Marketing Strategy Development of Mobile Money Services in Indonesia

Bianda Hyacintha Safira¹, Harimukti Wandebori²
¹ School of Business and Management, Institut Teknologi Bandung

bianda@sbm-itb.ac.id

² School of Business and Management, Institut Teknologi Bandung

harimukti@sbm-itb.ac.id

Abstract: In August 2014, Bank Indonesia launched Gerakan Nasional Non Tunai (Non-Cash National Movement) to increase people's awareness in using non-cash payment instruments in order to create 'less cash society' within the nation. However, out of 250 million people in Indonesia, only 30% of them own bank account which is relatively low compared to cellular phone penetration that reached 123,1% in 2014. Learning the fact, Telkomsel launched its mobile money, T-Cash so that customers can make financial transactions using mobile phones. However in its implementation, mobile money in Indonesia still has some issues, including awareness, regulations, and low rate of industry attractiveness. This research is conducted to understand the business environment of T-Cash in Indonesia and to develop a business and marketing strategy for T-Cash Tap, Telkomsel's new product innovation for in-store purchase payment in order to increase its usage among customers. Qualitative approach is used in this research by conducting interviews to mobile money players and consultant. In addition, secondary data is also used to support the analysis which taken from published reports, journals and articles regarding mobile mone. Following the management strategy process, business and marketing strategy is developed to be implemented by Telkomsel in aim for the growth of its mobile money usage.

Keywords: Less cash society, mobile money, marketing strategy development

1. Introduction

Rapid technology development has created an evolution in payment system, from cash to card-based payment instrument and recently to electronic money (e-money) payment. In August 2014, Bank Indonesia launched *Gerakan Nasional Non Tunai* (Non-Cash National Movement) to increase people's awareness in using non-cash payment instruments in order to create 'less cash society' within the nation (Martowardojo, 2014). Other than efficiency, the government realized that using non cash payment instruments is more beneficial than cash, such as reducing the high cost and energy in maintaining cash, reducing inflation, and criminal prevention. In Indonesia, even though e-money usage is increasing, cash is still dominantly used for transaction payment in Indonesia. It is because many of the Indonesians are still not fully aware and understood the function of the non-cash instruments as well as how to use them (Martowardojo, 2014). As a matter of fact, Indonesia still has low level of financial literacy, placed at 27 of 28 countries surveyed by VISA in 2012 (Litbang Kompas, 2012).

E-money itself was introduced in Indonesia on 2007, which was a bit late compared to other countries such as Hong Kong (introduced in 1997) and Singapore (introduced in 2000). On its sixth year in Indonesia, the frequency of e-money usage remained small compared to other non-cash payment instrument with only just 3.75% (Bank Indonesia, 2013). In terms of awareness, according to research conducted by Mars Indonesia in 2013, level of e-money awareness was relatively low with merely 23.8% (Mars Indonesia, 2014). The other issue in e-money is that many of the Indonesians do not have the access of non-cash payment system services (Martowardojo, 2014). Out of 250 million people in Indonesia, only 75 million or 30% of them own bank account (Prasetiantono, 2015).

On the contrary, there are more than 250 million active cellular SIM cards in Indonesia, which exceeded the number of population itself. According to Indonesia Telecommunication Report (2015) by Business Monitor International (BMI), there were 303,695,000 cellular mobile phone subscribers in 2013. BMI also estimated that the number increased to 334,064,500 in 2014 and forecasted will reach 360,789,700 subscribers by the end of 2015. It means that the penetration of cellular mobile phone reached 123.1% in 2014. Based on the fact, telecommunications operators such as Telkomsel and XL Axiata launched their mobile money, T-Cash and XL Tunai so that customers can make financial transactions using their mobile phones.

However in its implementation, mobile money in Indonesia still has some issues. Mobile money is still unfamiliar by the Indonesian people. Moreover, the scope of transaction between e-money issued by bank and mobile money is not consolidated yet, forcing public to have more than one e-money for transaction activity. It is inefficient for customers as well as limiting people's interest to e-money itself.

1.1. Research Objectives

The objective of this research is to understand the business environment of mobile money in Indonesia, which consists of the external and internal environment and to develop a business strategy and marketing strategy for T-Cash in order to increase its customer usage.

1.2. Research Limitation

This research will be focused on T-Cash Tap, one of T-Cash's features provided by Telkomsel, the leading telecommunication operator in Indonesia. T-Cash Tap utilized NFC technology to be used for in-store purchase. In addition, the strategy formulation will be focused mainly on business and marketing strategy.

2. Literature Review

2.1. Environmental Scanning

Hitt, Ireland, and Hoskisson (2011) define strategic management process as a rational approach firms use to achieve strategic competitiveness and earn above-average returns. The process includes four basic elements: (1) *Environmental Scanning*, (2) *Strategy Formulation*, (3) *Strategy Implementation*, and (4) *Evaluation and Control*. Environmental Scanning is the process of monitoring, scrutinizing, and gathering information from both external and internal environments of the corporation (Wheelen and Hunger, 2012).

