



Leverage of Pro-value in Exchange Network Power to Business Performance: A Service-dominant logic Perspective

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Abstract

Purpose – This study aims to build a conceptual model of pro-value in exchange network power in bridging product innovation against business performance, which was previously inconsistent.

Methodology – The survey method involved 187 owners and managers of the sector MSMEs in Salatiga, Central Java, Indonesia. The AMOS structural equation modeling software is used to test the proposed hypothesis.

Findings – The result showed that pro-value in exchange network power and market entry speed connect product innovation to business performance. The first hypothesis confirmed that product innovation significantly influenced pro-value in exchange network power; the second hypothesis illustrated that pro-value in exchange network power significantly affected market entry speed; the third hypothesis indicated that pro-value in exchange network power had a significant impact on business performance; and the fourth hypothesis confirmed that market entry speed significantly influenced business performance. The fifth hypothesis, which proposed full mediation using exchange network power, was rejected. However, the sixth hypothesis suggested that serial mediation through pro-value in exchange network power and market entry speed was accepted.

Originality – Based on the service-dominant logic, pro-value in exchange network power and market entry speed were proposed as alternative way to increase the role of product innovation in business performance of the MSME sector of food and beverage industry.

1. Introduction

The development of the micro business sector has become increasingly important to examine, especially in the context of its role in supporting economic resilience. Several challenges faced by these businesses require the MSME sector to continuously adapt and survive by introducing ongoing product innovation within a dynamic environment (Muna et al., 2023). However, Ferdinand & Zuhroh (2022) highlighted that small and medium enterprises (SMEs) in Indonesia generally lacked innovation capabilities, which limited their potential for growth and competitiveness. This issue was particularly relevant in Salatiga, where its economic growth was

based on the data from Badan Pusat Statistik (2024), contracted by -1.68% in 2020 due to the impact of pandemic. However, the signs of recovery emerged in 2021 with growth rate of 3.35%, followed by a significant increase to 5.53% in 2022, and sustained growth of 5.27% in 2023. Because of these challenges and economic conditions, innovation has become a key driver of recovery and future growth. Over the past decade, several studies have demonstrated that product innovation plays a critical role in improving business performance (Christa & Kristinae, 2021; Khuong et al., 2023; Mulyana et al., 2020). For example, the study conducted by Khuong et al. (2023) showed that product innovation could holistically meet dynamic customer needs. Second, these innovations could provide opportunities to increase product functions based on market needs (Christa & Kristinae, 2021). Third, when the product innovation was agile, making the product faster in accordance with customer needs and market share (Mulyana et al., 2020).

However, there are still inconsistent results in other studies (Abdullah et al., 2024; Achmadi et al., 2023; Farida & Nuryakin, 2021). Research conducted by Abdullah et al. (2024), demonstrating that product innovation requires complexity of management designed with large funding. In addition, research of Achmadi et al. (2023), It showed that product innovation which was not supported by technology, it will be difficult for companies to improve their business performance. Third, authentic products which were closely tied to cultural culture had sensitivity to radical innovation, this causes companies incapable of directly reacting to market demand (Farida & Nuryakin, 2021). Furthermore, Muna et al. (2023) highlighted that MSMEs tended to face resource limitations, and networking strength played a critical role in determining business performance by enabling access to broader resources and market opportunities. However, if networking capabilities in this sector was not managed strategically, they might restrict business flexibility in reaching potential partners (Martín Martín et al., 2022). Furthermore, Muna et al. (2022) noted that speed in market was considered as a comparative resource for small and medium enterprises (SMEs) in capturing new market opportunities, which could potentially enhance business performance. However, Martín et al. (2022) highlighted that market entry did not significantly improve business performance when it was not accompanied by resource readiness and a comprehensive understanding of the target market, as this capability might not consistently led to favorable business outcomes.

Therefore, it indicated that there were still inconsistent research findings regarding the role of product innovation in improving business performance, particularly in the micro, small, and medium enterprises (MSME) sector. Thus, this raises a question: What steps can be built for product innovation towards improving business performance? Relating to the answer about existing gaps and research questions, we adopt the theory of service dominant logic (Vargo & Lusch, 2017). First, business success was determined by efforts to build co-creation aimed at innovation so that innovation could present product functions as relevant exchange value in its business network (Rini & Ferdinand, 2024; Vargo & Lusch, 2017). Second, business success was seen from the existence of distinctive innovations, attached to strong value elements based on joint creation process (Ferdinand & Zuhroh, 2022).

