

# RESILIENCE AND INNOVATION OF SMALL INDEPENDENT RETAILERS IN POST-COVID ECONOMIC RECOVERY IN EMERGING MARKET

Irfan Saleh<sup>1</sup>, Dina Dellyana<sup>2</sup>

School of Business and Management, Institut Teknologi Bandung<sup>1,2</sup>

Corresponding E-mail: [29123469@mahasiswa.itb.ac.id](mailto:29123469@mahasiswa.itb.ac.id), [irfansalehprofit@gmail.com](mailto:irfansalehprofit@gmail.com)

Received : 20 April 2025

Published : 11 June 2025

Revised : 29 April 2025

DOI : <https://doi.org/10.54443/morfai.v5i4.3182>

Accepted : 13 May 2025

Publish Link : <https://radjapublika.com/index.php/MORFAI/article/view/3182>

## Abstract

"This study investigates how strategic planning, operational business practices, retailer supplier relationship, and technology adoption affect the performance of small independent retailers in Indonesia. By using Structural Equation Modeling (SEM) via SmartPLS, data were gathered from 283 retailers in Indonesia, West Java Province, specifically in Majalengka, Cirebon, Kuningan, and Indramayu between February and May 2025. Covid19 degraded the business sectors, the aim of study is to reveal how small independent retailer can survive and grow. The findings shows that both effective business operations and the use of technology significantly enhance customer loyalty, which is important in boosting retailer performance. Moreover, relationship among retailers and suppliers bridging the mediation effect of strategic planning on performance. Although strategic planning does not directly influence loyalty, its indirect effects highlight the importance of surrounding factors. The study reinforces the theoretical frameworks of the Technology to Performance Chain (TPC) and the relational view of firm performance, while proposing practical insights for retail strategy and digital innovation in emerging markets."

Keywords: *innovation, economic, market*

## INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) business is the backbone of Indonesia, in economy crisis 1998, MSMEs becomes one important pillars for Indonesian to survive, since UMKM able to absorb so many employment, according to Sri Mulyani (2024), The Minister of Finance Republic Indonesia said, "Labor absorption in the Micro, Small, and Medium Enterprises (MSMEs) sector in Indonesia has reached 97%, equivalent to 117 million workers relatively high compared to others countries". During Covid19 there are a lot of retail business collapses because their income decreases significantly, 83% retail business declared their income drop and 39% business forced to do layoff of the employees. Furthermore, data shows that around 15.6% of retail businesses permanently closed during the pandemic and 34.5% of retail businesses started using e-commerce platforms to sell their products. (Central Statistics Agency of Indonesia, 2020). The retail business is so important, not only for corporations but also the small traditional retail must be protected and developed.

The Covid19 pandemic affected the business sector significantly, retailers must learn how to survive and adopt new consumer behaviour. A prominent factor for small medium enterprises to survive in a post-pandemic period is the ability to operate and innovate specifically does not lose customers. Business agility reinforces small and medium-sized enterprises (SMEs) to actively react swiftly and effectively to real-time developments, helping them retain their customer base. (Dhewanto, Zailani, Dellyana, Fauzan, & Putri, 2021). While existent literature has provided major insights into the buyer-supplier and buyer-consumer relationships of small independent retailers (Runyan & Droge, 2008), and the functional business strategies and strategic planning that influence performance (Praharsi et al., 2014; Ramakrishnan, 2010), there remains limited absorption of strategic technology adoption into this framework, especially within emerging economies such as Indonesia. Most papers have focused on developed market contexts, which are often not categorized to traditional retailers in developing nations, where capital and digital literacy are still limited (Seethamraju & Diatha, 2018; Isharyani et al., 2024). Moreover, empirical studies that apply a structural equation model (SEM) to identify the collective impact of buyer behaviour, strategic planning, and technology adoption on retail survival are scarce. This study addresses these gaps by developing a holistic model tailored to Indonesian small retailers in a post-pandemic recovery context.

## **METHOD**

### **Research Design**

We used questionnaire survey as data collections tools, the survey contains of multiple scaled items for each the research constructs, in addition the survey was reviewed and did pretest by academicians and two retail managers to ensure the measurement items are fit with the research objectives described in the constructs and small retailers' community leader to sense the coherent and question simplification. The questionnaire survey comprises six constructs. Table 1 shows the measurement items for each construct included in the survey. These items are derived from a synthesis and combination of previous research formulations, as indicated by their referenced sources. All construct items are measured using a five-point scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree").

### **Research Sample**

The target respondent's population comprises small independent retailers located in four specific city and regencies in West Java Province, which are Majalengka, Cirebon, Kuningan, and Indramayu. They are joining program SRC, a movement and coaching program from a fast-moving consumer goods company to empower small medium enterprises like small independent retail store to keep relevant with current consumer behaviour and fierce competition vs modern trade and ecommerce. Total SRC population in those regencies is about 8,000 small independent retailers; to determine appropriate sample number we use Z Score methods with finite population correction (FPC) to determine the sample size, with margin error 0.05 for 95% confident level, total sample requirement is 367. The sample size consists of 369 respondents of small independent retailers selected based on a convenience and purposive sampling method to ensure relevant representation from each location.

### **Data Collection**

Data collection occurred between April and May 2025 through structured questionnaires. Questionnaires will be distributed directly to business owners or managers of selected retailers. To ensure data accuracy, field enumerators will facilitate the data collection process, providing guidance and clarification when necessary. The questionnaire was designed to capture their strategic perspectives, including aspects of functional business and planning, the development of relationships with key suppliers, engagement with consumers through consumer loyalty programs, retail technology to adapt with new consumer behaviour and overall retail performance to survive and develop.

### **Analytical Method**

Structural Equation Modelling (SEM) analysis will be assessed using SmartPLS software version 4. SmartPLS is chosen for its agility in analysing complex models with small to medium-sized samples and its capability for testing measurement and structural models simultaneously.

