kambara in the regency of Sumba Timur implement bootstrap financing for their initial finance. Questionnaires were used to collect data from 167 respondents. The questionnaires contained six indicators of bootstrap financing, namely independent funding from the owner's savings (including borrowed or invested funds from relatives), minimizing accounts receivable, sharing resources with other businesses, delaying payments to protect cash, and making use of subsidies. It was found that the *ikat* businesses do not implement the strategy for inventory management. Characteristics of the respondents were used to get information about their background in running the *ikat* business. The characteristics, which include sex, age, education level, and the period of running the business, are presented as follows:

Table 1. Respondents' Characteristics Based on Sex

Sex	Number of Respondents	Percentage (%)
Male	77	46
Female	90	54
Total	167	100

Source: Processed data, 2021

Based on Table 1, the respondents were 167 *ikat* business owners, where 54% are female, and 46% are male. The result shows that the owners of *ikat* businesses in the district of Kambara are dominated by females. The reason for this result is that in the area, men are working as farmers, thus, weaving is a task mostly performed by women.

Table 2. Respondents' Characteristics Based on Age

Age	Number of Respondents	Percentage (%)
< 18 years old	0	0
18 – 25 years old	3	2
26 – 35 years old	23	14
36 – 45 years old	50	30
46 – 55 years old	68	40
> 55 years old	23	14
Total	167	100

Source: Processed data, 2021

From Table 2, it is found that the highest percentage of *ikat* business owners are 46-55 years old (40%), while the lowest percentage are those who are 18-25 years old (2%).

Table 3. Respondents' Characteristics Based on the Education Level

Education Level	Number of Respondents	Percentage (%)
Primary school	131	78
Junior high school	23	14
Hig school	10	6
Diploma	1	0,5
Bachelor degree	1	0,5
Master/ doctoral degree	2	1
Total	167	100

Source: Processed data, 2021

Table 3 shows that 78% of *ikat* business owners have a low education level. The result is understandable because education is not crucial and is not a mandatory requirement for *ikat* weaving. Therefore, the *ikat* business owners might not feel required to upgrade their education level. This result is in line with the analysis regarding the respondents' age. If we see the age of the respondents, they were living their young life when education facilities were exclusive because of their price and limited access.

Table 4. Respondents' Characteristics Based on the Length of Business

Length of Business	Number of Respondents	Percentage (%)
3-5 years old	11	7
>5 years old	156	93
Total	167	100

Source: Processed data, 2021

Table 4 shows that the owners of *ikat* industries have run their businesses for more than five years. It is not surprising because *ikat* weaving in Sumba Timur is a tradition that has been handed down over generations, so the business is not new in the area.

Regarding funding resources, it is found that 99% of respondents agree that the initial funding used to establish the business was from personal funding. Concerning the funding contribution from families and relatives, 72% disagree that the families and relatives give a contribution to the business. This means that the *ikat* business owners are self-reliant. The finding is relevant to the result of the International Labour Office (2019) finding that business owners in Indonesia dominantly use personal funding.

In general, owners can rely on personal savings because *ikat* businesses do not require a large amount of funding. It is because of several reasons. First, since the weaving tradition has been the legacy over generations, *ikat* business performers do not need to pay for any training. Second, the weaving process uses self-made traditional instruments; thus, people do not need to buy them. Families and relatives usually give their support voluntarily either in the form of money or weaving instruments. Based on the findings, 99% of the *ikat* owners use personal funding. It shows that they apply the first indicator of bootstrap financing. This result is contrasting with a previous study by Prahasiwi & Mildawati (2019), where they found that MSME actors tend to rely on bank loans. A previous study that yielded a similar result to the present finding was from Radja (2018), finding that a major number of MSMEs' funding is

either from personal assets, savings, donations from families and relatives, or business profit. This finding is also relevant to the capital structure theory, where *bootstrap financing* is one part of the pecking order theory. The notion suggests that *ikat* business owners prefer internal instead of external funding to minimize future risks.

Table 5. Findings

Funding Resources		
Response	Personal fundings	Fundings from families and relatives
Agree	99%	18%
Disagree	1%	72%
Receivables Management		
Response	Loan is paid relatively in a short period	
Agree	87%	
Disagree	13%	
The Use of Amenities		
Respon	Sharing the use of weaving machine	
Agree	93%	
Disagree	7%	
Payment Method		
Response	Delaying payments to protect cash	
Agree	25%	
Disagree	75%	
Inventory Management		
Response	Making purchase based on the necessities	Production is Made by Orders
Agree	31%	10%
Disagree	69%	90%
Utilizing Subsidies		
Response	Obtain subsidies from the government	
Agree	78%	
Disagree	12%	

Source: Processed data, 2021

Regarding the second indicator of *bootstrap financing*, which is receivables management, 87% of respondents agree that they need a relatively short time to pay loans. A high score in this indicator shows that the *ikat* business owners in the district of Kampera prefer to give their customers a short period to pay the receivables. The main reason is that *ikat* weaving in Sumba Timur is highly expensive, where each *ikat* may cost up to 3 million Indonesian rupiahs. The lengthy process required to produce *ikat* also makes it risky for the business owner to accept down payments and give long-term loans. The result of this indicator is in line with the findings of Auken (2005) and Wasiuzzaman & Nurdin (2019). They found that higher-risk businesses have higher possibilities of implementing bootstrap financing. In contrast, lower-risk businesses have a higher chance to the traditional funding resources.

Seen from the use of amenities (weaving machines, tools, and other instruments), 93% of respondents agree that the amenities can be shared with other family members who might also own *ikat* businesses. In Sumba Timur, it is common to find 3 to 4 members in a family doing *ikat* weaving. Although usually each of them owns their machine, tool, and other

instruments, the amenities are shared among family members in case someone's amenity has malfunctioned. The result of this indicator is in line with Rita (2019) who suggests that a creative funding category includes the joint use of amenities. The strategy aims to reduce dependency on external funding resources.

With regards to the next indicator, which is payment delay, only 25% of the respondents agree to delay payment to protect their cash. This means that most *ikat* business owners do not prefer to delay payments. The cause of this finding is related to the affordable cost of yarns and threads, which are the materials required for the weaving process. The price of these items is still reasonable for the *ikat* business owners to buy in cash. Although the number of respondents who agree to delay payment to protect their cash was relatively low (25%), it shows that the pecking order theory has played a role in the *ikat* business (Baker et al., 2017).

For the inventory management indicator, 31% of the respondents agree, and 69% disagree that they are making purchases based on necessities. Related to *ikat* production, 90% of respondents disagree, and 10% agree that they produce *ikat* by order. The result is understandable because *ikat* entrepreneurs in Sumba Timur usually produce their *ikat* continuously. It means, they do not only weave based on orders but make more *ikat* as a supply in case customers desire to repurchase. The result is in line with the last discussion of down payment, in which *ikat* business owners do not accept front money before they finish the weaving process. The practice has caused them the risk of having relatively limited funds to buy the *ikat* materials. Therefore, perceived from inventory management, there is a low percentage of *ikat* business owners in the district of Kampera who apply bootstrap financing because they do not seem to minimize the inventory.

Regarding subsidy utilization, 78% of the respondents received subsidies from the regional government, while 12% did not. The result represents that the regional-government of Sumba Timur has shown its support for the *ikat* business. The subsidies provided are usually not in form of cash. The government helps businesses by providing yarns and threads. The study found that the *ikat* business owners have benefited from the subsidies for the last 1 year.

According to the findings of six indicators of bootstrap financing to *ikat* MSMEs, it is found that they do not tend to rely on external funding. Instead, they prefer internal funding resources through bootstrap financing strategies. The findings validate the pecking order theory (Auken, 2005; Rasheed & Siddiqui, 2019). Furthermore, bootstrap financing strategies have also been favorable for *ikat* entrepreneurs, as startup businesses, to grow their ventures (Miao et al., 2017; Michiels & Molly, 2017).