Thus, we implemented the role of mediation, namely; pro-value in exchange network power (PVIENP) as a mediating mechanism, a novel theoretical contribution derived from service-dominant logic followed by several other parameters; market entry speed (MES), product innovation (PNV), business performance (BP). Then they were formulated, how these steps could utilize business performance, especially towards MSMEs in the food and beverage sector in Salatiga, Central Java, Indonesia. This was based on several reasons. First, MSMEs had fierce and dynamic competition, most of these businesses had limited innovation capabilities (Ferdinand & Zuhroh, 2022). Second, high demand encouraged businesses in such sector to continue innovating present superior value to their competitors (Muna et al., 2023). Therefore, this study aimed to develop a conceptual model to fill the gap in the role of product innovation in business performance by utilizing pro-value in exchange network power and market entry speed.

1.1. Product Innovation

Product innovation grounded in service-dominant logic shifts firms from a product orientation to a service orientation, as the exchange rate between a company and its business partners (Vargo & Lusch, 2017). Product innovation is not only seen as physical product development, but to support service processes that prioritize the value of user experience (Vargo & Lusch, 2017), such as a study conducted by Lin & Eng (2024), which explains that to be able to maximize value in innovation, companies could interact with their business partners. These activities encourage creation of relevant exchange rates, bringing out the impression and utility of perceived attributes (Liu et al., 2019). Product innovation This allowed company to offer a strong selling point at a cost-effective (Li et al., 2021), even this can be the main capital (Ferdinand & Zuhroh, 2022).

Our literature study shows that common product innovation requires large costs with strong organizational capabilities, which MSMEs are limited or typically lack (Abdullah et al., 2024; Ferdinand & Zuhroh, 2022). As a result, MSMEs tend to remain in a competitive stagnation (Abdullah et al., 2024; Achmadi et al., 2023). However, based on the perspective of service-dominant logic (SDL), product innovation is not only a physical product, but there is a unique value which is offered and enhanced the product (Vargo & Lusch, 2017). This approach is suitable for MSMEs by reducing costs and can be reproduced (Barba-Aragón et al., 2024). As emphasized by Ferdinand & Zuhroh (2022), these efforts will be effective if the value of the product is created and clearly articulated with the right emphasis, in a focused and long-term manner. Therefore, it is marked by several things; efforts to build new products and product line expansion (Suryani et al., 2021), as well as activities imitation product (Wang & Chen, 2020). Product innovations like this focus on creating added value (Liu et al., 2019), which not only enhance effectiveness based on market demand, but also maximizes efficiency when business entities innovated.

1.2. Pro-value in Exchange Network Power

Pro-value in exchange network power refers to actions of company in building valuable relationships with various parties, including business partners, customers, and other stakeholders (Muna et al., 2023; Saputra & Ferdinand, 2023). As emphasized by the principle of service-dominant logic, such business success depends on interactions which provide value based on the process of co-creation, and it is the basis for the exchange of business actors (Vargo & Lusch, 2017). Pro-value in exchange network power as a concept of prioritizing services in 1 integrated network ecosystem, and routinely creating mutual benefits (Ferreira et al., 2022). To maximize these profits, businesses involved their partners (Chirico et al., 2024). As studies conducted (Ferdinand & Killa, 2018), business partners are strategic assets of company in creating value. To build this, it is marked by 3 efforts in pro-value in exchange network power; key people awareness in business network, having a wide network as a strategic resource chain (Ferdinand & Killa, 2018), and routine cross/upselling practices (Itani et al., 2023). With these elements, companies can maximize strength of an effective sales network and stimulate their business growth.

1.3. Product Innovation as a Driver of Pro-value in Exchange Networks Power

Pro-value in exchange network power depends on positive product innovation. Value attached to a product tends to increase bargaining power of the product (Liu et al., 2019). The product which commercialized is not always new, but can be based on existing (Chirico et al.,

2024). By attaching appropriate usability or practical values, businesses can create new distinctive product innovations (Letellier et al., 2022). In accordance with the basic principle of service dominant logic that emphasizes service exchange for value, mutual interaction emerges among business actors (Vargo & Lusch, 2017). The interaction focuses on the process of creating a varied product as a means of delivering value to be commercialized (Lin & Eng, 2024). A study conducted by Widjojo et al. (2020) stated that it could maximize the opportunity to get innovation at the micro or firm level. This encouraged the expansion of product lines and aimed at expanding business network (Suryani et al., 2021). To accelerate it appropriately, it could be optimized with product innovation through imitation activities (Wang & Chen, 2020). Therefore, the presence of accurate innovations with strong value could encourage the strength of business networks. Therefore, our first hypothesis was proposed.