## **RESULTS AND DISCUSSION**

In this part we are going to examine the calculation results of the Hypothesis model. Start from respondents' demography, technology adoption model that translated by Digital Maturity Level, statistical measurement and its practical interpretations. Furthermore, theoretical implications and managerial implications will be explained in this session as the core of the study how to enhance small retailer performances and its survival. Finally, is the suggestion for future research of the study for novelty addition for academic research.

Demographic Profile			
Demography Characteristics	Level	Frequency	Percentage
Age	13 - 28 years	16	4%
	29 - 44 years	164	44%
	45 - 60 years	174	47%
	61 - 79 years	15	4%
Gender	Man	176	48%
	Women	193	52%
Children in households	0	19	5%
	1 - 2	239	65%
	>3	111	30%
Duration join program SRC	<1 years	54	15%
	1 - 3 years	119	32%
	>3 years	196	53%
Duration run the business	0 - 4 years	46	12%
	5 - 9 years	116	31%
	10 - 19 years	156	42%
	>20 years	51	14%
Total sales growth	Increase	127	34%
	Not Changed	190	51%
	Decrease	52	14%

Table 2: Demographic Characteristics of small independent retailers

We have done survey through online questionnaire to 369 small independent retailers who joined SRC program, presented in Table 2. Based on age demography small independent retailer dominating with range age 29 – 44 and 45 – 60 years by 92%, this generation called Millennials or Gen Y and Gen X, most of the retailers are in the productive working age. Women are slightly dominating by 52% compared to men, in Indonesia this quite prevalent. With 65% of respondents having one to two children and the rest 30% raising more than three, most participants are managing business responsibilities at the same time bearing small to moderately sized families. 53% of participants have remained in the SRC program for more than 3 years, indicating strong retention and sustained involvement. This emphasizing the program's ability to foster long-term engagement among its members. While 34% of respondents reported increased sales in the last 3 years after Covid pandemic, 51% experienced no change, and 14% are facing a decline in the last three years. even though a third have shown improvement, the stagnant performance among half of the retailers underscores the need for strategic support solutions.

Grouping	RT Adopted	#Respondent Outlet	%
<input checked="" type="checkbox"/> Non Digital	0	57	
<b>Non Digital Total</b>		<b>57</b>	<b>15%</b>
<input checked="" type="checkbox"/> Basic Digital	1	62	
	2	54	
<b>Basic Digital Total</b>		<b>116</b>	<b>32%</b>
<input checked="" type="checkbox"/> Advanced	3	75	
	4	70	
	5	51	
<b>Advanced Total</b>		<b>196</b>	<b>53%</b>
<b>Grand Total</b>		<b>369</b>	<b>100%</b>

Table 3: Digital Maturity Level

The categorizing of digital maturity for traditional retailers is considered by the types of technologies they adopt and the extent to which these technologies contribute to achieving strategic performance goal (Isharyani et al., 2024). Table 3 shows Digital Maturity Level. Level 1 – Non-Digital is defined as no digital products are sold in

their outlets or being use by the retailer to support business performance, Level 2 – Basic Digital is defined outlet with minimal sold 1 to 2 digital products, and Level 3 – Advanced Digital is defined outlet with provide minimum 3 digital products. In this study we found that only 8% retailers do not provide digital products, while the rest is minimum provide 1 digital product. In figure 3 presented the list of digital products surveyed in the research questionnaire.

No	Digital Tools/Products
1	Use Whatsapp as promotion media
2	Computerized Cashier
3	Sell telecommunication credits, Electricity Voucher, and Games Voucher
4	Receive Cashless Payment such as QRIS, transfer, etc
5	Provided Bank Transfer Services and Cash Withdrawal
6	Non Digitalize

Figure 3: List of Digital Products

### Confirmatory Analysis (CFA)

Confirmatory factor analysis (CFA) aims to test the hypothesis regarding the proposed constructed models. We used SMART PLS to run the data processing. A CFA is executed by using 21 items that measure the 5 constructs. Indicator Loadings, Table 4 demonstrates indicator loadings examine the effectiveness each item represents its linkage construct. Most of indicators exhibit strong loadings above 0.70, reflecting high item reliability. While FB3 and FB4 falls below the recommended threshold, review carefully for next studies.

Indicators	Outer loadings	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
CLP1 <- Consumer Loyalty Program	0.778				
CLP2 <- Consumer Loyalty Program	0.917				
CLP3 <- Consumer Loyalty Program	0.929				
<b>Total Consumer Loyalty Program</b>	<b>2.624</b>	<b>0.847</b>	<b>0.860</b>	<b>0.909</b>	<b>0.7698</b>
FB1 <- Functional Business	0.850				
FB2 <- Functional Business	0.840				
FB3 <- Functional Business	0.632				
FB4 <- Functional Business	0.575				
<b>Total Functional Business</b>	<b>2.896</b>	<b>0.706</b>	<b>0.749</b>	<b>0.820</b>	<b>0.539</b>
RP1 <- Retailer Performance	0.864				
RP2 <- Retailer Performance	0.902				
RP3 <- Retailer Performance	0.824				
RP4 <- Retailer Performance	0.814				
<b>Total Retailer Performance</b>	<b>3.404</b>	<b>0.874</b>	<b>0.878</b>	<b>0.913</b>	<b>0.726</b>
RSP1 <- Retailer Supplier Relationship	0.912				
RSP2 <- Retailer Supplier Relationship	0.934				
RSP3 <- Retailer Supplier Relationship	0.916				
<b>Total Retailer Supplier Relationship</b>	<b>2.761</b>	<b>0.910</b>	<b>0.910</b>	<b>0.943</b>	<b>0.847</b>
RT1 <- Retailer Technology	0.846				
RT2 <- Retailer Technology	0.886				
RT3 <- Retailer Technology	0.944				
RT4 <- Retailer Technology	0.928				
RT5 <- Retailer Technology	0.892				
<b>Total Retailer Technology</b>	<b>4.496</b>	<b>0.941</b>	<b>0.944</b>	<b>0.955</b>	<b>0.810</b>
SP1 <- Strategic Planning	0.944				
SP2 <- Strategic Planning	0.937				
<b>Total Strategic Planning</b>	<b>1.881</b>	<b>0.870</b>	<b>0.872</b>	<b>0.939</b>	<b>0.885</b>

