

# Remote Purchases & Proximity Payment in Indonesia. Why Grow So Fast?

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## Abstract

The phenomenon of the development of mobile payment in Indonesia, especially remote purchases and proximity payments, is decomposed by the Service-Dominant Logic approach. Furthermore, data from socioeconomic characteristics which are the diffusion of mobile phones, internet retailing, and consumer mobile commerce in Indonesia utilize to elaborate on the phenomenon. The results show that this phenomenon is the result of the Service-Dominant Logic oriented mobile commerce system service. Moreover, Indonesia's potential in ASEAN is still tremendous, the number of Indonesian families with smartphones is still 56.6%, smaller than other ASEAN countries, and the infrastructure supported by the Palapa Ring which will improve internet access. Nevertheless, a comprehensive service system also needs to be supported by comprehensive monitoring and supervision of services with the Service-Dominant Logic paradigm.

**Keywords:** Remote Purchase, Proximity Payment, Indonesia

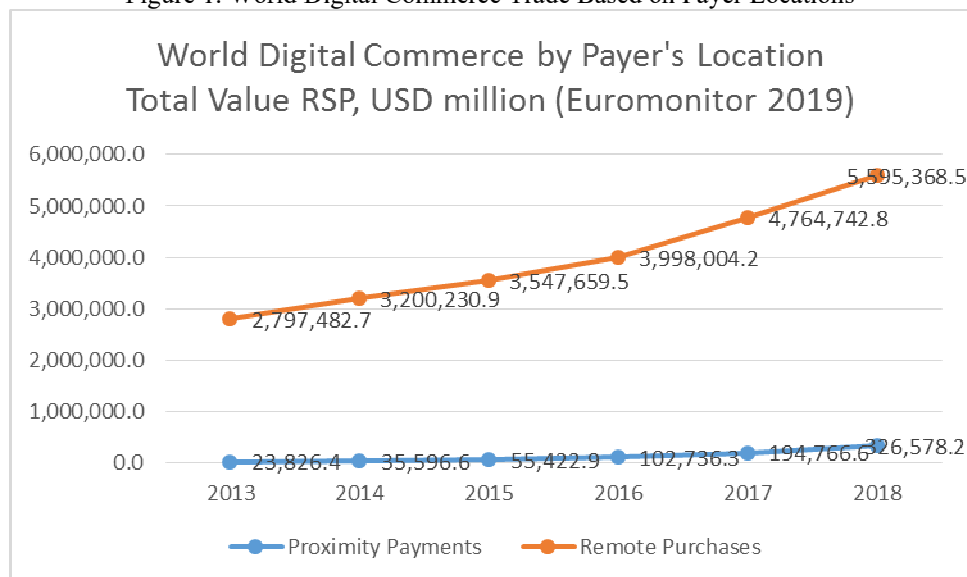
**DOI:** 10.7176/EJBM/11-27-19

**Publication date:** September 30<sup>th</sup> 2019

## 1. Research Background

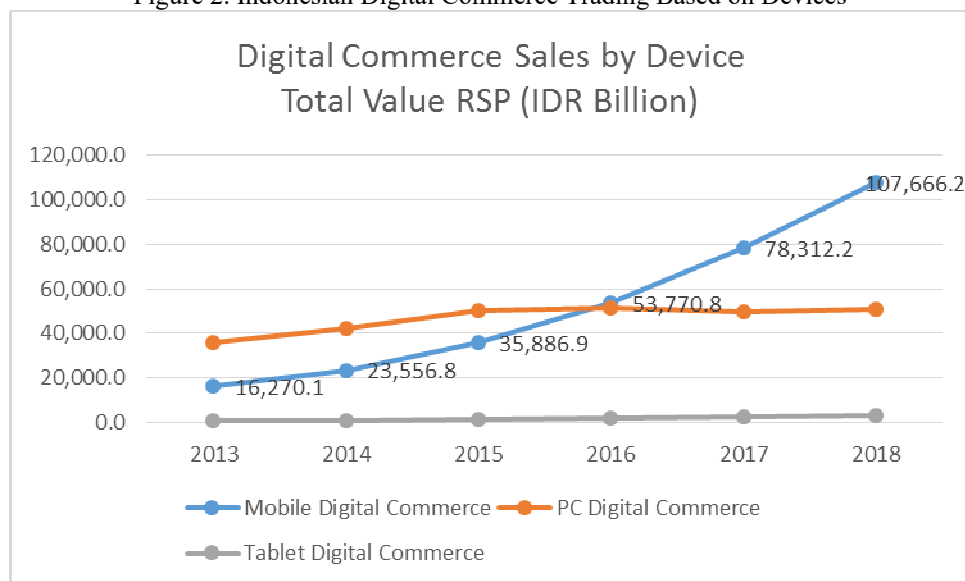
Indonesia plays an essential role in digital trade because Indonesia has more than half of the digital market in Southeast Asia. Indonesia has 150 million internet users in 2018 (Google & Temasek, 2018), and has a digital commerce of 161.4 trillion rupiahs which is expected to increase to 387 trillion in 2023 (Euromonitor, 2019a). This prediction is the main reason this study built, namely to parse the factors that influence the high growth of mobile commerce, mobile payment in Indonesia and build projections for the development of mobile payment in Indonesia (Euromonitor, 2019b). The dataset from Euromonitor International is processed and displayed in Figures 1 and 2.