H₁: Product Innovation had a positive impact on pro-value in exchange network power

1.4. Business Performance

Business performance reflects the extent to which a company can achieve its financial and non-financial goals (Prim et al., 2024). The implementation of service-dominant logic fundamentally focuses on enhancing business performance by enabling firms to generate higher bargaining value through value co-creation with stakeholders (Vargo & Lusch, 2017). This principle emphasizes the important role of services as the basis of exchange rates that bring mutual benefits (Vargo & Lusch, 2017), such as a study conducted by Santos-Vijande et al. (2022), it relies on the power of intense interaction, focusing on creating valuable value with its business partners. Business performance like this, it is marked by several elements; good sales growth, wide market share, and stable profits (Santos-Vijande et al., 2022). This sign of business performance reflects solid and sustainable performance.

1.5. Pro-value in Exchange Network Power as a Determinant of Business Performance

Pro-value in exchange network power which had a positive impact on business performance. The value of being pro in business networking provided opportunity to offer more intense services (Gerke et al., 2020). This activity began with a strong interaction between business networks (Muna et al., 2023). A strong network allowed easier customers' access, faster distribution, and quicker response to partners' needs (Ferdinand & Zuhroh, 2022; Gunawan et al., 2024). With strength of an extensive network, companies could quickly absorb complex insights and developed solid value propositions (Santos-Vijande et al., 2022). As highlighted by Ferdinand & Killa (2018), this opportunity could be accelerated by creating value with solid business partners. A solid network ecosystem, derived from interdependent and competent business partners (Saputra & Ferdinand, 2023), this activity reflected the existence of a favorable evaluation process. This process provided an opportunity to precisely meet the needs of its business network, which in turn leads to superior business performance. Therefore, we proposed a second hypothesis.

H₂: Pro-value in exchange network power had a positive impact on business performance

1.6. Market Entry Speed

Speed of market entry from a service-dominant logic perspective, emphasized responsiveness in delivering appropriate services to meet market demands (Jurek, 2024). First, market entry speed emphasized flexibility of company efforts in responding quickly to dynamics of customer needs (Muna et al., 2023). This reflected that superior companies could adapt their

plans to dynamic market environment and being able to provide quick solutions (Saputra & Ferdinand, 2023), Offering more effective solutions than competing firms (Muna et al., 2023). Market entry speed played a role in distributing this value to customers more rapidly (Nuryakin & Ardyan, 2018). When a company had fast power, relationships between business actors could be easily built on a wide market share (Kyomugisha et al., 2018). It was marked by three important elements; being able to accelerate planning, strive faster than competitors and quickly access the market (Muna et al., 2023). Therefore, businesses that had such resources, it would be faster to offer value to their customers (Golgeci et al., 2023).

1.7. Pro-value in Exchange Network Power as a Determinant of Market Entry Speed

Pro-value in exchange network power had a positive impact on effective market entry speed. A network that did business by prioritizing value provides adaptive capacity of business to enter market faster than planned (Muna et al., 2023). When the value offered is right on the business network, the company easily distributes its products across a wide network (Ferdinand & Zuhroh, 2022), it can even surpass existing competition (Muna et al., 2023). This advantage is built from solid connectivity with business partners (Widjojo et al., 2020). Solid connectivity forms intense interactions (Gerke et al., 2020), creating a wide market entry force (Muna et al., 2023), increasing confidence in competing (Widjojo et al., 2020) and result in more complex access (Li et al., 2021). Such resources can be a strong foothold when companies enter dynamic markets. Based on this condition, we propose a third hypothesis.

H₃: Pro-value in exchange network power had a positive impact on market entry speed

1.8. Market Entry Speed as a Determinant of Business Performance

The speed of market entry had a positive impact on business performance. Entering the market sooner than planned would contribute positively to sales growth (Muna et al., 2023). These activities could be accumulated by creating market access that tended to be effective and prioritizing efficiency (Kyomugisha et al., 2018). Through strong relationships with business partners, companies could quickly meet the needs of a wide range of customers (Setiawan & Ferdinand, 2021). The speed was based on systematic steps and considered as same orientation (Muna et al., 2023; Setiawan & Ferdinand, 2021). Therefore, a fourth hypothesis was proposed.