CONCLUSIONS

Bootstrap financing is an effective alternative to reduce the dependency of MSMEs, including the *ikat* business, on external funding such as loans. The financing strategy can help a business be independent and prevent them from any potential risks. Additionally, bootstrap financing may stimulate the growth of new *ikat* businesses.

Based on the results and discussions, it can be concluded that the *ikat* business owners in the district of Kampera in the regency of Sumba Timur, apply four *bootstrap* financing strategies, i.e., 1) independent funding from the owner (including borrowed or invested funds from relatives); 2) sharing resources with other businesses; 3) delaying payments to protect cash; 4) making use of subsidies. However, the result shows that the *ikat* businesses do not implement the strategy of inventory management and receivables

management. Bootstrap financing should have been an effective solution to capital gain if all six indicators are met, but the findings show that the *ikat* business owners have not used all of the strategies.

Since the result found that the *ikat* business owners in the district of Kambera have not managed their inventories, it calls for attention either from the regional government or higher education institutions to provide additional support. Therefore, the recommendation is to organize training or seminar.

For future studies, it may be required to determine whether a process or treatment affects the population of interest. It is recommended to investigate the implementation of bootstrap financing using different analysis methods, such as the T-test and F-test, to better insight into the bootstrap financing benefits on MSMEs.

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- personal savings, including borrowed or invested funds from family or friends,



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The Effect of Digital Literacy and Innovation Resistance to Use Digital Payment for Taxpayers Enhance Capabilities and Innovation Performance



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ABSTRACT

The growth of digital payments is accelerating with technological advancements, which must fully pique the interest of the general public, particularly the land and building taxpayers in Buleleng Regency. This study looks at how innovation resistance and digital literacy affect taxpayers' desire in adopting digital payments for land and buildings in the Buleleng area. Utilizing a questionnaire, this study is quantitative. 178 respondents were chosen using a chance sample technique from the population of this study, which consists of land and building taxpayers in the Buleleng regency. Using SEM-PLS analysis, test the data. According to the study's findings, digital literacy significantly and favorably influences people's intentions to utilize digital payments, (2) the desire to use digital payments is negatively and significantly impacted by innovation resistance, (3) the intention to use digital payments is impacted simultaneously by both digital literacy and innovation resistance.

Keywords: Digital Literacy; Innovation Resistance; Behavior Intention; Digital Payment

INTRODUCTION

Technological changes created by humans have made all activities more practical and easier (Nisya Nur Rahma., 2021). In the financial sector, technological developments have changed digital payment systems, making it easier for service users to make payments remotely quickly without using cash (cashless) (Komunikasi, 2020). Digital payments use a cellphone as a means, using a menu from a cellphone's SimCard, SMS codes, and applications by pressing buttons on the cellphone (Salsabila, 2020). Digital payment is a non-cash payment instrument whose monetary value is stored in electronic media. Users first deposit money with issuers which is then stored electronically so that transactions can be used (Softina, 2021). Success in implementing digital payments is influenced by several factors, including (1) Independence, digital payments only depend on other software or hardware technologies. (2) Interoperability and portability, accessible and integrated with various platforms or other technologies. (3) Security has a high level of security for both user and system security. (4) Anonymity, maintaining the user's data confidentiality. (5) Easy to use, easy to use, and easy to understand by users. (6) Transaction fees and profit

sharing between parties have a clear mechanism. (7) Regulation, comply with applicable regulations (Heijden, 2002).

To increase financial transparency, local governments carry out a program of digitizing financial transactions to accelerate and expand regional digitization. Digitizing government payments can reduce costs, increase efficiency and transparency, and build digital habits for people (Klapper, Leora., 2022). The program aims to accelerate and expand regional digitalization to support various economic activities, including optimizing local revenue, improving governance by providing simpler administrative processes, broad, transparent, and accurate access, increasing equitable access to finance, and systematically strengthening financial control. The government provides digital payments to receive government revenue, taxes, and levies, which can be accessed easily by the public.

In addition to providing a digital payment channel, it is hoped that the wider community can utilize the program to accelerate and expand regional digitization. Service system users determine success in implementing the digitization of Government financial transactions, the government and the public, and service system providers, including State/Regional Treasury Account Management Banks, bank partners, bank agents, point payments, and fintech.

According to the notion of planned behavior, a psychological factor connects beliefs to actions (Ajzen, 1991). The planned behavior theory aims to forecast particular individualized behavior. Individual intentions to carry out particular acts are the primary component in the notion of planned behavior. It is believed that purpose captures the driving forces behind motivation. Therefore, the performance will be better the more determined the intention was (Ajzen, 2005). The three key components that lead to the formulation of individual behavioral intentions, Consumer response, performance expectancy, and perceptions of behavioral control are all considered within the notion of cognitive theory. These three elements work together to create a determinant of interest that determines whether the desired action will be performed out.

The ability of the intended community or target to absorb the innovation will determine how successfully an innovation program is implemented. The innovation diffusion theory, which E.M. Roger created in 1962, described how an inventive concept or product occasionally picks up steam and spreads throughout a given community or social system. The essential requirement for adoption is that a person recognize an idea, behavior, or product as being novel or inventive (Prabandari, 2020). Understanding the traits of the target group is crucial for an innovation's adoption. In addition to methods for encouraging others to adopt innovations, Roger identified five traits of those who do so: (1) Those that desire to attempt an idea first are known as innovators. To persuade people to adopt advances, little effort is required. They even generate fresh concepts. (2). Early adopters are thought leaders who understand the need for change. The approach that must be taken is to offer a practical manual for its application. (3) The early majority, or people who adopt new concepts as soon as they have proof that they work. The approach that must be taken is to provide proof of innovations' efficacy and success stories. (4). Those who are the "late majority," or those who fight change and adopt innovations only after the majority has done so. The tactic for drawing in this audience is to offer statistics on the number of people who have tried it and

embraced it. (5). Laggards are the most hardest people to get along with since they are so traditional and conservative. Applying pressure and instilling fear among those who have embraced this innovation is the tactic used to draw in this community. Five factors are important when deciding whether to adopt an innovation: Interconnection (how well the capacity for future with key attributes, experiences, and needs), complexity (how difficult it is to realize and use), triability, and performance expectancy (how much the innovation is regarded as being superior to the concept, program, or thing it replaces (how well others are able to see an innovation's effects) are all influences to take into account..

The Technologies Acceptance Model (TAM), which is rooted in the theory of technology acceptance, also aims to predict and determine the outward buyer factors' effects on the acceptance and application of emerging digital technologies (Sutanto, 2020). Technology Acceptance Model is a research model. Technology use is the earliest and most efficient method of explaining individual behavior (Davis, 1989). Perceived utility and perceived usability are the key determinants of IT use (Davis, 1989). Adoption of new technology, environmental uncertainty, and behavioral ambiguity all cause uncertainty (Pavloe, 2003). Three factors—easiness of use, utility (mobility, convenience, compatibility, knowledge, trust, risk), and affordability of usage—influence customers' intentions to adopt new technology (trust, risk) (Liu and Tai, 2016).

In term of regional tax revenue, especially land and building taxes, local government in Buleleng Regency has developed digital payment innovation. There are mobile banking, virtual account, e-wallet such as gopay, balipay, and indomaret, internet banking and QRIS (Quick Response Indonesian Standard). Community acceptance of digital payment innovations implemented by local governments can be seen from the percentage of total regional revenues through digital payment channels. Judging from the percentage of total regional tax revenues through digital payment channels, especially land and building taxes, in 2021, it is still the lowest compared to revenues from other regional taxes, which is only 20% of all land and building tax revenues, even though the digital payment channel developed by the government the largest number of regions, considering that the land and building taxpayers are all Buleleng people who own or control land and building tax objects in Buleleng Regency.

