

# **M-Wallet Adoption and SMEs Performance: *The Mediating Role of Internal Process Collaboration***

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## **ABSTRACT**

The development of information and communication technology has a strong positive impact on lifestyle changes for businesses and consumers. It becomes important to start digital transformation, seeing that the use of technology can increase productivity and improve the competitiveness of Indonesian Small and Medium Enterprises (SMEs). Research on the use of digital payment instruments in SMEs is still relatively limited. The analytical method used in this study is Structural Equation Modeling (SEM). Based on the results of the analysis, several conclusions are obtained, including the ability to run a business and the adoption of technology has a positive and significant influence on internal process collaboration. Second, the ability to run a business and technology adoption significantly affects business performance. Third, internal process collaboration is able to mediate the influence of entrepreneurial skills and technology adoption on the performance of SMEs. In subsequent studies, it is recommended to use other variables such as perceived benefits, perceived comfort, and impact of infrastructure to make a more significant contribution to business performance, and to be able to explain variations in the performance of SMEs more comprehensively.

**Keywords:** *mobile wallet, technology, entrepreneurial*

## **1. INTRODUCTION**

Information and communication technology has been widely used in the business world such as: the use of the internet for business purposes [1], websites [2], social interactions [3], and e-commerce [4]. In the business world, the use of information and communication technology is often referred to as electronic-based business.

Electronic business adoption has been widely studied by scientists [5]. Some studies include explaining the e-business adoption on the performance of SMEs [6]. The use of e-business is based on interest in the benefits obtained such as ease in winning competition and efficiency [7].

Mobile wallets are one of the drivers of increasing business efficiency [8]. Research on mobile wallet on business performance [9] is still getting different results. There is research that states that mobile wallets can improve business performance through the convenience of payment transactions [10], increase customer satisfaction [11] and ease of recording business finance [12]. However, there are different results in which the use of mobile wallet does not have a large influence on

business performance [13]. The use of mobile wallets in the SMEs sector has not been thoroughly studied [14].

In our effort to resolve this gap, our current study uses collaboration theory because of several considerations, namely this theory explains the level, direction and implications or performance of a company's strategy diversification [15]; the theory offers measurement of an organization's superior performance achievement through the implementation of strategies for using electronic technology in a business [16]; and it encourages social innovation in the application of electronic business in the form of collaboration and relationships between partners [17]. This research develops a new conceptual model in the collaboration theory approach that integrates the process of achieving goals through the conception of the Internal Process Collaboration as a bridge between m-wallet adoption and the performance of SMEs formed together with the concept of entrepreneurial skills [18]. This conceptual model will be tested on a SME center in Indonesia.

## **2. LITERATURE REVIEW**

### ***2.1. Ability to run a business and business performance***

Entrepreneurial expertise has a high influence on the achievement of business performance. The ability to innovate and to make appropriate decisions affect the level of achievement of business performance [19]. Human resources can be considered as a barrier for the creation of innovation in improving SME services. Nevertheless, resistance to change from both managers and employees, the lack of trained personnel for the development of innovation activities, and the training of workers and employees play a less important role when compared with environmental and external financial barriers, in stopping organizations from becoming more innovative [20]. The combination of entrepreneurial skills and technology mastery has an impact on increasing business success [21].

### ***2.2. Adoption of M-wallet and business performance***

SMEs which are currently surviving and increasingly successful need to keep up with the development of payment technology. The high demand from consumers in e-commerce business is in line with the high use of online payment technologies such as GoPay, Ovo, Dana, LinkAja. Some factors that influence entrepreneurs in adopting payment technology include consumer behavior using payment technology [22], high net transactional benefits received by employers and the level of accessibility perceived by entrepreneurs [23]. The development of financial technology (fintech) goes hand in hand with demands for financial service offerings [24]. Fintech which focuses on payments, or often called mobile payments, can increase opportunities to get customers quickly at lower costs, and is one of the fastest moving in terms of innovation and adoption of new payment capabilities [10]. The two fintech payment markets are consumer and retail merchant payments and [25] wholesale payments and e-commerce companies [12]. Payment is one of the most widely used retail financial services every day, and one of the least regulated financial services.