H₄: Market entry speed had a positive impact on business performance

1.9. Pro-value in Exchange Network Power as a Mediator of Product Innovation on Business Performance

The strength of network is a prerequisite in developing, accumulating value in products to be better. These values are generated from the process of co-creation (Gerke et al., 2020; Itani et al., 2023). This study was based on the principle of service-dominant logic (Vargo & Lusch, 2017), that business performance depends on strong interactions within its business network, focusing on creating service value as a transactional core mechanism or foundation of exchange. The value created in the network presenting additional benefits that mitigate product limitations and enhance the capability of product innovation of firm (Widjojo et al., 2020). Aligning with strong values as basis strategy, the innovations which implemented would be quickly accepted (Farida & Nuryakin, 2021). It is based on the same needs (Barba-Aragón et al., 2024), so that it could provide relevant superior values continuously. When it had the power of a network that put value, businesses could empower their partners (Saputra & Ferdinand, 2023), providing an efficient distribution flow (Ferdinand & Zuhroh, 2022), and able to meet dynamic market

demands (Muna et al., 2023). Therefore, the concept of pro-value in exchange network power functioned as a mediator between product innovation and contributed to business performance.

H₅: Pro-value in exchange network power mediated product innovation towards business performance

1.10. Pro-value in Exchange Network Power and Market Entry Speed as Mediation of Product Innovation in Business Performance

This study is based on the idea that pro-value in exchange network power and market entry speed can positively accelerate the role of product innovation in business performance. Companies that had strength of exchange network value could access a wealth of information (Muna et al., 2023), this was marked by a harmonious need (Ferdinand & Killa, 2018). This alignment encouraged innovation to be more prominent and quickly accepted by business partners (Li et al., 2021), such as a study conducted by Nuryakin & Ardyan (2018), this could be strengthened with market entry capabilities and result in a better advantage over competitors. These advantages encouraged network to be more solid in fulfilling customers' needs (Saputra & Ferdinand, 2023), creating an efficient sales distribution flow (Ferdinand & Zuhroh, 2022), and in turn it would add value to the user of product. Therefore, innovations which are supported by the power of network exchanges, pro-value and speed to market would present an active and fast solution to meet dynamics of customers' needs. Based on this, we proposed the sixth hypothesis.

H₆: Pro-value in exchange network power and market entry speed mediated product innovation towards business performance

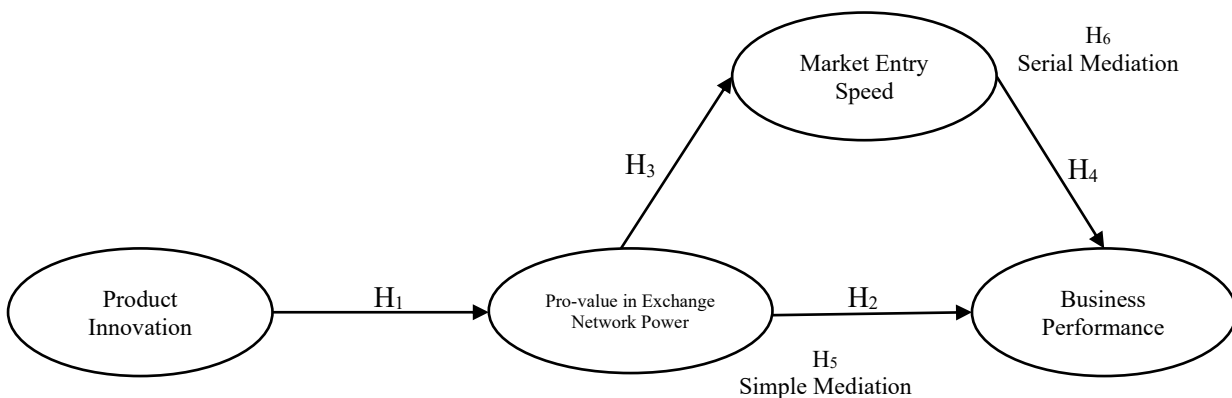


Figure 1. Conceptual Model

2. Research Methods

2.1. Sample and Respondent

This study employed a quantitative research design to analyze six proposed hypotheses. Some variables which were examined in these hypotheses included product innovation, pro-value exchange in network power, business performance, and market entry speed. The model was examined in micro, small, and medium enterprises (MSMEs) located in Salatiga. Some data were collected from the MSME population within the food and beverage sector by inviting business owners or managers to participate as potential respondents. Purposive sampling applied to target potential respondents (Sekaran & Bougie, 2016). The data distribution using Google Form and direct distribution. To meet the research criteria, owners, or managers of MSMEs in the food and beverage sector in Salatiga, Central Java, Indonesia is a potential sample with the criteria of operating business for at least five years. The questionnaire was distributed directly to 200 respondents, and all 200 responses were successfully collected and imported into Microsoft

Excel for initial processing. The respondents surveyed including 15 business owners, 151 were both owners and managers, and 34 were managers only. However, 17 respondents were identified as outliers. The outliers were identified based on mahalanobis distance with a p -value ≤ 0.001 (Collier, 2020). After eliminating the outliers, a total of 183 valid responses remained for further analysis. As emphasized by Hair et al. (2019) models consisting of five constructs or fewer require a minimum sample size of 100. This indicated that the sample used in this study met the recommended minimum requirement or threshold.