The adoption of e-banking is significantly impacted, in part or simultaneously, by digital literacy, claims Munari (2021) effective use of digital platforms, such as messaging apps, network services, and some others, is known as digital literacy (Suherdi., 2021). Understanding, analyzing, assessing, organizing, and evaluating information gained via the use of digital technology tools is known as "digital literacy" (Singh, 2015). This amount of consumer comprehension affects preferences for using offered digital financial services. The national scale digital literacy index has a 2021 score of 3.49 out of a possible 1-5.

Indicators of digital literacy variables are internet searches, directions, information content evaluation, and knowledge compilation (Gilster, 1997). Digital literacy includes (1) Awareness, the skill of using digital technology to quickly and effectively locate information, places, and sources of analysis, (2) understanding of computer and digital technology, as well as its applications (3) Language literacy, or the ability to speak clearly and publish cutting-edge information; (4) Media literacy, or the capability to gather, analyze,

and disseminate information on a number of digital platforms; (5) Visual literacy, or the ability to read, evaluate, and grasp data offered in a variety of formats and visuals using digital technology, (6) the capacity to apply technology to improve efficiency, performance, and knowledge (Reddy, 2020).

The use of e-banking is significantly impacted, either partially or simultaneously, by digital literacy. E-banking usage is significantly influenced by one's comprehension of how this technology is used (Aprilia et al., 2021). The use of mobile banking does not, according to Krissandi's research from 2021, significantly benefit from digital literacy. However, convenience of use, The use of mobile banking is simultaneously impacted and signified by financial literacy, digital literacy, and both. Additionally, Apriani's research from 2021 discovered that digital literacy had no impact on consumer anxiety and does not influence decisions to use digital payments as a result of customer concern. According to Jamila et al research.'s (2019), adopting new technology and digital literacy have a good link. According to Ullah et al research's The intention to use mobile payments or mobile banking is significantly influenced positively by mobile learning.

H1: The intention of land and building taxpayers in Buleleng Regency to use digital payments is significantly positively impacted by their level of digital literacy.

In terms of access to information technology, the use of cellular telephones for residents over five years is 83.62%, the use of computers is 14.52%, and internet access is 67.75% (BPS Provinsi Bali, 2021). However, the low utilization of digital payment channels shows that people still tend to pay taxes conventionally and have yet to utilize digital payments provided and developed by the government fully. A component of consumer behavior that is just as crucial as technology acceptance is customer resistance to innovation (Migliore, 2021). The decision to use non-cash payments is impacted by innovation resistance (Softina, 2021). According to the innovation resistance theory, psychological and functional hurdles can prevent consumers from embracing new technologies. The psychological barriers include stereotypes and tradition, whereas the functional barriers include utilization, value, and risk (1989; Ram & Sheth)

Resistance to innovation is called innovation resistance. Consumers are forced to change by innovation, and resistance to change is a common reaction (Mack, 2018). People are still used to a steady state, after all. Consequently, there occurs a transition, which makes people feel threatened by the comfort they previously attained (Alimbudiono, 2005). Customer opposition is a key factor in whether an invention succeeds or fails (Ram Sheth, 1989). Consumer resistance is theoretically framed by the IRT or Innovation Resistance Theory (Kaur, P., Dhir, A., Singh, N., Sahu, G., & Almotairi, 2020). There are two types of consumer resistance: passive resistance and active resistance. In the Innovation Resistance Theory (Ram & Sheth, 1989), there are two barrier to adopt innovation: functional barriers and psychological barriers. Functional barriers occurs when consumers feel a significant change from the applicaton of innovation due to the characteristics of innovation. The factors of this barriers are usage barrier, value barrier and risk barrier. And psychological barriers occurs when conflict with consumer confidence in innovation. There are two factor of psychological barriers: tradition barriers and image barrier.

Research by (Kaur, P., Dhir, A., Singh, N., Sahu, G., & Almotairi, 2020) demonstrates that barriers to risk and value have a detrimental impact on the desire to utilize mobile payment system. As opposed to that, the user's intention to recommend mobile payment system is only adversely impacted by the usage and value barriers. Pitari et al. (2020) claim that customer intentions and reluctance to adopt new technologies determine how consumers would behave while using near field communication based mobile payments. Resistance occurs to something new and then will decrease along with the fulfillment of consumer psychology (Chung & Liang, 2020). the biggest barriers is the risk and usage barrier, their concern about the risks of using digital wallets, and mistakes in using digital wallets (Nugraheni, 2022).

H2: The intention of land and building taxpayers in Buleleng Regency to use digital payments is significantly negatively impacted by their innovation resistance.

H3: The intention to employ digital payments by land and building taxpayers in Buleleng Regency is significantly influenced by both digital literacy and innovation resistance at the same time.

METHODS

This study falls under the category of quantitative research. The study's target demographic is the 407,961 land and building taxpayers in Buleleng Regency's rural and urban districts in 2022. By choosing taxpayers who make non-digital payments through bank tellers, payment counters, and tax officers, a sample of 178 respondents was drawn using probability sampling and a purposive random selection technique.

Digital literacy and innovation resistance are exogenous variabel (X) . The intention to use digital payment is endogenous variabel (Y). The components of digital literacy are signs of fundamental knowledge and abilities, awareness, practical knowledge, decision-making, and self-protection. Inhibitors of innovation resistance include usage, value, risk, tradition, and image barriers are all present. Interviews, documentation, and questionnaires were used to collect the data. A 35-item questionnaire on a Likert scale of 1 to 5 served as the research instrument. Research data is processed using by SEM-PLS analysis.

RESULT AND DISCUSSION

Respondent data in this study were analyzed using descriptive statistics. Characteristics of the respondent data for land and building taxpayers in Buleleng Regency as many as 178 respondents were distinguished based on the respondent's age, gender, area of residence, and level of education. Table 1 contains information on respondents based on the respondents' attributes.

Table 1. Respondent Data based on Respondent Characteristics

Characteristic	Category	Number of Respondents	Percentage
1. Age of Respondents	Less than 23	9	5,05%
	24 – 39	34	19,10%
	40 – 59	89	25,84%
	More than 60	46	50%
2. Gender	Male	145	81,46%
	Female	33	18,54%
3. Region of residence	Rural	155	87,08%
	Urban	23	12,92%
4. Level of Education	primary school	42	23,60%
	elementary school	22	12,36%
	high school senior	78	43,82%
	Diploma Bachelor	9	5,06%
		27	15,17%

Source: Research Data, 2022

The average score obtained from the descriptive statistical analysis of the digital literacy variable was 3.11, which is high enough. The highest indicator for the digital literacy variable is found in the basic knowledge and skill indicator, which is 3.43. The basic knowledge and skill indicator measured by basic knowledge of hardware such as computer, tablet, mobile phone, and internet, including turning on/off, charging and locking devices, and basic knowledge of software including creating user account, managing password, logging into account, using privacy setting. At the same time, the lowest indicator is found in the self-protection indicator, an average of 2.83. It indicates that the average respondent has high knowledge and skills in operating digital devices, using them to communicate, and seeking entertainment and information. However, protecting personal data from the risks of using digital technology still needs to be improved.

The innovation resistance variable's descriptive statistical analysis yielded an average score of 3.09, which is high enough. The traditional barrier indication, with an average score of 3.93 in the high category, has the strongest association with the measure of digital literacy. The risk barrier indicator also has a mean of 3.08, which is a sufficient value. The value barrier indicator, however, has the lowest average of all indicators at 2.71. It indicates that the average respondent perceives that digital payments can benefit respondents. However, there is a high habit among the public of making payments through non-digital channels and fears of failed transactions using digital payments inhibiting innovation.