Fintech offers value in the form of service innovation in the form of cost reduction and ease of use. Value is defined as the financial or non-financial benefits obtained from interactions between [26]. As a result, value can be realized from the right combination of low cost, faster processing, and high quality service. In a traditional business environment, an organization is seen as the sole creator of value. However, in contemporary business settings, shared value creation occurs through the collective efforts of organizations, partners, and their customers [27]. Given that the digital

business environment relies on synergy between different entities to produce value, value creation can be seen as an important driver in the formation and operation of digital businesses [28]. Platform refers to a collection of tools, innovations, and services that can be used by other partners to improve their performance, create innovation, and collaborate [29]

### ***2.3. Ability to run a business and collaborate with internal process***

The ability to run a business is influenced by the process of learning technology and internal collaboration between an entrepreneur and a commercial technology [21]. Companies that have high internal innovative capabilities have the ability to take advantage of their diverse network access and turn it into higher corporate value by pursuing technological opportunities and responding to market changes and competition [30].

### ***2.4. Adoption of M-wallet and internal process collaboration***

The decision to adopt a mobile payment is influenced by the balance between costs and convenience in facilitating payment, protecting consumers, and reducing sales risk [23]. Payment transactions through digital devices, which are often referred to as mobile payments, are believed to reduce the cost of customer service [12]. Collaboration with the mobile payment application providers is needed in achieving an entrepreneur's success [30], the success of this business performance is measured by how big the size of the network and the number of partners.

### ***2.5. Collaboration of internal process and business performance***

Business performance in the concept of organizational collaboration is determined by the size of the network and the number of partners it has [30]. Implementation of the use of online markets, access to information online and collaboration together have a positive impact on increasing the strength of the company [31]. Collaboration with customers and suppliers is not as beneficial to encourage novelty and meaningfulness, their results can be strengthened or lost under certain conditions. Customer collaboration is more useful to enhance novelty in the face of employee exploration and collaboration learning. In contrast, supplier collaboration encourages novelty only at a higher level of exploratory learning. Furthermore, supplier collaboration is more useful to increase meaningfulness at higher levels of employee collaboration [32].

### 3. RESEARCH METHODOLOGY

To assess this hypothesized relationship, structural equation modeling (SEM) is used. This technique is suitable for our purposes for several reasons [33]. First, SEM is able to estimate multiple and interdependent dependency relationships.

### 4. RESULT

#### 4.1. Characteristics of Respondents

Based on the results of data collection (table 1), the respondents obtained were 150 SMEs in the Food and Beverages sector with demographics based on gender, age, education, marital status, income, duration of digital wallet use, and use of internet promotions.

The determination of the sample is determined through a purposive sampling technique with the condition that respondents of this study are the owners of SMEs of food and beverages which have payment systems via digital wallet such as GoPay, OVO and others. Most SMEs in food and beverages who have a digital wallet are in the District of Sukoharjo, with a total of 135 respondents. The largest income of SMEs food and beverages in this study > Rp. 300 million per year, and GoPay is the main choice of respondents in using a digital wallet with a proportion of 56.7% since it is most often used by consumers.

#### 4.2. Validity and Reliability Testing

Validity Test is used to measure the validity of a research instrument. A research instrument is declared valid if the statement items available are able to measure

the variables that should be measured. If the Loading factor value > 0.5 or AVE value > 0.5, it can be stated that the research instrument is valid.

The reliability test is intended to measure the level of consistency of research instruments when used in related research in the future. The research instrument is declared reliable when the CR value > 0.7.

Based on the calculation above (table 2), the validity test results by the Average Variance Extracted Test (AVE) showed that all statement items on the research variables were declared valid because they had a AVE value > 0.5. The reliability test with Construct Reliability (CR) shows that all items of variable statements are declared reliable with a value of CR > 0.7.