2.2. Measurement Variables

We adopted some measurements from other studies. First, product innovation consisting three items (Suryani et al., 2021; Wang & Chen, 2020); new product development, product line expansion, imitation product. Second, pro-value in exchange network power (Ferdinand & Killa, 2018; Itani et al., 2023); self-awareness, wide network, cross/upselling. Third, business performance (Santos-Vijande et al., 2022); sales growth, market share and profit growth. Fourth, market entry speed (Muna et al., 2023); sooner than expected, faster than competitors, and rapid market access. It was measured using a multilevel numerical scale, (0= strongly disagree to 10= strongly agree) (Hair et al., 2019). The data analysis was carried out using AMOS software. Before conducting data analysis using AMOS, all data were initially compiled in Microsoft Excel, then imported and processed using SPSS. Following this initial stage, further analysis was performed in AMOS. Through AMOS, data processing was conducted in two main steps: confirmatory factor analysis (CFA) and full structural equation modeling (SEM).

3. Results and Discussions

First, the data analysis started with a confirmatory factor analysis (CFA) in weighing validity and reliability. However, at this stage, we encountered data which were not normally distributed. Thus, the data transformation was carried out using $X_n = \lg_{10}(k-X)$ (Tabachnick & Fidell, 2019). This step resulted in normally distributed data (Ferdinand & Zuhroh, 2022), following the examination of data distribution, the second step involved validity testing using Confirmatory Factor Analysis (CFA) technique. This process began by identifying factor loadings of each indicator, applying a threshold value of 0.50 (Hair et al., 2019). The assessment also included in evaluating the average variance extracted (AVE), with a criterion value of 0.50 (Arbuckle, 2016).

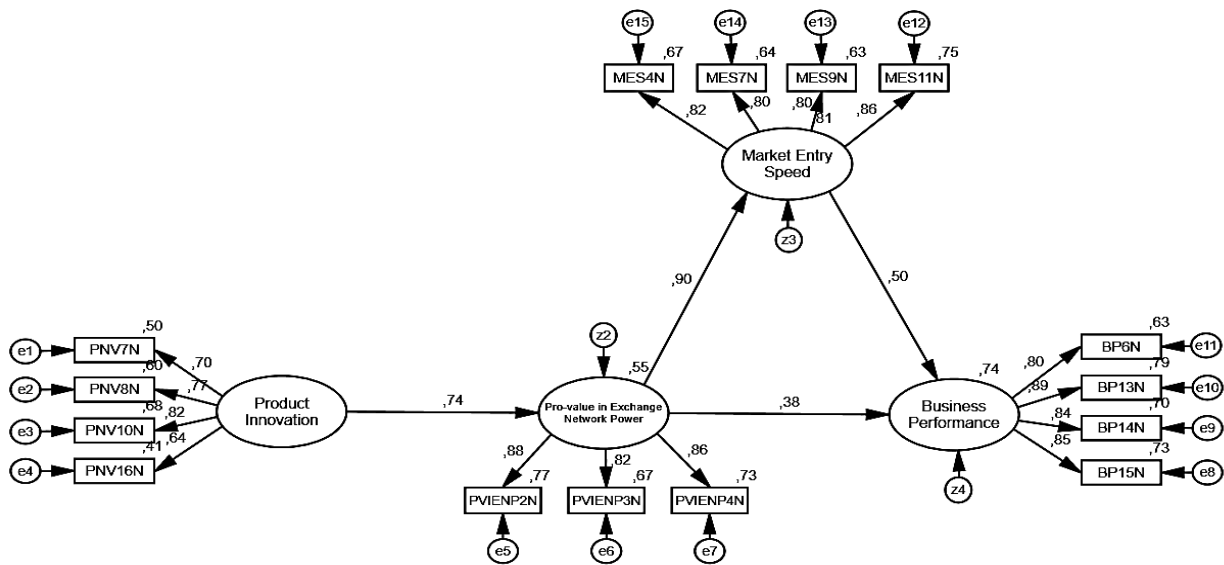
The results indicated that each indicator had a factor loading exceeding the threshold (minimum criterion) of 0.50, as shown in Table 1. Furthermore, the AVE values for each construct also exceeded the minimum threshold of 0.50: product innovation (0.673), pro-value in exchange network power (0.829), business performance (0.882), and market entry speed (0.879). The final stage involved testing reliability by examining composite reliability index, using a threshold value of 0.70 (Arbuckle, 2016). The results showed that all constructs met or exceeded this threshold 0,70, innovation products (0.891), pro-value in exchange network power (0.936), business performance (0.948) and market entry speed (0.937). Therefore, this indicated that the size of the CFA was fixed. As shown in the following table (table 1), it showed the results of factor analysis.