SEM PLS analysis was used to analyse data from respondents' Likert scale responses to questionnaires. Evaluation of the outer and inner models is the type of test that is employed. Three measurement models—convergent validity, discriminant validity, and internal consistency—are used to evaluate the outer model. According to the outer model's evaluation findings, each latent variable had an AVE value of less than 0.5 and was produced by the value of the outer loading indicator. Each variable's Fornell Lacker criterion, however,

is higher than that of the other latent variables. Additionally, each indication has a higher cross-loading value on one variable compared to other variables. It proves that the variables and indicators used in this study are valid. For the composite dependability, each variable's Cronbach's alpha must be more than 0.7. With an average value of > 0.9 for both Cronbach's alpha and internal consistency, the dependability is excellent (excellent reliability).

R-Square, the estimation of path coefficients, effect magnitude (f-square), and prediction relevance are all considered in the inner model evaluation (Q-square). The model's Q-Square score for the intention to use variable is 0.625, indicating that it has enough predictive relevance to be able to explain the information in the study data by 62.50%. The innovation resistance variable's f-square value is 0.502, indicating that it has a "high" impact on use interest. The digital literacy variable's f-square value is 0.174, indicating that it has a "moderate" impact on interest in use.

To test the hypothesis that digital literacy and innovation resistance variables have a partial impact on interest in adopting digital payments, the findings of path coefficient analysis, T statistics, and P-Value are employed. has a negative impact if the path coefficient is less than 0. The significance is examined using T Statistics and P Value. The entire bootstrapping process is utilized to calculate the values of R-Square Adjust, T Statistics, and P-Value, and the link between exogenous factors and endogenous variables is examined. Tables 2 and 3 show the findings of the hypothesis test.

Table 2. Partial Hypothesis Test Results

Hypothesis	Path Coefficients	T Statistics	P Values	Influence
H1: Digital Literacy → Interest in Use	0,325	4,660	0,000	Positive significant effect
H2: Innovation Resistance → Interest in Use	-0,552	8,698	0,000	Negative significant effect

Source: Research Data is processed, 2022

Table 3. Simultaneous Hypothesis Test Results

Hypothesis	R Square	R Square Adjustment	T Statistics	P Values	Influence
H1: Digital Literacy and Innovation Resistance → Interest in Use	0,638	0,634	14,389	0,000	Significant influence

Source: Research Data is processed, 2022

The digital literacy variable for interest in using digital payments shows that the path coefficient has a positive value of 0.325. The T statistic meets the minimum limit of 4.660 or P Values below 0.05, which is 0.000. These results indicate that the digital literacy variable significantly affects the interest in digital payments. The higher the digital literacy level of the taxpayer, the greater the interest in using digital payments. Conversely, the lower

the digital literacy level of the taxpayer, the lower the interest in digital payments. It is because someone with high digital literacy can take advantage of technology and use and understand digital content correctly and precisely. After all, by having digital literacy, a person can know technology, understand how to operate it, and be aware of the risks it poses. (Pradini, 2021). Taxpayers who need basic knowledge of using electronic devices and digital applications will tend to pay directly or use payments through non-digital channels.

From the indicators of basic knowledge and skill, awareness and practical know how, show that taxpayers using digital technology devices tend only to use them to communicate, seek information, and entertain. The ability to use digital applications will give you the confidence to make decisions using digital applications at every opportunity. In the Technology Acceptance Model theory, the factor influencing consumer intentions to implement new technologies is convenience, ease, and convenience of using IT that someone perceives as a benefit. These three indicators will affect interest in using digital payments because digital payment channels are partly in the form of applications installed on electronic devices such as mobile phones. With a high level of proficiency in using digital applications, it will give individuals the perception that using digital payment channels is easy, so interest in using digital payment channels will be even higher.

On the other hand, the researchers also found that the ability level for self-protection was the lowest compared to other indicators. Reducing the risks that occur takes the ability to protect yourself from these risks. According to Pavlou (2003) in Priyono, 2017, the theory of the Technology Acceptance Model states that there are uncertainties that arise in adopting new technologies, environmental uncertainty, and behavioral uncertainty. This uncertainty raises risks that may cause losses when using information technology. The inability to carry out self-protection will raise concerns about the risks experienced, so the ability for self-protection will affect the tendency of taxpayers to utilize digital payment channels.

Interest in adopting digital payments is -0.552 path coefficient indicates a negative correlation between this factor and innovation barrier. The T statistic is less than 8.698 or 0.000, which is the lowest threshold for P values under 0.05. These findings show that the intention of land and building taxpayers in Buleleng Regency to adopt digital payments is severely negatively impacted by innovation resistance. Taxpayers in the land and building sectors are less interested in embracing digital payments the more resistant they are to innovation. Complicated mobile payment methods will lessen users' desire to utilize them (Chung, K. C., & Liang, 2020). Customers' resistance is the reason why innovations either succeed or fail in a big way.

This study found that the indicator with the highest average in the innovation resistance variable is the tradition barrier, barriers caused by taxpayers preferring and being accustomed to using non-digital land and building tax payments. Using subjective norms to predict whether a behavior will be carried out is one of the components of the Theory of Planned Behavior, where responses from other parties or the environment become inhibiting or supporting factors for each individual to behave (Tamba, 2017). In the diffusion of innovation theory, people bound by tradition and conservatives are the most skeptical of change. The research data shows that 87.08% of respondents are in rural areas, where the environment is not accustomed to making digital payments. Access to banking services is quite far, influencing interest in digital payment channels.

The existence of taxpayers' concerns about transaction failures when using digital payments also affects an interest in using digital payments. The theory of perceived risk

states that at every risk, there is always an accompanying benefit (Yousavzai, 2012). Risk in the context of digital payments is understood to be the possibility of suffering a loss when employing digital payments to achieve the desired outcomes (Featherman and Pavlou, 2003). The notion of planned behavior states that the consumer's attitude—a favorable or negative belief to exhibit a particular activity—is the determining factor of consumer behavior. If the evaluation of the conduct is favorable, someone will intend to do something or behave in a certain way. (Ahcmad, 2003).

Meanwhile, in the technology acceptance model (TAM) theory, the variables that influence consumer intentions to implement new technologies are safe to use (trust, risk) (Liu and Tai, 2016). This study found that taxpayers will feel safe and trusted if proof of payment transactions can be physically accepted. Respondents feel confident that a transaction is only successful if they have received physical evidence and know where to get evidence when using digital payments. It is also in line with the findings on the self-protection indicator, where there is concern that there is a risk due to the inability to protect personal data.

Besides that, the indicators for image, usage, and value barriers are also reasons for not being interested in digital payments. The idea of planned behavior holds that management controls behavior. Individual perceptions of control, which are derived from ideas about this control, determine how people behave. According to the Technology Acceptance Model (TAM) theory, this view is influenced by the factors that make technology helpful, safe, and easy to use (trust and risk) (Liu and Tai, 2016). People are more likely to choose and embrace this technology if they find it to be convenient, pleasant, and benefits that meet their demands. According to innovation diffusion theory, factors that affect whether people embrace Flexibility, complexities, performance expectancy, and quantitative measurements are a few examples, as well as an inventive performance expectancy. According to this study, taxpayers who were uninterested in digital payments claimed that using them was difficult. There is a perception that taxpayers must have a savings account to be able to use digital payments, causing taxpayers' reluctance to use digital payments. Taxpayers tend to feel burdened when using digital payments because they do not feel the benefits. On the one hand, taxpayers are interested in using digital payments due to the benefits they get from using digital payments in the form of ease of transaction and efficiency in terms of time.