Table 4: Factor Loading, construct & composite reliability, variance extracted

Cronbach's Alpha and Composite Reliability (CR) are empowered to evaluate internal consistency, with values more than 0.70 signifying acceptable reliability. All constructs in the analysis meet this standards criterion. Moreover, Average Variance Extracted (AVE) values is above 0.50 for all constructs, confirming convergent validity. These results as in to prove that the constructs possess strong internal consistency and valid convergence, as supported by the reliability and AVE metrics. All constructs tested strong internal consistency, with composite reliability (CR) values more than 0.70. Convergent validity was supported by average variance extracted (AVE) values above 0.50.

Construct	Consumer Loyalty Program	Functional Business	Retailer Performance	Retailer Supplier Relationship	Retailer Technology	Strategic Planning
<b>A. Discriminant Validity: Fornell-Larcker Criterion</b>						
Consumer Loyalty Program	<b>0.877</b>					
Functional Business	0.721	<b>0.734</b>				
Retailer Performance	0.738	0.631	<b>0.852</b>			
Retailer Supplier Relationship	0.698	0.684	0.659	<b>0.920</b>		
Retailer Technology	0.777	0.627	0.789	0.688	<b>0.900</b>	
Strategic Planning	0.523	0.649	0.564	0.557	0.503	<b>0.941</b>
<b>B. Heterotrait-monotrait ratio (HTMT) - Matrix</b>						
Consumer Loyalty Program						
Functional Business	<b>0.918</b>					
Retailer Performance	<b>0.850</b>	<b>0.775</b>				
Retailer Supplier Relationship	<b>0.799</b>	<b>0.836</b>	<b>0.732</b>			
Retailer Technology	<b>0.865</b>	<b>0.745</b>	<b>0.871</b>	<b>0.745</b>		
Strategic Planning	<b>0.617</b>	<b>0.822</b>	<b>0.638</b>	0.625	<b>0.553</b>	

Table 5: Discriminant Validity

Discriminant validity was confirmed through both the Fornell-Larcker criterion and HTMT ratios below 0.90, it shows that the constructs were empirically distinct (Hair et al., 2021). Table 5 shows results of the SEM PLS calculations tell us that this analysis as in confirms the constructs are statistically distinct. For each construct, the square root of the AVE (displayed on the diagonal) is greater than the correlations with other constructs (off-diagonal values), indicating that each construct shares more variance with its own indicators than with others. This satisfies the Fornell-Larcker criterion, thereby as in supporting discriminant validity across all constructs.

HTMT is considered a more rigid method for imposing discriminant validity, with handed thresholds below 0.90 and excellently below 0.85. While most HTMT values fall within acceptable ranges, two pairs of constructs raise concerns: Consumer Loyalty Program vs. Functional Business (0.918), exceeded threshold, while Retail Technology vs Retail Performance (0.871) still acceptable but in the borderline. The value exceeds the edge, suggesting potential issues with discriminant validity. This overlap means that the constructs may not be sufficiently distinct, warranting further academic explanation or enhancement of the measurement item. Finally, discriminant validity was examined by comparing the correlations between constructs with the square roots of the average variance extracted (AVE) for each construct (Santoso, 2012; Fornell & Larcker, 1981). In table 5A, this analysis shows the inter-construct correlations (under the diagonal) and the square roots of the average variance extracted (on the diagonal) for each construct. The results describe that all inter-construct correlations are lower than the square roots of the AVE values for the corresponding constructs. This confirms discriminant validity. Furthermore, we conclude that the overall model and its constructs are satisfactory.

### Model Analysis

To identify common method bias, according to Kock (2015), the full collinearity VIF test was recommended, where all VIF values for latent variables were under the 3.3 threshold, denoting the needs of significant common method bias in the dataset showed in Table 6.

Test	Tool	Threshold	Outcome if violated
Full Collinearity VIF	SmartPLS	$VIF \leq 3.3$	Common method biases likely

Table 6: Collinearity VIF threshold to identify biases

	VIF	Notes
CLP1	1.493	Acceptable
CLP2	3.602	Tolarable
CLP3	3.755	Tolarable
FB1	1.766	Acceptable
FB2	1.919	Acceptable
FB3	1.327	Acceptable
FB4	1.112	Acceptable
RP1	2.363	Acceptable
RP2	3.033	Tolarable
RP3	2.223	Acceptable
RP4	1.769	Acceptable
RSP1	2.747	Acceptable
RSP2	3.634	Tolarable
RSP3	3.077	Tolarable
RT1	2.478	Acceptable
RT2	3.761	Tolarable
RT3	6.262	High Multiollinearity
RT4	4.988	Tolarable
RT5	3.478	Tolarable
SP1	2.457	Acceptable
SP2	2.457	Acceptable

Table 7: Collinearity statistics (VIF): Outer model – List

Construct	Consumer Loyalty Program	Functional Business	Retailer Performance	Retailer Supplier Relationship	Retailer Technology	Strategic Planning
Consumer Loyalty Program			1.952			
Functional Business	2.187					
Retailer Performance						
Retailer Supplier Relationship			1.952			
Retailer Technology	1.693					
Strategic Planning	1.775			1.000		

Table 8: Collinearity statistics (VIF): Inner Matrix Model

To impose common method bias (CMB), the full collinearity VIF theory delivered by Kock (2015) was applicative. At the construct level in Table 7, all VIF values were below the conservative threshold of 3.3, indicating no serious multicollinearity or CMB. However, several indicators level VIFs exceeded 3.0, such as CLP2, CLP3, RT2, RT4, and RT but still tolerable. Except RT3 These results indicating theoretic repetitions measurement in specific items, which should refine in future research to ensure discriminant clarity.