Table 1. The Validity and Reliability Measurement

Variables and Indicators	Scale of Items	References	Std. Loading	C.R \geq 1.96
Product innovation; (AVE=0.673, CRI= 0.891)				
PNV7N	We modified the packaging of products to be more attractive		0.704	8.094
PNV8N	We conducted an analysis of customer needs	(Suryani et al., 2021; Wang & Chen, 2020)	0.772	9.333
PNV10N	We developed new product lines periodically or regularly in certain periods		0.823	9.789
PNV16N	We prioritized innovative and functional design		0.643	7.916
Pro-value in exchange network power; (AVE= 0.829, CRI= 0.936)				
PVIENP2N	We believed in the role and contribution of key figures in expanding the sales network	(Ferdinand & Killa, 2018; Itani et al., 2023)	0.880	6.887
PVIENP3N	We interacted directly with programs led by key figures in sales network		0.817	14.386
PVIENP4N	We provided special incentives to key business figures		0.856	15.633
Business performance; (AVE= 0.822, CRI= 0.948)				
BP6N	We achieved market share growth in the last period		0.796	13.251
BP13N	We got additional profits through product or service innovation	(Santos-Vijande et al., 2022)	0.891	15.979
BP14N	We managed to secure a continuous contract with the customer		0.838	14.406
BP15N	The increase in net profit percentage		0.854	7.577
Market entry speed; (AVE= 0.789, CRI= 0.937)				
MES4N	We optimized supply chains and logistics		0.820	14,086
MES7N	We had a long-term strategy in entering the market		0.801	13,531
MES9N	We conducted regular evaluations of competitors' steps in entering the market	(Muna et al., 2023)	0.795	13,389
MES11N	Our businesses could quickly access market after launching a new product or service		0.864	7.240

Source: processed data

Confirmatory factor analysis showed that the assumptions had been met. The second stage, as shown in Figure 2, it indicated that the goodness-of-fit model had met required non-statistical criteria; with relative value χ^2 1.815, TLI (0.958), CFI (0.965), NFI (0.927), IFI (0.966), RMSEA (0.066). Although $\chi^2 = 156.068$ ($df= 86$, $p= 0.000$) did not indicate a good fit, it was acceptable. As emphasized by Arbuckle (2016) and (Tabachnick & Fidell, 2019), χ^2 statistically sensitive to large samples, so that non-statistical measures needed to be considered, following the validity and reliability testing, we proceeded to the hypothesis testing stage using a structural equation modeling approach.



Model test; Chi-square =156,068; DF =86; Significance level =,000; Relative Chi-square =1,815; TLI =,958; CFI =,965; NFI =,927; IFI =,966; RMSEA =,066

Figure 2. The Empirical Testing of the Research Model

As shown in Figure 2 above, we conducted hypothesis testing based on the proposed model. Table 2 presented the results of hypothesis testing. Hypothesis (H₁) was accepted ($\beta= 0.743, p= 0.000$), indicating that product innovation significantly influenced pro-value in exchange network power. Next, (H₂) was accepted ($\beta= 0.901, p= 0.000$), suggesting that a strong pro-value in exchange network power enhanced market entry speed. H₃ was accepted ($\beta= 0.383, p= 0.015$), indicating that pro-value in exchange network power positively affected business performance. (H₄) was also accepted ($\beta= 0.499, p= 0.002$), showing that higher market entry speed could improve business performance. Following this formula, as proposed in the development of Hypotheses 5 and 6 in this study, we examined simple mediation and serial mediation using syntax-based formulas in AMOS software (Collier, 2020), as presented in Table 3 below.