According to Table 3, the T statistic is 14.389, the P value is less than 0.05, or 0.000, and Interest in Use has a T statistic of 14.389. This illustrates how the intention to adopt digital payments is affected by 0.634, or 63.4%, by all exogenous variables at once, including digital literacy and innovation resistance. The public's level of digital literacy and the accessibility of gadgets for conducting transactions electronically, and the public's perception of the convenience, comfort, level of complexity, and benefits felt by taxpayers determine the success of the digitization program so that it is hoped that payment channels will be available that are practical, do not burden the community and provide immediate benefits by society. This study also found that there was a refusal from taxpayers because of their age and the taxpayer's belief that they could no longer use digital payment channels, so they did not wish to study, let alone use, digital payment channels. There are impacts from functional barriers (complexity, incompatibility, and cost), psychological (trust, inertia, and anxiety about technology), and risks (privacy, security, financial and operational risks) which result in the elderly refusing to use digital payment services (Cham, Huei Tat., Jun

Hua Cheah, Boon-Liat Cheng, 2021). Younger customers are more interested in innovation and more adaptable to the changing direction of digital banking (Dimimitrova, Irina., 2021). also states that the age factor hurts the use of information technology-based innovations (Tamba, 2017).

CONCLUSION

According to the study's findings, taxpayers intention to use digital payments is positively and significantly influenced by their level of digital literacy. It shows that individuals who are knowledgeable and skilled about digital technologies are more likely to employ digital payment. This is because someone who has high digital literacy will be able to operate, utilize, use and understand software and hardware correctly and precisely, and be aware of the risks posed. Meanwhile, the Innovation resistance variable significantly negatively affects taxpayers' intention to using digital payments. It indicates that customer resistance has a big role in the interest in using digital payments. This is because taxpayers tend to choose a payment system that considered easy to use, has greater benefits than other channels and creates a sense of security. An innovation will be absorbed by people to replace old habits influenced by factor: relative advantage, complexity, compatibility, triability dan observability. Simultaneously, digital literacy and innovation resistance significantly influence taxpayers' interest in using digital payments.

From the results of this study, it is suggested that the government implement a digital literacy improvement program through intensive education and outreach to increase taxpayer understanding of how to use digital devices, useful digital application knowledge, and how to protect access and personal data to avoid the risks of using digital technology. The government should also carry out digital ecosystem development programs, especially for rural communities, bringing banking access closer, socializing types of digital payment channels, and the benefits of digital transactions. The government also socializes how to check the success of transactions and obtain proof of payment that taxpayers can keep, as well as providing information and complaints channels with fast and easy access to facilitate consultations and taxpayer complaints.

To develop knowledge and further research, it is necessary to test the effect of age, location, and education level on this study's variables. In addition, further research was carried out on the types of digital payment channels that are most in demand and are considered the easiest to implement by taxpayers according to the characteristics of the respondents.

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Implementation of Bali Local Cultural Values (Jengah, Taksu, and Menyamabraya) in Human Resources Practices Associated with Stress and Organizational Performance in Cooperatives in Bali



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ABSTRACT

The purpose of this research is to find out and explain the implementation of Balinese cultural values in human resource practices associated with stress and organizational performance. Respondents are managers of cooperatives in Bali total of 79 people. The analysis technique uses the application of a PLS-based structural equation model or SEM (structural equation modeling). The results showed: The influence of HR practices that implement local Balinese cultural is negative and significant on work stress. The influence of the implementation of local cultural values on HR practices on organizational performance is positive and not significant. The effect of stress on organizational performance is increasing. positive and significant. So it is a finding in this study that the implementation of cultural values contained in the concepts of jengah, taksu, and menyamabraya to reduce stress and improve organizational performance. Employees feel no pressure because of the suitability of HR practices with their culture.

Keyword: Cultural Values (Jengah, Taksu, and Menyamabraya) in HR Practices; Stress; Organizational Performance

INTRODUCTION

The development of the business world is inseparable from issues related to globalization and technological developments. Globalization brings competitive changes in organizations business and non-business organizations. The workplace has changed dramatically due to the use of new information and diversity. Organizations in achieving better performance are required to keep up with changes, but on the other hand there are values that must be maintained. It is very difficult to keep up with the changing times without ignoring the noble values prevailing in society. Organizational culture is at least required to follow the values prevailing in society. Organizational culture that is not in accordance with cultural values in society affects employee performance and organizational performance (Olulana, 2015). Organizational performance is the result obtained by an organization, both profit-oriented and non-profit-oriented organizations (Fahmi, 2011).

Theory of action and job performance (Boyatzis, 2008) emphasizes that performance is a combination of the individual and the environment. Knowledge, values, interests that individuals have interacting with culture, structures, systems, strategies, opportunities, and according to roles will shape performance (Salleh, 2010). Based on this theory, the

environment is one of the factors that shape performance. Part of the environment are cultural values in society which then shape the culture of an organization. The prevailing culture in society can be seen as part of the company's resources, which lead to competitive advantage. Like guanxi culture is a culture in China that plays a very important role in Chinese business. Guanxi culture which contains the meaning of brother is not only seen from the existence of blood relations (Wang, 2012), contains almost the same meaning as the *menyama braya* culture in Bali. Guanxi culture is a social capital that affects business performance (Arribas et al., 2013). The success of the Chinese is supported by the role of guanxi culture which is actualized in business practices. The results of research in several countries show that culture supports organizational performance (Lucky, 2012; Luo, 1997; Wiengarten et al., 2011; Wingarta, 1997; Yiu et al., 2007). While research conducted in Bali has a relationship between Balinese culture and organizational performance. is positive and significant (Riana, 2011; Sitiari et al., 2020; Sugawa, 2014; Suyatna Yasa et al., 2020). Previous researchers in Bali have mostly associated organizational culture with organizational performance.

Research by Sitiari et al. (2016) found that Balinese cultural values that are still maintained and valid and reliable reflecting Balinese culture are the cultural values contained in the concepts of *jengah*, *taksu*, and *meyamabraya*. *Jengah* is one of the important terms in the Balinese cultural tradition that stimulates the emergence of self-motivation. Without being embarrassed, a person does not have the enthusiasm to work hard to achieve a better life (Dibia, 2013). *Taksu* will increase confidence and self-confidence because of the strength from within, inner power, which gives intelligence, beauty and as a gift from God as a result of hard work, dedication, submission to certain fields in a pure and disciplined manner (Ardana, 2007). The concept of *menyama braya* contains togetherness values that are implemented in the form of mutual cooperation, *ngayah*, *nguopin*, mutual help, mutual honing, mutual care, *paras-paros*, *saluluk sabayantaka* (Meniarta, 2009; Parimarta, 2011). Based on Sitiari et al. (2016), it has been tested that the values in the concepts of *jengah*, *taksu*, and *meyamabraya* are able to improve organizational performance, which have a positive and significant effect on organizational performance. The research of Sitiari et al. (2020) found that organizational culture based on cultural values contained in the concepts of *jengah*, *taksu*, and *meyamabraya* was able to improve organizational performance. This means that an organizational culture that is in accordance with the local culture can improve performance. Ahmad & Schroeder (2003) found that best HR practices should be compatible with the organizational culture, HR practices should also not conflict with cultural values prevailing in society. Employees will feel more comfortable if managed according to their culture. HR practices that implement cultural values in society should be able to improve organizational performance.

Human Resource Management (HRM) is a planned approach to manage people effectively to achieve better performance. It aims to build a management style that is more open, flexible and caring so that employees will be motivated, developed and managed in a way that suits their culture so that they can give their best to achieve better organizational performance. Good HR practices play an important role in helping to achieve the goal of increasing productivity. Carlson et al. (2006) found that HR practice is a very complex decision related to strategy and has a positive effect on organizational performance. Saleem & Khurshidn (2014) also found HR practices, namely withdrawal, and training had a positive and significant effect on organizational performance. Another study Suryani et al. (2018) found HR practices had a positive but not significant effect on fairness and organizational performance. This means that HR practices are not necessarily able to improve fairness and organizational

performance. Sani (2012) also found an insignificant relationship between HR practices and organizational performance.