## Hypothesis Testing Results

In Table 9, provides summary hypothesis testing using path coefficients, T Statistics, and P Value of the hypothesis models consist of 6 relationship constructs, at 95% confidence level with Threshold T-Statistic  $\geq 1.96$  means Significant, p-Value  $< 0.05$ , Significant, and p-Value  $\geq 0.05$  Not Significant.

Hypothesis	Hypothesis Construct	Path coefficients	T statistics ( O/STDEV )	P values	Supported?
1	Strategic Planning -> Retailer Supplier Relationship	0.550	10.954	0.000	Supported
2	Strategic Planning -> Consumer Loyalty Program	0.007	0.137	0.891	Not Supported
3	Functional Business -> Consumer Loyalty Program	0.386	6.949	0.000	Supported
4	Consumer Loyalty Program -> Retailer Performance	0.589	11.041	0.000	Supported
5	Retailer Supplier Relationship -> Retailer Performance	0.218	4.205	0.000	Supported
6	Retail Technology -> Consumer Loyalty Program	0.533	10.884	0.000	Supported

Table 9: Summary of Hypothesis Testing

	R-square	R-square adjusted
Consumer Loyalty Program	0.702	0.700
Retailer Performance	0.576	0.574
Retailer Supplier Relationship	0.303	0.301

Table 10: R2 and R2 Adjusted

As shown in Table 9, five of the six hypotheses were statistically significant based on path coefficients, t-values, and significance levels ( $p < 0.05$ ). Furthermore, Strategic Planning significantly influenced Retailer Supplier Relationship ( $\beta = 0.550$ ,  $t = 10.954$ ,  $p = 0.000$ ) means by having sales forecast and inventory management could strengthen relationship with suppliers, it is important especially main suppliers where their products are fast moving.

Strategic planning's influence on Consumer Loyalty Program was not significant ( $\beta = 0.007$ ,  $t = 0.137$ ,  $p = 0.891$ ), thereby rejecting Hypothesis 2. It might be because of this empirical study in small independent retailers weakly implement strategic planning on consumers and consumer loyalty, in small retailers may be influenced by the social bounding or convenience than strategic planning.

Functional Business had a suggestive positive effect on Consumer Loyalty Program ( $\beta = 0.386$ ,  $t = 6.949$ ,  $p = 0.000$ ), demonstrates product availability, pricing strategy and service consumers is highly supportive to consumer loyalty, this is the core of business operational in small retailer business, improvement on community engagement maybe necessary to keep the loyalty.

Consumer Loyalty Program also had a strong positive result on Retailer Performance ( $\beta = 0.589$ ,  $t = 11.041$ ,  $p = 0.000$ ) is supported also with  $R^2$  (Table 10) of 0.702 indicating that over half variation in performance outcomes explain by the model, supporting H4. Loyalty programs significantly boost retailer performance. Loyal customers contribute to consistent sales and profitability, especially important for small retailers with limited promotional budgets. Meeting expectations related to product quality, service, and overall experience is essential for enhancing long-term customer loyalty.

Retailer Supplier Relationship significantly influenced Retailer Performance ( $\beta = 0.218$ ,  $t = 4.205$ ,  $p = 0.000$ ) is supported also with  $R^2$  of 0.63 indicating that over half variation in performance outcomes explain by the model. Strong supplier relationships improve performance by ensuring better product supply, credit terms, and operational support

Retailer Technology significantly influenced Consumer Loyalty Program ( $\beta = 0.533$ ,  $t = 10.884$ ,  $p = 0.000$ ), supporting H6. These results confirm the importance of functional strategies, technology adoption, and relationship strength in enhancing performance and loyalty outcomes in small independent retail settings. Digital payment system, point of sale, social media & messaging apps, provide digital products such as electricity voucher, internet quota, and communication credit confirming increase consumer loyalty and indirectly influence the retailer performance.

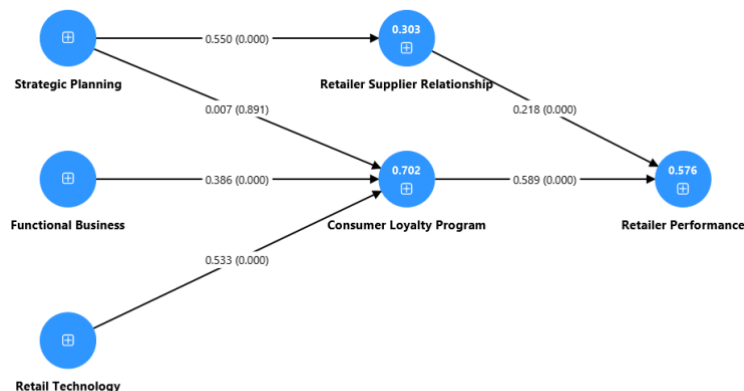


Figure 3: Construct Models with Coefficients, p-value &  $R^2$

Furthermore, to strengthen the hypothesis test we would like to do the mediation test to understand how and why an independent variable affects dependant variable through a mediator, the results presented in Table 11.