Table 2. Hypotheses Testing

Hypotheses test	Std. estimate	C.R	p	Conclusion
H ₁ : Product innovation => pro-value in exchange network power	0.743	8.308	0.000	Accepted
H ₂ : Pro-value in exchange network power => market entry speed	0.901	13.411	0.000	Accepted
H ₃ : Pro-value in exchange network power => business performance	0.383	2.423	0.015	Accepted
H ₄ : Market entry speed => business performance	0.499	3.129	0.002	Accepted

Source: processed data

The hypothesis testing process for mediation was carried out in several stages. It began by examining direct regression effect of independent variable on the dependent variable. The influence of product innovation on business performance was found to be significant ($\beta= 0.370, p= 0.000$). Next, we tested the fifth hypothesis by introducing pro-value in exchange network power as a mediating variable between product innovation and business performance. The result

was not significant ($\beta= 0.063, p= 0.620$), indicating that H5 was rejected. In the following stage, we tested the sixth hypothesis involving serial mediation by positioning pro-value in exchange network power and market entry speed as mediators in the relationship between product innovation and business performance. The result was significant ($\beta= 0.397, p= 0.005$), indicating that H6 was accepted. Significant direct effect of product innovation on business performance which observed in this stage suggested that the serial mediation applied operated partially within the model (Collier, 2020).

Table 3. The Mediation Hypotheses Testing

Mediation test	Direct Effect	Indirect Effect (95%)				Conclusion
		Estimate	Lower	Upper	<i>p</i>	
H ₅ : Product innovation => pro-value in exchange network power => business performance	-0.169 (<i>C.R</i> = -4,361; <i>p</i> = 0.000) ^{sig}	0.063	-0.246	0.388	0.620	Rejected
H ₆ : Product innovation => pro-value in exchange network power => market entry speed => business performance		0.397	0.165	0.735	0.005	Partial Mediation

Source: processed data

From Table 3 above, it shows that the mediation path which had been built rejecting H5 ($\beta= 0.063; p= 0.620$), it indicated that pro-value in exchange network power could not simply mediate product innovation towards business performance. However, when serial mediation path was designed, H6 ($\beta= 0.379; p= 0.005$), pro-value in exchange network power and market entry speed encouraged product innovation to improve business performance. This meant that the power of a network which highlighted value as the foundation of exchange along with the speed of entering the market, becoming a bridge in improving product innovation in business performance.

This study develops a conceptual model by introducing pro-value in exchange network power as a mediator between product innovation and business performance, addressing the inconsistencies reported in prior studies in terms of enhancing business outcomes. An empirical analysis which conducted indicating several key findings. The acceptance and rejection of some proposed hypotheses offered strategic pathways to improve business performance. The first pathway changed product innovation to pro-value in exchange network power, and towards the business performance. Product innovation capability originated from internal capacity of a firm to create value through products, whereas network power was rooted in relational strengths within external networks (Setiawan & Ferdinand, 2021). This misalignment in focus leads to a weak linkage between product innovation and performance when solely mediated by pro-value in exchange network power. This is particularly apparent in SMEs, which tend to rely more heavily on internal capabilities, such as creativity, production flexibility, and responsiveness to market needs when developing product innovations. In contrast, the development and strategically utilization of business networks require intensive engagement to generate mutual benefits for the firm, its customers, and its distributors (Ferdinand & Killa, 2018). As a result, SMEs often analyze innovative products directly in the market without relying on network support. Their limited access to network partners capable of facilitating product diffusion or expanding markets weakens the role of pro-value in exchange network power as a sole mediator in linking product innovation to business performance. Interestingly, our study found that when

pro-value in exchange network power was positioned as a direct driver of business performance, it had a significant influence, as confirmed in the third hypothesis.

This finding emphasized the importance of relational strength within business networks based on mutually beneficial value creation and exchange. Such relationships can directly enhance operational efficiency, market access, and business sustainability. When SMEs possess strong bargaining power within collaborative networks, they are more likely to obtain market intelligence and access towards potential customers through established business relationships. These key relationships with suppliers, distributors, or customers create strategic advantages through reducing transaction costs, accelerating product distribution, and strengthening trust among business partners. Co-creating value with network partners enables businesses to reduce market uncertainty, accelerate market adaptation, and strengthen competitiveness. Although pro-value in exchange network power alone may not fully mediate the relationship between product innovation and business performance, the findings indicate that it plays a mediating role when combined with market entry speed, as supported by the sixth hypothesis.