Based on the results of the hypotheses model testing, several findings can be obtained, among others, the ability to run a business significantly influences the internal process collaboration variable with a p-value of  $0.037 < 0.05$ , so that H1a is proven to be true and supported. The second result shows that the ability to run a business has a positive and not significant effect on business performance with a p-value of  $0.839 > 0.05$ , so H1b is not supported. Third, the results of the analysis show that technology adoption has a significant effect on the collaboration of internal processes with a p-value of  $0.000 < 0.05$ , so it can be concluded that H2a in this study is supported. At H2b states that technology adoption has a significant effect on business performance, this is evidenced by the p-value  $0.048 < 0.05$ , the results are supported. The internal process collaboration variable shows a positive and significant effect on business performance with a p-value of  $0.023 < 0.05$ , so that H3 is supported.

**Table 1.** Demographics of respondent (n=150)

Variables	Level	Frequency (n=150)	Percentage
Age	< 21	1	0,7%
	21-35	114	76,0%
	36-50	29	19,3%
	>50	6	4,0%
Education	High school/below	104	68,0%
	Graduate	46	32,0%
Marital status	Married	72	48,0%
	Single	78	52,0%
Mobile wallet	GoPay	85	56,7%
	OVO	61	40,0%
	Others	4	3,3%
Monthly Income	<50 million rupiah	12	8,0%
	50-150 million rupiah	97	64,7%
	>150 million rupiah	41	27,3%

Source : Data has been processed, 2019

### 5. DISCUSSION

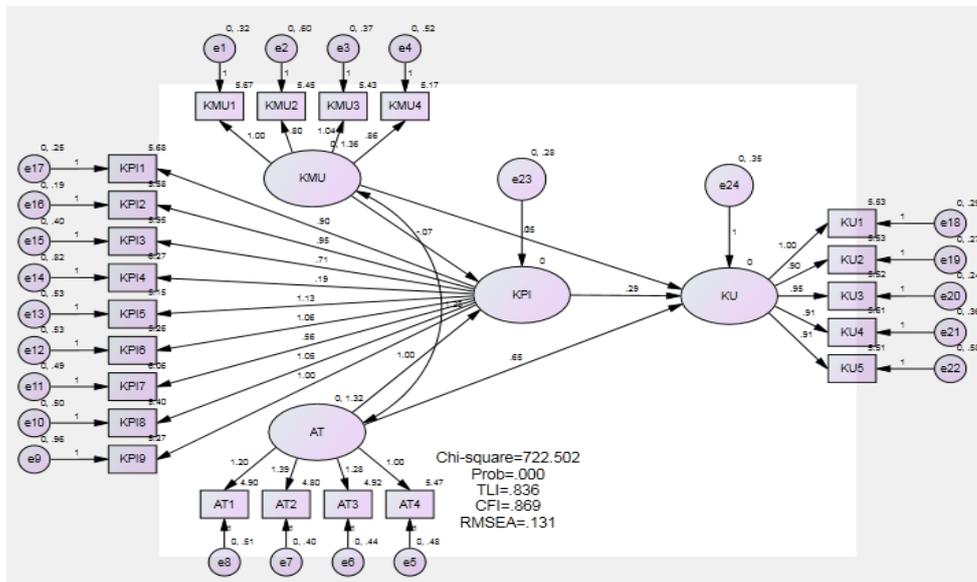
When entrepreneurs are happy to look for ideas and create new opportunities aimed at business development, they will not mind being invited to cooperate with a vendor. It is because entrepreneurs believe that working with vendors will be mutually beneficial and provide new information, especially related to the use of technology. Employers also feel that working with vendors will also increase market share, company performance and competitiveness in the food and beverage industry.