Hypothesized Mediation Path	Indirect Effect ( $\beta$ )	t-Value	p-Value	Direct Effect ( $\beta$ )	Mediation Type
Strategic Planning → Retailer Supplier Relationship → Retailer Performance	0.12	3.59	0.000	Significant	Partial Mediation
Strategic Planning → Consumer Loyalty Program → Retailer Performance	0.00	0.14	0.8910	Not Significant	No Mediation
Functional Business → Consumer Loyalty Program → Retailer Performance	0.23	6.33	0.000	Not Modeled	Full Mediation
Retailer Technology → Consumer Loyalty Program → Retailer Performance	0.31	7.46	0.000	Significant	Partial Mediation

Table 11: Mediation Results

Mediation analysis was run to decide whether Consumer Loyalty Program and Retailer Supplier Relationship works as mediators in the model. Results presented that:

### **1. Strategic Planning → RSR → Retailer Performance**

The outcomes show that Strategic Planning (SP) significantly influences RSR ( $\beta = 0.550$ ,  $p < 0.001$ ), and RSR, in turn, significantly affects Retailer Performance (RP) ( $\beta = 0.218$ ,  $p < 0.001$ ). Even though the direct path from SP to RP was not tested directly in the model, the strength and significance of both SP → RSR and RSR → RP paths suggest the presence of a partial mediation, where the strategic intent contributes to performance outcomes through enhanced supplier collaboration.

### **2. Strategic Planning → CLP → Retailer Performance**

In this pathway, neither the indirect effect from SP to RP via CLP ( $\beta = 0.004$ ,  $p = 0.891$ ) nor the direct effect from SP to CLP ( $\beta = 0.007$ ,  $p = 0.891$ ) is statistically significant. These results indicate that Consumer Loyalty Program does not mediate the relationship between strategic planning and retailer performance. This suggests that planning efforts, while essential internally, may not directly influence customer loyalty unless complemented by more tactical or operational drivers.

### **3. Functional Business Strategy → CLP → Retailer Performance**

There is no direct path modelled from Functional Business Strategy (FBS) to Retailer Performance; hence the direct effect is implicitly considered zero. However, the indirect effect through CLP is statistically significant (FBS → CLP =  $\beta = 0.386$ ,  $p < 0.001$ ; CLP → RP =  $\beta = 0.589$ ,  $p < 0.001$ ). This confirms the presence of full mediation, indicating that functional business practices such as pricing, product availability, and service quality impact performance only through their effect on consumer loyalty.

### **4. Retail Technology → CLP → Retailer Performance (Partial Mediation)**

The analysis reveals that Retail Technology (RT) significantly affects CLP ( $\beta = 0.533$ ,  $p < 0.001$ ), and CLP significantly impacts RP ( $\beta = 0.589$ ,  $p < 0.001$ ). In addition, the direct effect from RT to RP is also significant ( $\beta = 0.510$ ,  $p < 0.001$ ). These results support a case of partial mediation, implying that technology enhances performance both directly and indirectly by reinforcing customer loyalty. This is in line with the Technology-to-Performance Chain (TPC) model, emphasizing the dual role of technology as both an enabler and amplifier of performance when aligned with customer-centric processes.

These results emphasizing the demanding mediating role of consumer loyalty program and retailer supplier relationship strategies in enhancing retailer performance.

## **Theoretical Implications**

This paper contributes to the theoretical improvement of small independent retail performance and survival by combining strategic, technological, and relational dimension within market in developing economy as the context. The results supporting foundational role of consumer loyalty program and retailer supplier relationships as critical bridging that mediates operational strategies and business outcomes.

The results that Retailer Technology has influence on Consumer Loyalty Programs, which subsequently improve Retailer Performance, strengthen and expands the Technology-to-Performance Chain (TPC) model (Goodhue & Thompson, 1995) within the context of small retailers in Indonesia. This emphasizing the significance of aligning technology with business needs, even in more traditional retail settings. It highlights the importance of technological fit and usage even in traditional business environments. This study emphasizes the need for small independent retailers to adapt their strategies to leverage community relationships and technological advancements effectively (Isharyani et al., 2024).

The notable positive impact of Functional Business Strategies, such as maintaining product quality & availability (Moorthy et al. 2015), setting competitive prices (Grewal et al., 2011), and optimum service to consumer (Hendrawan & Anggraeni, 2020) on consumer loyalty reinforces established theories in marketing and competitive strategy, particularly within localized retail environments. Additionally, the mediating role of the Retailer-Supplier Relationship supports the relational view of firm performance, emphasizing that trust and collaboration between organizations are vital for sustaining a retailer's competitive edge.

Interestingly, the lack of a significant relationship between Strategic Planning and Consumer Loyalty introduces an important theoretical insight. Although strategic planning is typically assumed to influence customer behaviour, this finding suggests that its effect may be indirect or influenced by other variables—such as organizational capabilities, business size, or cultural context. Similar findings were noted in studies by Rahman et al. (2021), who observed that planning activities in informal retail sectors often lack the structure required to

influence customer outcomes directly. This highlights the need for more nuanced and context-specific theoretical models, particularly for emerging market environments.

### Managerial Implications

From an applicative point of view, this study provides insightful guidance for small independent retail owners and managers in emerging markets. The results emphasize the prominent role of technology not only in optimizing operations but also in enhancement of customer loyalty, a key factor in business performance booster. Even modest investments in digital tools, such as point-of-sale apps, loyalty tracking systems, and inventory monitoring software, can significantly raise customer engagement and retention. Below are the summary digital products availability and its retail performance. Table 12 shows retailer with advanced digital 34% has increased retail performance and 51% of digitalized outlet has stable business performance in the last three years after covid pandemic.