There are indications that HR practices that are not in accordance with local cultural values are not able to achieve fairness and performance in an organization. To find out whether HR practices that implement local cultural values are able to improve organizational performance, it is necessary to investigate. Dwipayana et al. (2015); Ismail & Gali (2017) found that HR practices related to the performance appraisal system had a negative and significant effect on work stress. This means that the better the HR practice system, especially performance appraisal, the lower employee stress. It can be concluded that in addition to having an impact on organizational performance, HR practices also have an impact on employee stress.

Stress is a concept that describes the relationship between people and the environment. Robbins & Judge (2008) stated that organizational factors can cause stress. Job stress describes stress associated with the professional or work environment. Tension is created when the demands of the job or work environment exceed people's capacity to respond effectively. Work stress is measured by Mas'ud (2004) as follows: excessive workload, difficulty communicating with other parties, unclear job responsibilities, unable to do daily work, difficulty in maintaining relationships, role in the organization interfering in family life, carry out a role that is contrary to conscience. Based on the results of the study found that stress has a negative and significant effect on employee performance (Sitiari et al., 2020). However, there are also other studies that stress has a positive effect on employee performance (Yoga,

Based on the results of previous studies, organizational performance is determined by HR practices (Roca et al., 2006; Saleem & Khurshidn, 2014; Sani, 2012). However, other studies have found that the influence of HR practices on fairness and organizational performance is positive and insignificant (Suryani et al., 2018). The insignificant relationship indicates that HR practices are not in accordance with the cultural values prevailing in society, so that employees feel they are not being treated fairly so that there is a tendency for employees to become depressed or stressed. It turns out that HR practices also have an impact on stress (Dwipayana et al., 2015; Ismail & Gali, 2017). There are indications that an insignificant relationship can be caused by a mismatch with values in HR practices with individual values.

Problems related to organizational performance are very relevant to be studied in cooperatives in Bali. Cooperatives are organizations that are very close to the community. Based on the results of Sitiari et al. (2016), the results of interviews with 95 cooperative managers in Bali show that the performance of cooperatives in Bali in terms of financial aspects tends to be the lowest compared to other aspects, while the number of cooperatives is growing very rapidly. The development of cooperatives in Badung Regency, one of the regencies in Bali from 2019 has 567 active cooperative units and 68 inactive units. The existence of inactive cooperatives shows that cooperative performance still needs to be improved. Based on the results of previous research, it is necessary to examine how the implementation of local Balinese cultural values contained in the concepts of jengah, taksu, and meyamabraya in HR practices is associated with stress and organizational performance.

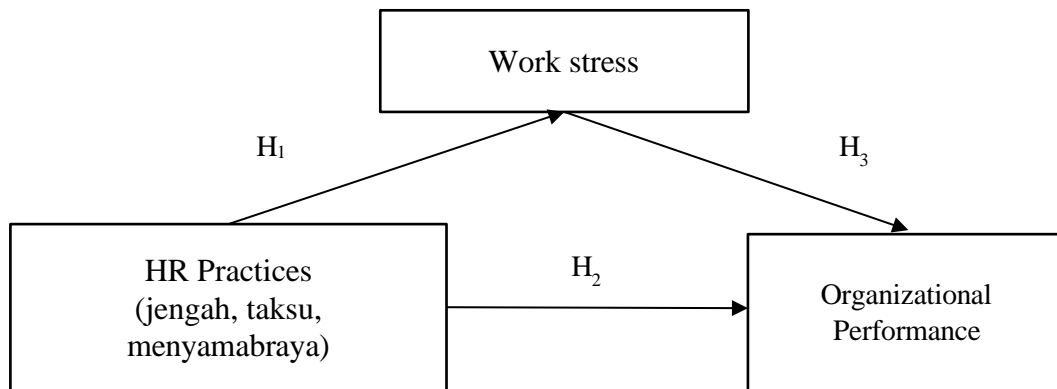


Figure 1: Research Concept Framework

Source: Previous Research Studies

Based on the conceptual framework and research objectives of this research hypothesis:

- H₁: The effect of HR practices based on local cultural values on work stress is negative and significant.
- H₂: The effect of HR practices based on local cultural values on organizational performance is positive and significant
- H₃: The effect of work stress on organizational performance is negative and significant.

METHODS

The research location is savings and loan cooperatives in Badung Regency and Denpasar City with cooperative managers as respondents. While the object of research is HR practices based on local Balinese cultural values, work stress, and organizational performance. Research respondents are managers of cooperatives located in Badung district and Denpasar city. Regency with the highest number of cooperatives in Bali. The number of respondents was 79 managers, who met the requirements were analyzed using the Smart PLS analysis tool. The research design used a quantitative model (Creswell, 2010), and analyzed multivariately with the application of a PLS-based structural equation modeling model (SEM).

Collecting data using a questionnaire consisting of 34 statements that have been prepared related to research variables. The variables identified to measure the research are: 1) Exogenous variables (exogenous variables) variables of HR practices based on cultural values that refer to Sitiari et al. (2016); Suryani et al. (2018), with the following indicators: X1. Selection and recruitment are carried out based on skills to increase willingness or high enthusiasm to compete in a healthy manner (reflecting jengah values). X2. Providing orientation for new employees motivates them to excel (reflects jengah values)).X3. Provide internal opportunities before opening new vacancies to increase enthusiasm to work hard in order to achieve a better life (reflecting jengah values), X4. Using the principle of honesty in determining every decision in the selection and recruitment process (reflecting taksu values) X5. In the selection and recruitment process, we prioritize brotherly relations with mutual respect, establish good cooperation, and make decisions based on mutual agreement (reflecting the values of menyama braya), X6. Providing training programs for all employees to increase employee's ability and confidence (reflecting taksu values). Confidence in carrying out his profession (reflecting taksu values).) X7. Regular training schedule to provide enthusiasm for learning (reflecting jengah values), X8. Providing training according to employee needs so that the ability to produce something interesting for others (reflecting taksu values), X9.

Performance appraisal is carried out objectively by using the principle of honesty in determining every decision (reflecting *taksu* values). X9. Performance appraisal helps employees in career development, namely to establish cooperation both for the common good and for the benefit of the individual (*menyamabraya*), X10. Salary increase based on performance results to increase competitive spirit (reflecting *jengah* values). X11. Giving higher salaries to employees who excel increases achievement motivation (reflects *jengah* values). X12. X13. Awards for employees who achieve the target of enthusiasm to work hard (reflecting *jengah* values). X14. Provide opportunities to discuss careers prioritizing brotherly relationships, mutual respect, and mutual help and tolerance (reflecting the values of *menyamabraya*), X15. Career development programs are structured and clear because they feel they need each other (reflects the value of *menyamabraya*)

Work stress variable is measured by indicators referring to Mas'ud (2004) as follows: Y1.1. excessive workload, Y1.2. difficulty communicating with other parties, Y1.3. unclear job responsibilities, Y1.4. unable to do daily work, Y1.5. difficulty in maintaining relationships, Y1.6 role in the organization interfering with family life, Y1.7 carrying out roles that are contrary to conscience. The endogenous variable, namely organizational performance using the Balanced Score Card (BSC) theory, is a performance framework and was developed by Robert Kaplan and David Norton in 1992 (Fahmi, 2011). BSC emphasizes four studies, namely financial, customer, internal business, learning and growth perspectives with the following indicators: The aspects used in measuring organizational performance include: Organizational performance from a financial perspective (aspects of increasingly healthy performance). Measured by indicators, namely: Y2.1 Ability to provide funds, Y2.2 Sales growth, growth in SHU, Y2.3 Asset growth, and increased business volume. Organizational performance from the customer perspective (aspects of service to members and the community). Measured by indicators, namely: Y2.4 Transactions with members, Y2.5 Education and training for members, Y2.6 Ability to absorb labor, Y2.7 Number of services cooperatives to the general public. Organizational performance from the perspective of internal business processes (aspects of active business entities). Measured by indicators, namely: Y2.8 Annual Member Meeting, Y2.9 Management process of running business activities and compliance with regulations. Organizational performance from the perspective of learning and growth (aspects of cohesiveness and Y3.10 Member participation and aspects of contribution to regional development). Organizational performance from a learning perspective is measured by the following indicators: Y2.11 Members tend to pay off mandatory savings and attend member meetings. Y2.12. Cooperatives tend to be obedient in paying taxes