Figure 1. World Digital Commerce Trade Based on Payer Locations



Source: Processed using Euromonitor International Dataset

Figure 2. Indonesian Digital Commerce Trading Based on Devices



Source: Processed using Euromonitor International Dataset

Descriptions and projections built by mapping the latest articles over the past ten years on the factors of the development of mobile payment and e-commerce. Then the projected development of mobile payment and e-commerce in Indonesia is conveyed through relevant indicators.

Scientific articles and relevant indicators reviewed with the Service-Dominant Logic theory approach (Vargo & Lusch, 2004) that can explain the phenomenon of the development of mobile payments in Indonesia holistically. Service-Dominant Logic is a meta-theory that conveys that all exchanges seen as service exchanges; there is a reciprocal relationship in managing resources to benefit others. The focus of services is the process, pattern, and benefits when exchanges occur, rather than only when goods reach consumers.

Service-Dominant Logic argues that in order to create value for consumers, each party in the service ecosystem is interconnected and provides mutual benefits in exchange (Lusch & Vargo, 2014). Value creation enjoyed by consumers is in the system when the exchange process occurs between various parties; therefore, this activity called value creation (Lusch & Vargo, 2014).

The following is a scientific article describing the factors that support the development of mobile payment and e-commerce:

1. Ease of use and practicality (Duncombe & Boateng, 2009) (Lin, 2011) (Mallat & Tuunainen, 2008) (Faith, 2018)
2. Universal, meaning that it can be used in transactions with various parties, institutions, companies. (Jenkins, 2008)
3. Task Characteristics (Malaquias & Hwang, 2016) (Malaquias, Malaquias, & Hwang, 2018)
4. Can be integrated with other systems (Karnouskos, 2004)
5. Cost and speed (Chakravorti & Kobor, 2005) (Shareef, Baabdullah, Dutta, Kumar, & Dwivedi, 2018)
6. Integration (Pousttchi, 2008)
7. Security, trust and maintaining confidentiality (Mallat, 2007) (Luo, Li, Zhang, & Shim, 2010) (Dahlberg, Guo, & Ondrus, 2015) (Liébana-Cabanillas & Lara-Rubio, 2017)
8. Understanding the needs of the local market (Van der Boor, Oliveira, & Veloso, 2014)
9. Influence of social environment (Zhou, Lu, & Wang, 2010) (Mohammadi, 2015) (Shareef et al., 2018)
10. Can conduct transactions between regions (Duncombe, 2012) (Mallat & Tuunainen, 2008)

This factor is part of the theory of Service-Dominant Logic. Furthermore, the synergy of these ten factors conveyed with 11 foundational premises that could explain the development of mobile payment and e-commerce in Indonesia.