Grouping	RT Adoption	Decrease	Stable	Increase	Grand Total
Non Digital	0	17	39	1	57
<b>Non Digital Total</b>		<b>17</b>	<b>39</b>	<b>1</b>	<b>57</b>
Basic Digital	1	11	42	9	62
	2	7	21	26	54
<b>Basic Digital Total</b>		<b>18</b>	<b>63</b>	<b>35</b>	<b>116</b>
Advanced	3	8	39	28	75
	4	8	24	38	70
	5	1	25	25	51
<b>Advanced Total</b>		<b>17</b>	<b>88</b>	<b>91</b>	<b>196</b>
<b>Grand Total</b>		<b>52</b>	<b>190</b>	<b>127</b>	<b>369</b>
<b>%Retailer Performance</b>		<b>14%</b>	<b>51%</b>	<b>34%</b>	<b>100%</b>

Table 12: Summary Digital Maturity vs Retailer Performance

Retailers must put enhancing functional business elements such as pricing strategies and service quality to strengthen customer loyalty in the first place. Offering clear, unique value propositions that align with local customer preferences may have a more impactful than relying only on formal strategic planning.

Furthermore, developing strong supplier relationships is important. Retailers who collaborate, trust-based partnerships with their suppliers are more likely has privilege from improved product availability, favourable payment terms, and enhanced overall performance. Retail managers can engage more from this point of view by giving them consultancy on managing business, if the retailer feels comfort and has support system, then they are willing to buy more following the sales plan and doing retail advocacy to the consumers.

While this paper did not find a direct relationship between strategic planning and customer loyalty, strategic planning still plays a prominent role within an organization. Retailers should embrace it as a foundational element that support more directly on real efforts, such as working closely with suppliers and engaging customers by loyalty programs.

These findings can become the procedure training programs development, policy measures, and capacity improvement initiatives designed to reinforce the resilience and competitiveness of small retailers in Indonesia and at the end of the day we want to keep small independent retailers stronger, absorb employment and become the backbone of people economy.

### Limitation of Study and Future Research

While the study provides valuable contributions, it also has several limitations. First, the data were collected from retailers in only four regencies in West Java, which may limit the generalizability of the findings to other regions or countries. Future studies could expand the geographic scope to provide broader insight across various cultural and economic contexts.

Additionally, the model's focus was on internal business strategies. Future research could explore external environmental factors, such as government policies, digital infrastructure, or economic shocks (e.g., post-pandemic recovery), that might shape technology adoption and performance.

Furthermore, to enrich emergent retailer research stream (Runyan & Droge, 2008), future research can discuss about strategic implementation in labours issues and in the structure, part focusing on franchising model, alliances, and local or global sections. Overall, these directions will help extend the applicability of the study's

insights and enhance the robustness of the theoretical framework for small independent retail research in emerging markets.

## CONCLUSION

In conclusion, this research improves and give value added to the existing theoretical models by illustrating how the integration of strategic planning, functional execution, and technological adoption collectively influence consumer loyalty and business performance. These results are particularly relevant to the ignored segment of small independent retailers in emerging markets such as Indonesia. Furthermore, this study could be a reference for retail managers across industries who have business interests on small retailer in Indonesia on how two create engagement and act as consultant to support customers business, collaborate with suppliers both of distributors and wholesaler to gain benefit for all stakeholders. Finally, for small retailer this insight can help to prioritize on how main business function will impact to consumers loyalty, utilizing retail technology is empirically prove give positive influence on consumer loyalty and eventually will support retail performance and survival for betterment of people's economy in Indonesia.

## REFERENCES

- Mulyani, S. (2024, March 7). UMKM Indonesia Jadi Raja di Dunia, 97% Serap Tenaga Kerja. CNBC. <https://www.cnbcindonesia.com/research/20240307154500-128-520473/umkm-indonesia-jadi-raja-di-dunia-97-serap-tenaga-kerja>
- Central Statistics Agency of Indonesia, (2020, December 21). Analisis Hasil Survei Dampak Covid-19 Terhadap Pelaku Usaha Jilid 2. [www.bps.go.id](http://www.bps.go.id). Analisis Hasil Survei Dampak Covid-19 Terhadap Pelaku Usaha Jilid 2 - Badan Pusat Statistik Indonesia
- Runyan, R. C., Droge, C., 2008. A categorization of small retailer research streams: what does it portend for future research? *Journal of Retailing* 84, 77–94.
- Ramakrishnan, K., 2010. The competitive response of small, independent retailers to organized retail: study in an emerging economy. *Journal of Retailing and Consumer Services* 17, 251–258.
- Praharsi, Y., Wee, H.-M., Sukwadi, R., & Padilan, M. V. (2014). Small-independent retailers vs. organized retailers: An empirical study in Indonesian economics of service industries. *Journal of Retailing and Consumer Services*, 21(2), 108-117. <https://doi.org/10.1016/j.jretconser.2013.09.002>
- Vilà, J., & Canales, J. I. (2008). Can strategic planning make strategy more relevant and build commitment over time? The case of RACC. *Long Range Planning*, 41(3), 273–290. <https://doi.org/10.1016/j.lrp.2008.02.002>
- Dess, G. G., & Davis, P. S. (1984). Porter's (1980) Generic Strategies as Determinants of Strategic Group Membership and Organizational Performance. *The Academy of Management Journal*, 27(3), 467–488. <https://doi.org/10.2307/256040>
- Isharyani, M. E., Sopha, B. M., Wibisono, M. A., & Tjahjono, B. (2024). Retail technology adaptation in traditional retailers: A technology-to-performance chain perspective. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(1), 100204. <https://doi.org/10.1016/j.joitmc.2023.100204>
- X. Neumeyer, S. C. Santos and M. H. Morris, "Overcoming Barriers to Technology Adoption When Fostering Entrepreneurship Among the Poor: The Role of Technology and Digital Literacy," in *IEEE Transactions on Engineering Management*, vol. 68, no. 6, pp. 1605-1618, Dec. 2021, doi:10.1109/TEM.2020.2989740
- Seethamraju, R. and Diatha, K.S. (2018) 'Adoption of Digital Payments by Small Retail Stores', in . *Australasian Conference on Information Systems* (ed.) <i>Australasian Conference on Information Systems 2018</i>. Sydney: UTS ePRESS. Available at: <https://doi.org/10.5130/acis2018.as>
- White, D.W., Absher, K., 2007. Positioning of retail stores in Central and Eastern European accession states: standardization versus adaptation. *Eur. J. Mark.* 41, 292–306. <https://doi.org/10.1108/03090560710728345>.
- Gaskill, L.R., Auken, H.E.V., Manning, R.A., 1993. A factor analytic study of the perceived causes of small business failure. *Journal of Small Business Management* 31,4