The results of the instrument validity test illustrate that all indicators forming the variables (X, Y1 and Y2) are considered valid as research test tools because they produce a Pearson correlation coefficient (r) > 0.30 , $n = 30$, at level 0.1 (Sugiyono, 2017). The lowest correlation coefficient (r) for; HR practices is X15 with a value of 0.429. and the highest is X14, with 0.753. As for stress, the highest is X18 with a value of 0.919, and the lowest is X16 with a value of 0.505. For performance variables, organizational performance variables are: the indicator with the highest coefficient value is Y2.24, namely Y2.24 with a value of 0.813 and the lowest is Y2.23 with a value of 0.451. Instrument reliability test is measured by Cronbach's Alpha (α) formula and a variable is said to be reliable if it produces a value of $\alpha > 0,60$ (I. Ghazali, 2016). The results of the reliability test illustrate that all indicators forming the variables (X, Y1 and Y2) in the study show the value of Cronbach's Alpha (α) > 0.60 ($X = 0.83$, $Y1 = 0.907$, and $Y2 = 0.830$) at $n = 30$. This means that the variables in the questionnaire are considered valid and reliable as a research test tool.

RESULT AND DISCUSSION

The results of respondents' answers based on the questionnaire showed that the variable of HR practices based on cultural values was in the high category with an answer score of 4.01, for the stress variable was low with an average score of 2.5, while for organizational performance it was high with an average score of 2.5. 3.67 average. Profile of Respondents Cooperative Manager The dominant respondent is over 45 years old, namely 53%, while the education level shows the education level of the dominant respondent with undergraduate education, namely 57 people or 76%.

This study uses research variables consisting of indicators that make up reflective variables. To test the validity and reliability of the indicators that make up the variables evaluated from the coefficients of convergent validity, discriminant validity, composite reliability, and Cronbach alpha. Convergent validity is measured based on the outer loading test criteria for each indicator. Outer loading values ranging from 0.50-0.60 were declared valid and significant, and indicators with values below 0.50 were excluded from the model.

Convergent validity measured based on the outer loading test criteria for each indicator. Outer loading test results Outer loading are presented in Table 2.

Table 2. Outer loading research variables

	Performance_Organization	_HR Practice	_Work Stress	information
X1.1		0.665		valid
X1.11		0.617		valid
X1.12		0.756		valid
X1.13		0.660		valid
X1.2		0.528		valid
X1.4		0.652		valid
X1.6		0.709		valid
X1.8		0.576		valid
Y1.17			0.600	valid
Y1.18			0.757	valid
Y1.19			0.849	valid
Y1.20			0.911	valid
Y1.21			0.771	valid
Y1.22			0.827	valid
Y2.23	0.819			valid
Y2.24	0.843			valid
Y2.25	0.723			valid

Source: Processed data, 2021.

A good discriminant validity is that the square root of AVE for each construct is greater than 0.50. The AVE root value for each dimension ranges from 0.50-0.70 indicating the discriminant test results according to the required AVE value is greater than 0.50 (Imam Ghozali & Latan, 2012). A measurement can be said to be reliable, if the composite reliability and Cronbach alpha have a value greater than 0.70. The composite reliability and Cronbach alpha values meet the reliable criteria, with each value > 0.70, which shows that all indicators that make up the construct are valid and reliable. The values of AVE, composite reliability, and cronbach's alpha are presented in the table. 3.

Table 3. Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Extracted (AVE)	Variance
Performance_Organization	0.727	0.769	0.839		0.635
_HR Practice	0.803	0.808	0.852		0.530
_Work Stress	0.877	0.888	0.909		0.627

Source: Processed data, 2021.

The value of R Square indicates that each latent variable is endogenous as the predictive power of the structural model. Changes in the value of R Square can be used to explain the effect of certain exogenous latent variables on endogenous latent variables that have a substantive effect. R Square value of 0.75 concluded that the model is strong, 0.50 moderate, and 0.25 weak (Imam Ghazali & Latan, 2012). R Square value of each variable above 0.50 indicates a strong model. Organizational performance variable with R2 value 0.97 and work stress 0.689. Based on the R2 value, the model is classified as strong. R2 value of each variable is presented in Table 4.

Table 4. Value of R 2 Variable

	R Square	Information
Performance_Organization	0.971	strong
_Work Stress	0.689	strong

Source: Processed data, 2021.

Evaluation of structural models through Q-Square Predictive Relevance (Q2)

Q-Square Predictive Relevance (Q2) is a measure of how well the observations made give results to the research model. The value of Q-Square Predictive Relevance (Q2) ranges from 0 (zero) to 1 (one). $Q2 = 1 - (1 - R1^2) (1 - R2^2) \dots (1 - Rn^2)$

$$Q2 = 1 - (1 - 0.9712) (1 - 0.6892)$$

$$Q2 = 1 - (1 - 0.942) (1 - 0.474)$$

$$Q2 = 1 - (0.058) (0.525)$$

$$Q2 = 0.96 \text{ (strong model).}$$

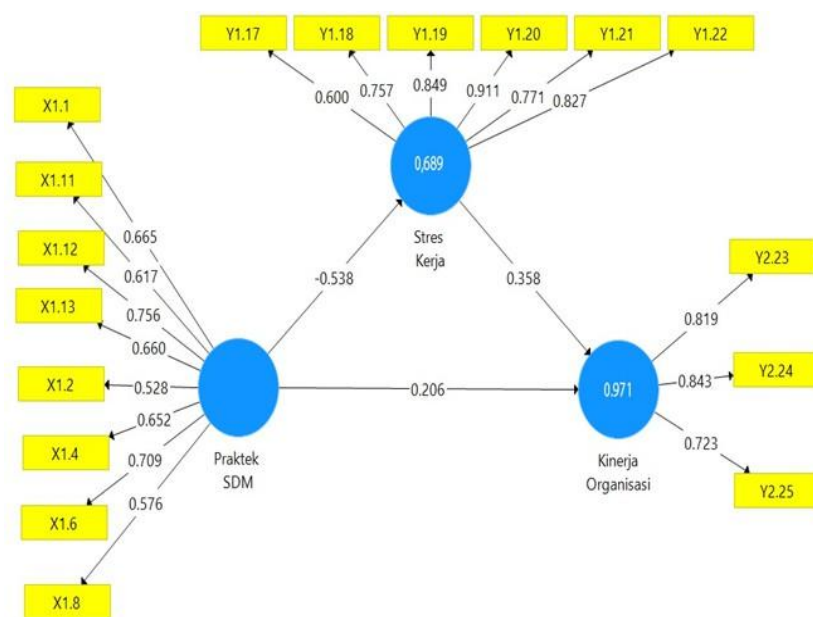
The results of hypothesis testing the relationship between variables are presented in Table 5. The effect of HR practices based on local Balinese cultural values (jengah, taksu, and meyamabraya) on work stress is negative and significant. the value of v value is 0.000, with a statistical t test value of 7.906 which is greater than the t table of 1.96. This means that the stronger the implementation of cultural values of shy, taksu, and menyama braya in HR practices, the lower employee stress. Based on the results of the analysis, it is shown that HR practices based on local cultural values (jengah, taksu, and meyamabraya) on organizational performance are positive and not significant. With a coefficient value of 0.303, V value is greater than 0.05 and the statistical test is smaller than the value of 1.96. This means that the better the implementation of cultural values in HR practices, the organizational performance will increase but not significantly. The effect of stress on organizational performance is positive and significant with a coefficient value of 0.018, which is smaller than 0.05 with a T statistic of 2.381 greater than 1.96. This means that the higher the stress the higher the organizational performance and significant.