External environment is conducted to identify the possible opportunities and threats of the company. In this research, the external environments will be analyzed using PEST analysis and Industry Analysis/Porter's Five Forces Model. PEST analysis will evaluate the macro environmental conditions in terms of Political-Legal, Economic, Sociocultural, and Technological. Porter's Five Forces Model is used to assess the intensity of emoney industry in Indonesia which determined by the threat of new entrants, rivalry among existing firms, threat of substitute products or services, bargaining power of buyer, and bargaining power of suppliers. Meanwhile, the internal environment is related to the strengths and weaknesses within the company. Value chain analysis will be used in this research to assess the company's internal environment. It consists of the primary and support activities of the business.

2.2. Strategy Formulation

The strategy formulation consists of the business strategy and marketing strategy formulation. SWOT analysis, TOWS matrix, and Porter's generic competitive strategies model is used the business strategy formulation while for marketing strategy formulation using marketing STP. Porter's generic competitive strategies are the combination between a company's (1) competitive advantage: low cost or product differentiation and (2) its competitive scope: broad target or narrow target (Wheelen and Hunger, 2012). Marketing STP starts with the segmenting in which dividing the market into distinct group of buyers based on

demographic, geographic, psychographic, and behavioral (Kotler & Keller, 2012). After that, the target market is selected followed by the positioning creation by the company to position the market offering in the minds of target customers (Kotler and Armstrong, 2010).

3. Research Methodology

This research is undertaken using qualitative approach. It consists of a series of process, starting with the data collection followed by environmental scanning and strategy formulation. At the end of the research, the conclusion will be drawn followed by the recommendations to Telkomsel in terms of business and marketing strategy of T-Cash Tap services.

3.1. Data Collection

The collected data consist of the primary and the secondary data. The primary data was gathered from interviews, discussion, and customer survey. In addition, secondary data was taken from published data in form of company reports, website documents and articles regarding e-money. Direct interviews were conducted with Mr. Aji Ahimsyah and Mr. Devy Firmansyah from Telkomsel and Mr. Hasnul Suhaimi, CEO of XL Axiata as two leading mobile money players in Indonesia as well as discussion with Mr. Koesmanggala as e-money observer & consultant in Indonesia. The interview covered mobile money's background, functions, benefits, issues, regulations, competitors, *STP*, and strategies while the discussion covered the current condition of the mobile money industry, regulations, challenges, and suggestion of what should be done for the industry to grow.

3.2. Data Sampling

To support the qualitative data, a survey is conducted using questionnaires sent by mail. Using the judgmental sampling, the questionnaires were distributed to Telkomsel's subscribers. There were 130 respondents consists of 79 male and 51 female from various age who are mostly living in Jabodetabek area and Bandung. Most of the respondents are employees, followed by university students and entrepreneurs. The questionnaire is created using Google DriveTM and designed to segment the subscribers in terms of demographic, geographic, psychographic, and behavioral, as well as whether they are aware and interested in using T-Cash Tap or not.

4. Data Analysis

4.1. Environmental Scanning

4.1.1 External Environment

• PEST Analysis

For their mobile money services, telecommunication (telco) operators follow Bank Indonesia Regulation No. 11/12/PBI/2009 and its amendment No. 16/8/PBI/2014 concerning e-money. The regulation however have not fully supported the development of mobile money since it gives telco operators some restrictions. As required by Bank Indonesia, outlets must be incorporated legal entity to be able to perform mobile money services. This is why, according to Mr. Hasnul Suhaimi, telco operators could not use hundreds and thousands of their top up outlets around Indonesia to operate cash in and cash out for their mobile money unless they are the "branch offices" of the company. They are allowed instead to use their service offices which are limited in number and located mostly in big cities. The regulations are more favorable for bank players in which they can cooperate with individual agent, especially the *BUKU* 4 banks.

In terms of the economy, Indonesia's booming middle class has become one of the contributive factors to the nation's expanding economy (Camner, 2013). The mobile and rapidly urbanizing population in Indonesia is driving demand to move money throughout the country and to handle payment with greater efficiency (Camner,

2013). Referring to the three stages towards electronic payment, Indonesia is currently on *Stage 1 - Bulk Payer Transition* in which the bulk payers has decided to pay electronically (Ghosh, 2014) and there are various payment instruments and channels but the users are still limited (Dewi, 2014).