This second pathway suggests that pro-value in exchange network power is a result of innovative capabilities that foster value co-creation with network partners. When SMEs produce innovative products perceived as highly valuable, external partners such as distributors, suppliers, and even customers recognize the potential for mutual value creation (Zuhroh & Rini, 2024). This value co-creation opens opportunities for SMEs to optimize resource access and deliver value more effectively. As proposed in this study, the strength of network power must be accompanied by the ability to enter markets quickly. Speed allows innovative products to gain early exposure, capitalize on market momentum, and reduce the risk of imitation by competitors. Thus, pro-value in exchange network power requires market entry speed as a complementary driver to bridge innovative potential with business performance outcomes especially for SMEs facing resource constraints.

3.1. Theoretical and Managerial Implication

This study adopts SDL theory as the root that explains product innovation, especially pro-value in exchange network power, market entry speed that can improve business performance (Vargo & Lusch, 2017). Although in the literature there is a lot of talk about the power of business networks. However, the ability to integrate value as the cornerstone of exchange between business networks is still limited. This research introduces the concept of pro-value in exchange network power as an alternative resource that reduces large costs when businesses innovate products. Finally, this gives some theoretical implications. First, the value created together strengthens the idea of product innovation into business strategy capital in prioritizing efficiency. Second, with values that prioritize the needs of business partners, companies will gain the strength to quickly enter the market. When distinctive value emerges from co-creation, it becomes the key to the company's success that strengthens the process of delivering that value (Ferdinand & Zuhroh, 2022). Thus, this study highlights the importance of applying SDL theory, as it allows a company to strengthen its business partners by providing enhanced value. In return, this empowers the company to access broader markets and fosters mutual benefits with its partners.

The findings of this study produce several managerial implications. First, product innovations that had met the needs of business partners encouraged those innovations to be quickly accepted and placed the products in superior position including wide range of customers. Therefore, product innovation was important to be considered by the needs of business partners. Second, the importance of pro-value network power to accelerate MSMEs to enter market, this

depends on product innovation that highlighted value. This value came from the value of creation process which was effective for MSMEs in maximizing their resources to meet the needs of the company itself. Therefore, it was an important asset that could be developed for MSME managers in the food and beverage sector. Third, successful performance was achieved through business partners who were professional and shared the same needs and goals. This allowed the company to offer product innovation as a resource aligning with its strategic partners, emphasizing value as a solution that could be efficiently replicated.

4. Conclusions

This study aims to investigate the inconsistencies observed in the existing literature concerning the role of product innovation in enhancing business performance by proposing pro-value in exchange network power as a mediating variable in the relationship between product innovation and business performance. Conceptual framework is grounded in the principles of service-dominant logic, which are included into research variables as a theoretical foundation. The findings indicate that product innovation when considered independently, it does not have a direct and significant impact on business performance. However, when combined with a rapid market entry strategy and an emphasis on co-created value within a broader exchange network, product innovation can significantly enhance performance outcomes. These results highlighted the importance of developing and leveraging strong, mutually beneficial business networks, particularly for MSMEs. The study emphasized that the ability to capitalize on network power and accelerate market entry plays a critical role in translating innovation into measurable business success. The implications of this research are especially relevant for MSMEs operating in the food and beverage sector, offering guidance for the adoption of more integrated and strategic approaches to innovation and market engagement to achieve sustainable business growth.

This study sought to overcome the gap in the results of previous research which were inconsistent regarding the role of product innovation in business performance. Hypothesis testing brought conclusions to strategic flows that could improve business performance. First, product innovation as a driver of pro-value in exchange network power to improve business performance. When this path was modeled as a simple mediator, it could not drive product innovation to improve business performance. However, the second path as serial mediation had proven that pro-value in exchange network power accompanied by market entry speed could encourage product innovation to improve business performance. Therefore, when product innovation was designed to leverage the power of value in the network with a rapid go-to-market strategy, it could be highlighted in broader market and generate mutual benefits.

However, when it is only aimed at business partners, then performance improvement cannot occur. This is logically acceptable, as no company is free from competition, and this ability tends to diminish when it is not co-created (Ferdinand & Zuhroh, 2022), especially in MSMEs which continue to face large capital competitors (Achmadi et al., 2023), and only operate individually. However, pro-value in exchange network power that prioritizes co-created value, is aimed at a broader market, and provides mutual benefits and it can in turn encourage product innovation to improve business performance more effectively, and these resources cannot function optimally without market entry speed. Therefore, SDL as conceptual foundation of thinking of Vargo & Lusch (2017), prioritizing the value of strength in the network must not only be created, but applied consistently. This consistency would present the strength of a solid network (Saputra & Ferdinand, 2023), which in turn could increase business performance in the food and beverage MSME sector.

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