Table 5. The results of the analysis of the relationship between variables

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Value	information
_HR Practice -> Organization_Performance	0.206	0.186	0.208	0.993	0.321	Not significant
_HR Practice -> _Work Stress	-0.538	-0.564	0.068	7,906	0.000	significant
_Work Stress -> Performance Organization	0.358	0.348	0.151	2,381	0.018	significant

Source: Processed data, 2021.

The results of statistical tests can also be presented in the following figure:

**Figure 2. Full Model**

Source: Processed data, 2021.

The influence of HR practices that implement local Balinese cultural values (jengah, taksu, and meyamabraya) is negative and significant on work stress. This means that the stronger the implementation of cultural values of jengah, taksu, and menyama braya in HR practices, the stress employees are getting lower. The implementation of the cultural values of jengah taksu and meyamabraya is reflected in the indicators of HR practices as follows: X1.1 The implementation of selection and recruitment is carried out based on skills to increase willingness or high enthusiasm to compete in a healthy manner, high willingness and enthusiasm to compete contains elements menyamabraya culture. X.2. Providing orientation for new employees motivates them to excel, motivation to achieve reflects a culture of jengah, X.1. 4, namely using the principle of honesty in determining every decision in the selection and recruitment process, prioritizing the principle of honesty reflecting the values contained in the taksu concept. Salary increase based on performance results to increase competitive

spirit, competitive spirit reflects a culture of *jengah*, Giving higher salaries to employees who excel increases achievement motivation. Awards for employees who achieve the target of enthusiasm to work hard. The provision of training programs for all employees to improve the ability and self-confidence of employees, reflects the concept of *taksu*. Confident in carrying out his profession, Providing training in accordance with the needs of employees so that the ability to produce something interesting for others reflects the concept of *taksu*. Based on the results of the analysis, it is shown that HR practices in cooperatives in Bali already reflect the values contained in the concepts of *jengah*, and *taksu*. The concept of *menyamabraya* based on respondents' answers has been applied to the performance appraisal process, including performance appraisal, reflected in the indicators of helping employees in career development, namely because of mutual need between managers and employees. Career development is reflected in clear structural indicators in career development because they feel they need each other. While the second indicator is to provide opportunities to discuss careers that prioritize brotherhood, mutual respect, and mutual help and tolerance. In the selection and recruitment process, we prioritize brotherly relations with mutual respect, Establish good cooperation, and make decisions based on mutual agreement. The concept of *meyamabraya* has been reflected in the process of establishing a cooperative, such as choosing members, preferably from members in the family, one office, or association. The results of this study support the results of previous studies: Arribas et al. (2013); Dwipayana et al. (2015); Ismail & Gali (2017); Sitiari et al. (2016); Suyatna Yasa et al. (2020). This study discusses how the role of culture implemented in organizational culture can reduce employee stress. The results of this study prove that HR practices such as providing compensation, selection, development, and performance appraisal by implementing cultural values where they live in society can reduce stress, because employees feel the suitability of individual behavior with the organization where they work. This approach is very suitable for retaining employees to achieve better organizational performance.

Based on the results of the analysis, it is shown that HR practices based on local cultural values (*jengah*, *taksu*, and *meyamabraya*) on organizational performance are positive and not significant. This means that the better the implementation of cultural values in HR practices, the organizational performance will increase but not significantly. HR practices that implement the cultural values contained in the concepts of *jengah*, *taksu*, and *menyama braya* have not necessarily been able to improve organizational performance. Although HR practices have not been able to significantly improve performance, this study proved that the implementation of cultural values in HR practices was able to reduce employee stress. The insignificant relationship can be caused that based on the fact that respondents' answers to the implementation of cultural values in HR practices are not yet very strong, and the tenure of the respondents is only 6% above 5 years, meaning that the tenure of service under 5 years tends not to have a very strong culture. strong in implementing cultural values in HR practices. This research supports previous researches Roca et al. (2006); Saleem & Khurshidn (2014); Sani (2012); Sitiari et al. (2016, 2020); Suryani (2017); Suyatna Yasa et al. (2020).

The effect of stress on organizational performance is positive and significant. This means that the higher the stress, the higher the organizational performance and significant. This relationship is in accordance with the theory of the human performance curve adapted from Hm Muhdar (2012). In the early stages along with increasing stress, human performance also increases at a certain point. At that stage humans do not consider themselves stressed, but in a state of stress. excited, passionate or full of encouragement. But past that point the

additional stress will make performance decline. Human performance can be described in the form of a curve:

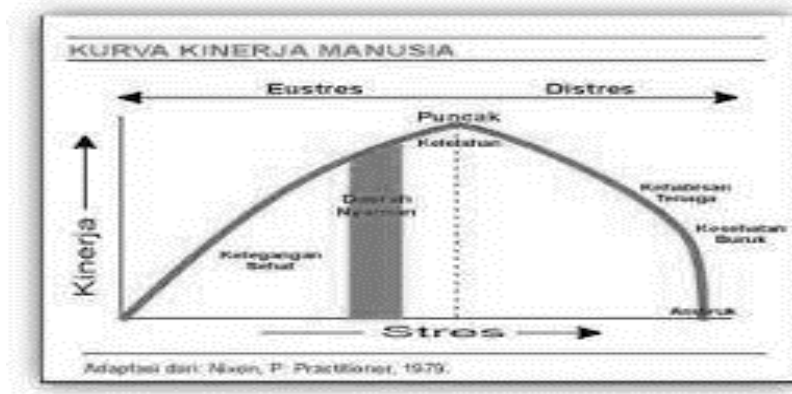


Figure 3. Performance Curve

Source: Muhdar, 2012

Related to the results of this study, which found that stress had a positive effect on performance, it could be due to conformity with individual values derived from values in society. Employees will not feel stress so that it can improve organizational performance. The results of this study do not support previous research that stress has a negative effect on performance (Sitiari et al., 2020). In this case, it can be caused by the background of cultural values, the individual will feel motivated and not feel any pressure. A person will feel an optimal stress range or comfort zone area that makes him feel comfortable and can perform well.

CONCLUSION

The influence of HR practices that implement local Balinese cultural values (jengah, taksu, and meyamabraya) is negative and significant on work stress. This means that the stronger the implementation of cultural values of jengah, taksu, and meyamabraya in HR practices, the stress employees are getting lower. HR practices based on local cultural values (jengah, taksu, and meyamabraya) on organizational performance are positive and not significant. This means that the better the implementation of cultural values in HR practices, the organizational performance will increase but not significantly. HR practices that implement the cultural values contained in the concepts of jengah, taksu, and menyama braya have not necessarily been able to improve organizational performance. The effect of stress on organizational performance is positive and significant. This means that the higher the stress the higher the organizational performance and significant. A positive relationship can be caused that stress is also needed in improving performance.

Based on the results of this study, suggestions for managers of cooperatives in Bali should be managed according to the cultural values that exist in the community. Cooperatives are organizations that are very close to the community because they are one of the people's choices in driving the economy in Bali.

Subsequent research to add other variables such as the strategy variable because the insignificant relationship between HR practices and organizational performance may be mediated by the strategy variable.

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