## 2. Theoretical Review

This reason explained by the basic premise of SDL (Service-Dominant Logic). SDL conveys that service is a fundamental basis of exchange (FP 1). Goods are part of the distribution service mechanism provided (FP 3). Coordination of values is coordinated through institutional institutions and also agreements from parties in the service delivery ecosystem (FP 10). These three basic premises convey that consumers not only receive goods that can meet their needs but the entire process of finding information, ordering, receiving goods, enjoying goods, even complaining and making repeat purchases in the future. This whole process is indeed unable to be

accommodated by traditional transactions that have been carried out by the company to consumers (Kim, 2013). Traditional companies cannot accommodate manually, because there are limited documentation, recording, and utilization of consumer databases to meet the needs of consumer processes in meeting all activities in the consumption process.

If we look at seven other premises (Lusch & Vargo, 2014), then it concludes that this premise associated with system services integration. Indirect exchange is a fundamental basis of exchange (FP2). Knowledge and skills are a fundamental resource which provides strategic benefits (FP4). All exchanges in the economy are service economics (FP5). The value cocreated the activity of various actors, including consumers who benefit (FP6). These actor actors cannot convey value on their own but can participate in the creation and offer the proposed value to consumers (FP7). Service-oriented views directly view orientation toward consumers and also focus on relational relations (FP8). All actor and social economy have a role in integrating the resources to provide overall service to meet the needs of consumers (FP9). Moreover, finally, the value creation is coordinated through various parties and the agreement of these parties (FP11).

### 3. Research Method

The study was conducted by analyzing socioeconomic indicators (Duncombe & Boateng, 2011), indicators of mobile phone diffusion (Duncombe, 2011), and indicators of the development of internet and mobile payment transactions.

Moreover, this study also parses indicators of the development of internet retailing and e-commerce companies in Indonesia. These indicators synergized with the service-dominant logic theory to further conclude the development of mobile payment in Indonesia.

### 4. Results and Discussion

#### Socioeconomic

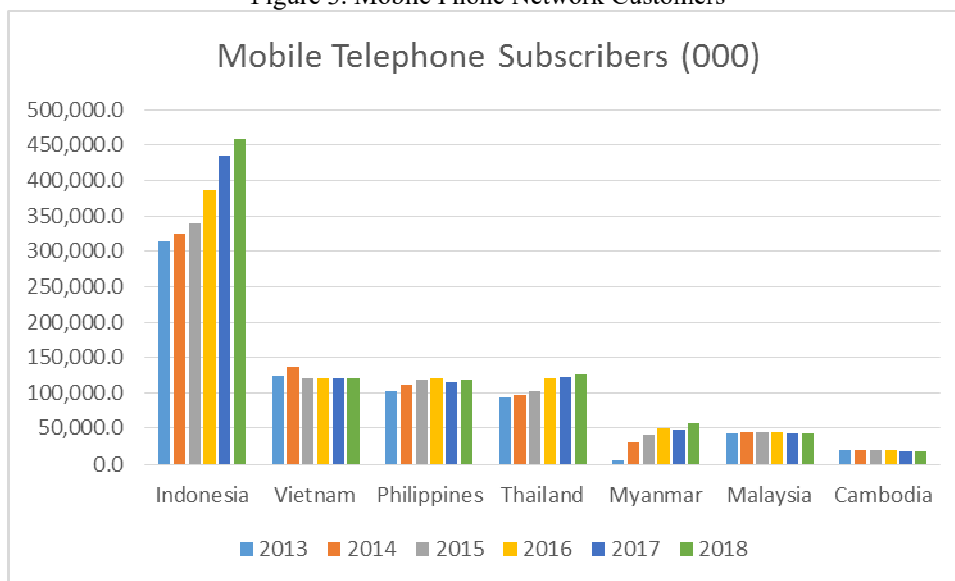
The first thing that can be seen from the development of Indonesia's mobile payment is the demographic structure of the Indonesian population under 30 years of age by more than 50 %, and in 2030 Indonesia is the third country with a population under 30 after China and India ( Euromonitor, 2019c). The generation that will be productive in the future, the generation that is very native to digital which called digital native. Moreover, they are doing various activities with mobile phone devices that exist in their hand.

Indonesia's geographical factors consist of islands, this makes the relationships between regions through face to face or direct meetings more expensive, and therefore communication via telephone is an efficient alternative. On the other hand, the number of the population in Indonesia is also more significant in urban areas than in rural areas (FitchSolution, 2019), those in urban areas have access to communication, better information that supports the use of mobile phones.