- Crosby, L.A., Evans, K.R., Cowles, D.L., 1990. Relationship quality in services selling: an interpersonal influence perspective. *Journal of Marketing* 54, 68–81.
- Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2008). *Designing and managing the supply chain: Concepts, strategies, and cases*. New York: McGraw-hill.
- Gupta, R., Vidyanta, U., & Murali, S. (2019). LOCAL: Online Visibility for Local Shopkeepers Through Participatory Geo-information Systems. [https://doi.org/10.1007/978-981-13-5974-3\\_54](https://doi.org/10.1007/978-981-13-5974-3_54)
- Moorthy, R., Behera, S., & Verma, S. (2015). On-Shelf Availability in Retailing. *International Journal of Computer Applications*. <https://doi.org/10.5120/20296-2811>
- Rahman, A., & Khan, P. I. (2014). Effect of Service Convenience on Service Loyalty: Moderating Role of Consumer Characteristics. *South Asian Journal of Management*.
- Hendrawan, D., & Anggraeni, R. (2020). Is the loyalty program effective in creating loyalty program satisfaction and store loyalty? an evidence from indonesia retail industry. <https://doi.org/10.21776/UB.JAM.2020.018.04>
- Mujianto, M. S. G., Ramaditya, M., Mustika, M., Tanuraharjo, H. H., & Maronrong, R. (2022). Dampak Pandemi Covid-19 pada UMKM Warung Ritel Tradisional di Indonesia dan Strategi Bertahannya. *Jurnal STEI Ekonomi*. <https://doi.org/10.36406/jemi.v30i02.494>
- Dai, L. (2022). Research on the Differentiated Competition Strategy of Membership-based Retail Stores. *Frontiers in Business, Economics and Management*. <https://doi.org/10.54097/fbem.v5i3.1901>
- Gui, L., Tang, C. S., & Yin, S. (2020). Collaborative Micro-Retailing in Developing Economies. [https://doi.org/10.1007/978-3-030-31733-1\\_9](https://doi.org/10.1007/978-3-030-31733-1_9)
- Fullerton, G., 2005. The service quality-loyalty relationship in retail services: does commitment matter? *Journal of Retailing and Consumer Services* 12, 99–111
- Makarova, V., & Makarenko, N. (2022). Features of customer loyalty management on small business trading enterprises. *Naukovij Visnik Užgorod's'kogo Nacional'nogo Universitetu*. <https://doi.org/10.32782/2413-9971/2022-42-16>
- Kirillova, T. V. (2023). Consumer loyalty: a critical analysis of approaches towards definition. *Научный Результат*. <https://doi.org/10.18413/2408-9346-2023-9-2-0-7>
- Rubio, N., Villaseñor, N., & Yagüe, M. J. (2017). Creation of consumer loyalty and trust in the retailer through store brands: The moderating effect of choice of store brand name. *Journal of Retailing and Consumer Services*. <https://doi.org/10.1016/J.JRETCONSER.2016.07.014>
- Verma, M., & Roshani, P. (2022). A Study on Consumer Expectation Towards Retail Service Quality with Reference to Ghaziabad. *ECS Transactions*. <https://doi.org/10.1149/10701.10385ecst>
- Makhitha, K. M., & Soke, B. (2021). Investigating the challenges for the development of independent retailers in South Africa. *International Journal of Research In Business and Social Science*. <https://doi.org/10.20525/IJRBS.V10I7.1226>
- Curtin, R. (2019). Consumer expectations: a new paradigm. *Business Economics*. <https://doi.org/10.1057/S11369-019-00148-1>
- Mahdikhah, S., Messaadia, M., Baudry, D., Evans, R., & Louis, A. (2014). A Business Process Modelling Approach to Improve OEM and Supplier Collaboration. *Journal of Advanced Management Science*. <https://doi.org/10.12720/JOAMS.2.3.246-253>
- Biggemann, S., Buttle, F., 2012. Intrinsic value of business to business relationships: an empirical taxonomy. *Journal of Business Research* 65, 1132–1138.
- Antonov, G., Ivanova, O., Tumin, V., Bodrenkov, A., & Kostromin, P. A. (2022). Supply and sales. <https://doi.org/10.12737/1852438>
- Chen, T., Levy, H., Martin, X., & Shalev, R. (2021). Buying products from whom you know: personal connections and information asymmetry in supply chain relationships. *Review of Accounting Studies*. <https://doi.org/10.1007/S11142-020-09578-1>
- Zha, Y., Chen, K., Dong, L., & Yu, Y. (2019). Financing Supplier Through Retailer's Credit. *Social Science Research Network*. <https://doi.org/10.2139/SSRN.3415185>
- Ng, C., Chua, Y. M., & Daud, D. (2019). A Study on the Impact of Supplier Performance towards Achieving Retailer Satisfaction. <https://doi.org/10.1051/E3SCONF/201913604089>
- Donderwinkel, S. (2015). Improving the On Time Delivery performance by the implementation of a Sales Inventory & Operations Planning process / Taking into account the optimization of inventory parameter settings of components with different demand patterns.
- Ibrahima, C. S., Xue, J., & Gueye, T. (2021). Inventory management and demand forecasting Improvement of a forecasting model based on artificial neural networks. <https://doi.org/10.30564/JMSER.V4I2.3242>