The satisfaction of an entrepreneur in applying digital payment technology in a company's operations has an impact on increasing the entrepreneur's trust in the vendor of digital payment service technology because it has helped the company adjust to the ecosystem in the food and beverage industry. When an entrepreneur is satisfied with adopting technology and wants to expand his business, he/she will collaborate with vendors to help simplify the payment process in transactions and increase the transparency of the

Table 2. Loading factor variables

Latent Factors	Observed Items	Items	Loading factor	CR	AVE
Entrepreneurial skill	KMU1	I like to look for new ideas to grow my business	1.00	0.75	0.71
	KMU2	I like to think about opportunities to develop new businesses (even though I didn't realize them)	0.80		
	KMU3	I often explore new ideas for developing new products / services	1.04		
	KMU4	I consider myself good at creating opportunities for business development	1.36		
Mobile Wallet Adoption	AT1	Digital payment technology has been carefully applied in our business	1.20	0.90	0.80
	AT2	Digital payment technology has been integrated online with other companies that collaborate (co: banks, suppliers)	1.39		
	AT3	I am trying to become a pioneer of technology users in this business	1.28		
	AT4	I am satisfied with the technology provided by digital payment service providers	1.00		
Internal Process Collaboration	KPI1	I believe in vendors in helping to facilitate digital payment technology	0.90	0.72	0.64
	KPI2	I am sure the vendor will explain how to use digital payment technology	0.95		
	KPI3	I believe that collaboration with vendors is mutually beneficial	0.71		
	KPI4	I do not mind giving out my business information to co-workers (Gojek, Event Organizer, etc.)	0.91		
	KPI5	Vendors share important information related to the market (customers and competitors)	1.13		
	KPI6	Collaboration with vendors provides benefits in reducing business operating costs	1.06		
	KPI7	Collaboration with vendors provides benefits in increasing market opportunities (GoFood, Exhibitions etc.)	0.76		
	KPI8	Collaboration with vendors provides benefits in simplifying the payment process	1.05		
	KPI9	The company's internal operational processes have become more transparent	1.00		
SMEs Performance	KU1	Overall, our sales increased	1.00	0.79	0.81
	KU2	Overall, our operating profit has increased	0.90		
	KU3	Overall, business performance has improved	0.95		
	KU4	We can compete with other businesses in the same industry	0.91		
	KU5	We are able to increase interactions with consumers	0.91		

Source : Data has been processed, 2019



Model fit: chi-square ( $\chi^2$ )=722.502; goodness of fit index (GFI)=0.937; Tucker-Lewis index (Stephensona, Lohmann, & Spasojevic) =0.836; comparative fit index (CFI)=0.869; root mean square error approximation (RMSEA)=0.131.

Figure 1 SEM Analysis Result

company's competitiveness in the food and beverage industry.

**Table 3.** Hypotheses Model Testing

<i>Hypothesis</i>	<i>Estimated</i>	<i>CR</i>	<i>p-value</i>	<i>Remarks</i>
H1a (KMU=>KPI)	0.178	2.074	0.037	Significant
H1b (KMU=>KU)	0.055	0.203	0.839	Not Significant
H2a (AT=>KPI)	1.002	3.598	0.000	Significant
H2b (AT=>KU)	0.653	1.980	0.048	Significant
H3 (KPI=>KU)	0.294	2.278	0.023	Significant

Entrepreneurs who believe that collaborating with vendors are profitable and helpful in keeping abreast of technological developments can have better company performance. This is because companies that work with vendors will be able to reduce company operating costs and make it easier to transact, and can help companies increase market share, will increase sales, profits, interaction with consumers, and the company's competitiveness in the food and beverage industry.

## 6. CONCLUSION

Based on the results of the analysis, several conclusions are obtained. Firstly, the ability to run a business and the adoption of technology has a positive and significant effect on the collaboration of internal processes. Secondly, the ability to run a business and the adoption of technology significantly influence business performance. Thirdly, internal process collaboration is able to mediate the effect of the ability to run a business and the adoption of technology on business performance.

In future studies, it is also advisable to use other variables (such as perceived benefits, perceived convenience, and the impact of infrastructure) to make a more significant contribution to business performance, and to be able to explain variations of business performance more comprehensively.

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