#### Diffusion Mobile Phone

The growth of telephone subscribers in Indonesia is enormous, Indonesia is a country with 458 million telephone subscribers, this is the biggest in ASEAN, and increased rapidly from 2016, 2017 and 2018 (Figure 3). This mobile phone diffusion is driving transformation in international trade (McKinsey, 2017). The trading process will be more responsive because information and also mobile commerce service systems are available in the hands of consumers.

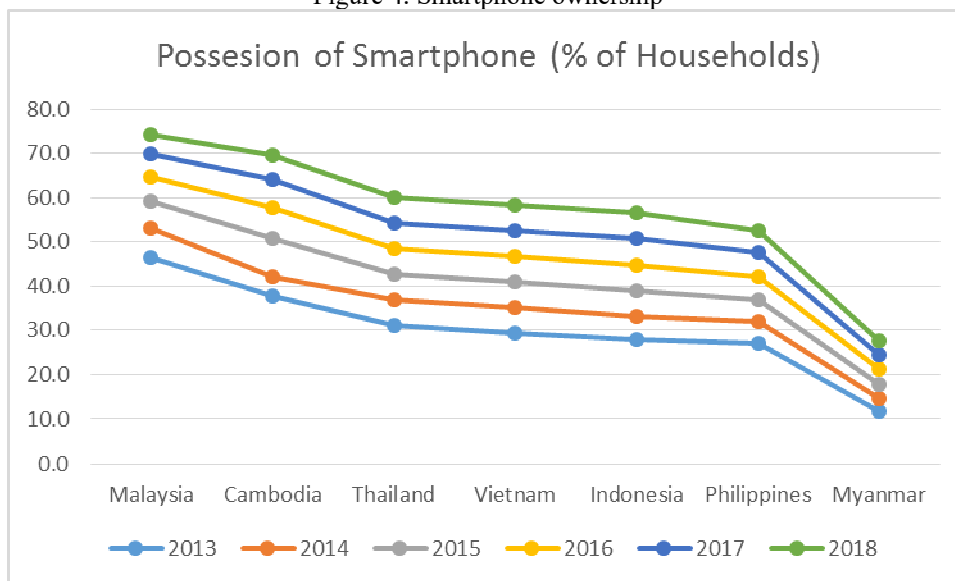
Figure 3. Mobile Phone Network Customers



Source: Processed using Euromonitor International Dataset

Indonesians use smartphones compared to other communication devices. Smartphone users are also more numerous than in the United States and Malaysia, although on the other hand internet speeds in Indonesia are still ranked fourth in Asia after Singapore, Malaysia, and Thailand. Nearly 56.6% of families in Indonesia use smartphones (Figure 4). If we look at Malaysia, Cambodia, and Thailand, the number of percentages is already higher than Indonesia. Therefore the Indonesia potential will continue to increase in percentage in the future.

Figure 4. Smartphone ownership



Source: Processed using Euromonitor International Dataset

The use of smartphones will change the pattern of consumer behavior in various aspects; they use smartphones not only for communication but also for shopping and online transactions (e-commerce). Both of these activities end with financial transactions in payment.

#### Internet Retailing

The huge number of people, geographical factors, and Indonesia geographical archipelago, followed with Indonesia young generation digital native will be an indicator of e-commerce development and mobile payment in Indonesia. The CAGR (Capital Annual Growth Rate) indicator of E-commerce companies shows a substantial growth in the 2013-2018 period. The highest growth was PT Tokopedia with a CAGR for the 2013-2018 period of 179.5% (Figure 5). Bukalapak also experienced another CAGR growth by 141.5%, Blibli.com by 95.9%, Zalora by 54.2% and other internet retail companies.