- Costa, G., Mavrommatis, A., Vila, M., & Valdes, S. (2017). Collaborative Relationships Between Manufacturers and Retailers: A Supply Chain Collaboration Framework. [https://doi.org/10.1007/978-3-319-59701-0\\_21](https://doi.org/10.1007/978-3-319-59701-0_21)
- Yu, V. F., Qiu, M., & Gupta, J. N. D. (2021). Improving Supplier Capability through Training: Evidence from the Chinese Automobile Industry. *Computers & Industrial Engineering*. <https://doi.org/10.1016/J.CIE.2021.107825>
- Neumeyer, X., Santos, S.C., Morris, M.H., 2020. Overcoming barriers to technology adoption when fostering entrepreneurship among the poor: the role of technology and digital literacy. *IEEE Trans. Eng. Manag.* 68, 1605–1618. <https://doi.org/10.1109/TEM.2020.2989740>
- Gupta A., Singh S., 2023. Barriers of digital transaction in rural areas: an interpretive structural modelling and MICMAC analysis. (2023). *International Journal of Electronic Business*. <https://doi.org/10.1504/ijeb.2023.127541>
- Tjahjono, B., 2009. Supporting shop floor workers with a multimedia task-oriented information system. *Comput. Ind.* 60, 257–265. <https://doi.org/10.1016/j.compind.2009.01.003>
- Liu, B.Q., Goodhue, D.L., 2012. Two worlds of trust for potential e-commerce users: humans as cognitive misers. *Inf. Syst. Res.* 23, 1246–1262. <https://doi.org/10.1287/isre.1120.0424>
- Oliveira, T., Faria, M., Thomas, M.A., Popovič, A., 2014. Extending the understanding of mobile banking adoption: When UTAUT meets TTF and ITM. *Int. J. Inf. Manag.* 34, 689–703. <https://doi.org/10.1016/j.ijinfomgt.2014.06.004>
- Zhou, T., Lu, Y., Wang, B., 2010. Integrating TTF and UTAUT to explain mobile banking user adoption. *Comput. Hum. Behav.* 26, 760–767. <https://doi.org/10.1016/j.chb.2010.01.013>
- Wang, X., Wong, Y.D., Chen, T., Yuen, K.F., 2021. Adoption of shopper-facing technologies under social distancing: a conceptualisation and an interplay between task-technology fit and technology trust. *Comput. Hum. Behav.* 124, 106900 <https://doi.org/10.1016/j.chb.2021.106900>
- Bradač Hojnik, B., & Huđek, I. (2023). Small and Medium-Sized Enterprises in the Digital Age: Understanding Characteristics and Essential Demands. *Information*, 14(11), 606. <https://doi.org/10.3390/info14110606>
- Zhao, Y., & Bacao, F. (2020). What factors determining customer continuingly using food delivery apps during 2019 novel coronavirus pandemic period? *\*International Journal of Hospitality Management*, 91\*, 102683. <https://doi.org/10.1016/j.ijhm.2020.102683>
- Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. (2022). Transforming the Customer Experience through New Technologies. *Journal of Interactive Marketing*, 51(1), 57-71. <https://doi.org/10.1016/j.intmar.2020.04.001>
- Ailawadi, K.L., Beauchamp, J.P., Donthu, N., Gauri, D.K., Shankar, V., 2009. Communication and promotion decision in retailing: a review and directions for future research. *Journal of Retailing* 1, 42–55. <https://doi.org/10.1016/j.jretai.2008.11.002>
- Galvão, E. de M., Cotrim, S. L., Leal, G. C. L., & Aragão, F. V. (2017). Sales performance management: a strategic initiative to the growth of micro and small businesses. *Brazilian Journal of Operations & Production Management*. <https://doi.org/10.14488/BJOPM.2017.V14.N1.A13>
- Bajpai, H., & Adhikari, A. (2018). Retailing in Emerging Markets. [https://doi.org/10.1007/978-981-10-6505-7\\_6](https://doi.org/10.1007/978-981-10-6505-7_6)
- Hensel, R., Visser, R. C., Overdiek, A., & Sjoer, E. (2021). A small independent retailer's performance: Influenced by innovative strategic decision-making skills? *Journal of Innovation & Knowledge*. <https://doi.org/10.1016/J.JIK.2021.10.002>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2021). *Multivariate data analysis* (8th ed.). Cengage Learning
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.2307/3151312>
- Santoso, S., 2012. Analisis SEM Menggunakan AMOS (SEM Analysis Using AMOS). PT Elex Media Komputindo, Jakarta.
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration*, 11(4), 1–10. <https://doi.org/10.4018/ijec.2015100101>
- Wu, Q., Li, T., Wang, Z., & Peng, H. (2019). A Purchasing Plan Management System Based on Belief Rule-Base Method. [https://doi.org/10.1007/978-3-030-25128-4\\_90](https://doi.org/10.1007/978-3-030-25128-4_90)
- Rahman, M., Islam, R., Ahmed, S., & Al Asheq, A. (2021). Determinants of service quality and its effect on customer satisfaction and loyalty: An empirical study of the private banking sector. *The TQM Journal*, 33(6), 1–15. <https://doi.org/10.1108/TQM-05-2020-0119>
- Goodhue, D. L., & Thompson, R. L. (1995). Task-technology fit and individual performance. *MIS Quarterly*,

19(2), 213–236. <https://doi.org/10.2307/249689>

Dhewanto, W., Zailani, S., Dellyana, D., Fauzan, T. R., & Putri, A. P. (2021). Towards sustainable and agile business: Orchestrating business agility framework for the recovery of small and medium-sized enterprises (SMEs) affected by COVID-19 in Indonesia. In ECIE 2021: 16th European Conference on Innovation and Entrepreneurship (pp. 249–257). Academic Conferences Limited

Zhao, X., Lynch, J. G., Jr., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197–206. <https://doi.org/10.1086/651257>.