Figure 5. Growth of Internet Retailing

Company Name (GBO)	2013 - 2018 %	2013 - 2018 CAGR %	2013 - 2018 Absolute
Tokopedia PT	16,961.1	179.5	2,907.1
Giosis Group	769.8	54.1	2,002.0
Telekomunikasi Indonesia Tbk PT	7,939.3	140.5	1,984.8
Rocket Internet GmbH	772.9	54.2	1,584.4
Bhinneka Mentari Dimensi PT	313.9	32.9	1,318.5
Bukalapak.com PT	8,120.7	141.5	1,037.8
Erajaya Swasembada Tbk PT	397.9	37.9	747.7
Apple Inc	209.3	25.3	574.2
Djarum Group	2,788.3	95.9	507.5
Sumitomo Corp	669.1	50.4	234.2
Kompas Gramedia Group	153.1	20.4	187.5
Direct Response TV Inc	41.0	7.1	4.0
Others	71.1	11.3	9,432.9
Total	304.7	32.3	46,235.8

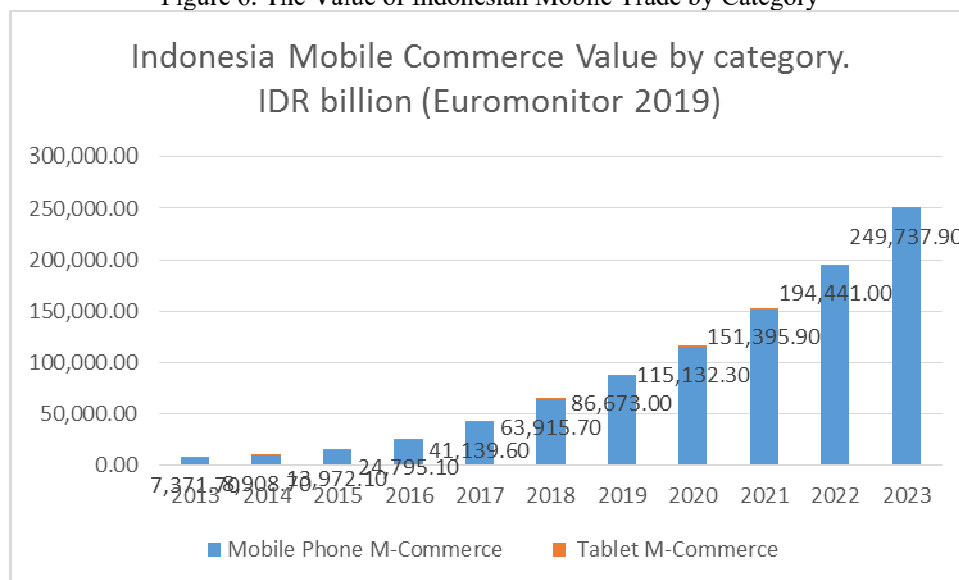
Source: Processed using Euromonitor International Dataset

The magnitude of this growth proves that there is a change in the service system chosen by consumers, previously transactions in stores or stores with cash / cashless, now consumers have entered the e-commerce ecosystem where they have been browsing, choosing to pay through e-commerce applications. Some companies that grow big compared to other companies are e-commerce companies that provide super app services (applications that provide a variety of services) such as Tokopedia, Bukalapak, and BliBli. This shows the preferences of consumers in utilizing mobile commerce that has a variety of services in the application.

#### M-Commerce

From this internet retail trade, a focus on the distribution of mobile commerce in Indonesia. The indicator of Indonesia mobile commerce value by category shows that the majority of mobile commerce conducted by mobile phone. Sixty-three trillion Rupiah is contributed by mobile phone commerce compared to tablet and PC devices, which have far less contribution (Figure 6).

Figure 6. The Value of Indonesian Mobile Trade by Category



Source: Processed using Euromonitor International Dataset

The next question is, why is it mobile commerce, especially the mobile payment grow so fast in Indonesia? Moreover, what the future will be?

In the introduction presented scientific articles that review the factors that drive the adoption of mobile commerce and mobile payment. The majority of these factors are fulfilling the desires of the consumer or user. These needs must be accommodated in the system according to the basic premise of SDL theory. The needs of consumers (users) are part of an integrated process in the system.

The system built to have six service capability to create cocreation value (Sihite, 2019), namely the capability of interaction relational, capability of interaction, the capability of interaction with specials for

individuals, capability interaction continues to grow, the capability of interaction in building services delivered, and also capacity interactions that can be orchestrated (Karpen, Bove, Luke, & Zyphur, 2015). These six capabilities increase the value perceived by consumers, consumer trust, and commitment.

If we look back at the growth data of internet retail in Indonesia, some companies that have large CAGRs are companies that have super apps. This application offers a variety of products to meet the various needs of diverse consumers. Providing services from product selection, recommendation information from fellow consumers regarding product choices, can answer questions about the product responsively, facilitate payment by mobile payment, provide certainty between the expected time, guarantee the goods delivered, up to the warranty of the goods.

The complexity of diverse needs can be facilitated in an integrated system such as the GoFood and GoJek services that make consumers increase their trust, feel the various benefits of the services in the application, and finally repurchase.

Payment methods such as digital wallet facilitated by the infrastructure provided in the system to serve various consumer preferences. Remote and proximity payments experience significant growth because they can meet the preferences of consumers who come to the counter to buy their products directly or make purchases with remote and cashless payment.

The system integrates various needs of these consumers by providing flexible devices. For counters that have EDC, use the QR code from the EDC machine. However, if the counter does not have an EDC device, then a cashless payment process is also possible with a QR code following the store registration identity.

Digital wallet Grab Ovo and Gofood Gopay are examples of case studies that have evolved because they build systems that can meet a variety of consumer needs preferences to process payments and complaints as well as to order back through system applications that are on each customer's mobile. Various activities are also in accommodation within the digital payment method. Promotional incentives for making telephone, electricity, BPJS payments, in addition to buying products and services provided by these applications will attract the base of consumer payment transactions that were previously cash into these super applications.

With the convenience provided by the system, the barrier to entry using cashless payment reduced. More and more consumer bases are taking advantage of this convenience. The number of users has also exceeded that of credit cards; the number of transactions has also significantly increased, which will exceed the use of transactions from credit cards (Euromonitor, 2018).

Efficiency and costs are also transaction requirements facilitated by digital wallet or mobile payment. If we do transactions through banking, interbank transfers will require transfer fees. Digital wallet cuts distribution channels for interbank transfers. Consumers focus on placing the funds in Digital wallet, which the system will distribute the funds to the accounts of the counter or the company. This indirect transaction which then increasingly makes the cost more efficient in mobile payments.

The time needed is also reduced because consumers do not need to go to the bank or make payments with mobile banking. Everything only needs to be done in one system that has been integrated to provide mobile payment services. Time becomes efficient, energy and energy and costs become more efficient compare cash transaction. These are the benefits provided by the system to consumers and can increase the value of mobile payment offered by services like Gopay and OVO. The whole system provides more significant benefits than transactions with traditional methods before.

## 5. Conclusion

The elaboration of indicators, scientific articles on factors that drive the adoption of e-commerce using SDL theory has shown that the system has a dominant role in the development of e-commerce in Indonesia. Mobile commerce, especially Mobile payment, can accommodate various needs of consumers and integrate various needs of complex service processes into one integrated system.

Indonesia's potential is still significant with the number of families with smartphones which is still 56.6%, still far below Malaysia, which has reached 74.4%. With the construction of the Palapa ring infrastructure, internet access will be faster, so it estimated that the reliability of the system built to serve the needs of consumers would increase, which encourages increased trust and the number of e-commerce users in Indonesia. Data on mobile commerce projections in Indonesia are estimated to reach 250 trillion rupiahs in 2023 (Figure 7).



Figure 7 . Mobile Trade Value Projection 2018-2023 by Category .

Forecast M-Commerce by Category: Value 2018-2023 (IDR Billion)						
IDR billion	2018	2019	2020	2021	2022	2023
Mobile Phone M-Commerce	63,915.70	86,673.00	115,132.30	151,395.90	194,441.00	249,737.90
Mobile Phone - Proximity	373.5	543.9	795.1	1,095.10	1,526.80	2,128.70
Mobile Phone - Remote	63,542.30	86,129.10	114,337.20	150,300.80	192,914.10	247,609.20
Tablet M-Commerce	507.7	589.5	698.4	813.1	968.3	1,153.00
M-Commerce	64,423.40	87,262.60	115,830.80	152,209.00	195,409.20	250,891.00

Source: Euromonitor International

In the future, the development of mobile payment in Indonesia must be supported by a system that makes it easy for consumers to meet preferences in payment transactions. Specialized services that can carry out prognosis due to a well-recorded database regarding the transaction history of each consumer will increase consumer commitment to using e-commerce services, especially mobile payment.

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