Regarding sociocultural condition, according to McKinsey Global Institute (2014), there were 45 million Indonesian people in the consuming class and estimated that they will spend mostly in financial services by 2030. Therefore, mobile financial service is really potential to be implemented in Indonesia in addition to the fact that mobile phone penetration reached 123,1% in 2014 (Business Monitor International, 2015). According to Mr. Aji Ahimsyah, the other constraint in mobile money is the level of public trust. For payment instrument, Indonesian people prefer the tangible form more than the intangibles. As for readiness, Mr. Koesmanggala explained that Indonesian people have been familiar and well-educated with prepaid system since the first prepaid card, Simpati was introduced back in 2000. Therefore, they were basically ready to accept the mobile money concept.

In terms of technology, there are two types of e-money: chip based and server based. According to Mr. Aji Ahimsyah, mobile money is categorized as server based because the money is 'stored' in the user's phone number that recorded in the operator's server system. Therefore, it is more secure and minimizes the risk of losing the money when customers lose their phones or SIM cards. Moreover, PIN is required everytime customers want to access their money. On the contrary, chip-based relies on the chip in the card to store the money and it is not recorded in the provider's system. Hence, when customers lose their cards, they also lose their money. Currently, all mobile money utilizes SMS and USSD. Some operators also utilize mobile application to deliver their service. Recently, NFC (*Near Field Communication*) technology was developed to be used for mobile money transaction. Telkomsel is the only mobile money issuer that has used this technology. According to Mr. Devy Firmansyah, the payment is done simply by tapping the sticker to the reader or just a few centimeters near. The sticker contains a chip that enables automatic data transfer between the two devices. The money will be automatically debited from the user's account upon the transaction payment.

• Industry Analysis

The threat of new entrants in this industry is *low* because of the closed-operation applied within the industry. According to Mr. Koesmanggala, customers' switching cost for e-money service is high due to the lack of interconnection and interoperability. Each player build its own e-money service using its own expense for its own interest. Also, new player requires a large capital/investment to enter the industry because they have to develop an advanced and reliable technology to support the service. Furthermore, the regulation stated that e-money player is obliged to obtain a license from Bank Indonesia.

The rivalry among existing firms are *moderate to high*. As of 2014, there were 20 authorized e-money issuers in Indonesia. Server based e-money are mostly issued by bank players while chip-based e-money by telco operators. Based on interviews to Telkomsel and XL Axiata, both companies don't address other operators as competitors but as partners in terms of mobile money services. Rather than on the same industry, the competition is actually between banks and telecommunication operators. Since the system is currently closed-operation, banks and telecom operators are vying for customers to use their e-money services. They aggresively conducted partnership with various merchants and service providers.

The threat of substitute services is *high* because there many substitutes to mobile money: the chip-based emoney, credit card, ATM/debit card, and cash which are still dominantly used for transaction payment. Also, due to the lack of interoperability in the industry, it is required for the customers to have more than one e-money. Compared to its substitutes, mobile money is the least familiar and used by customers. On the other hand, the regulation has restricted mobile money operators to use their top-up agents/outlets because they are not incorporated legal-entity. This makes it difficult for telco operators to deliver their mobile money services compared to bank players who have thousands of branch offices and ATM around the country.

The bargaining power of buyer is *moderate*. Since mobile money is one of payment instruments aimed for public usage, it has a large number of buyers. Furthermore, the switching cost in the industry is high and buyers do not have the potential to integrate backward by producing mobile money themselves. However, with many substitute products available, buyers can choose which e-money they want to use based on their interest.

The bargaining power of suppliers is *low to moderate*. According to Mr. Koesmanggala, suppliers in this case are sellers who accept e-money to collect customer payment for their products or services. They seek for e-

money services with better value proposition and also selective in opening online payment services for their customers. Therefore, e-money providers are expected to propose better value as well as improve and maintain their performance.

4.1.2 Internal Environment – Value Chain Analysis

• Primary Activities

Operations: Activities in which both companies set up the technology for their mobile money services. T-Cash Tap operations activities consist of the NFC technology development and the production of the NFC sticker production and EDC machine. Before publicly launched, T-Cash Tap was launched internally for trial to Telkomsel's employees and can be used only at merchants near the headquarter building.

Marketing and Sales: Telkomsel has partnership with various merchants, such as convenience stores, food & beverages stores, and cinema. They offer special price and discounts to attract customers. To socialize the services and increase customer awareness, the company conducted several exhibitions and media-coverage activities. The company also created T-Cash Tap website page, brochures, and manual videos. In terms of advertising, they use print ads, such as posters and banners and put them on display at their service office and some of the merchants. In addition, they also use SMS blast and broadcast chats from their official LINE account. Telkomsel also uses its service office, GraPARI as direct distribution channel.

Service: Telkomsel is increasing its EDC installment at more merchants. For its customer service, Telkomsel uses GraPARI to serve its customers regarding mobile money usage. Their service offices can also facilitate cash in and cash out for customers, besides convenience stores and their special agents. Mobile money is guaranteed by the Financial Service Authority and protected by the Indonesian government.

• Support Activities

Firm Infrastructure: Telkomsel consistently maintains its strong financial performance, which in 2014 generated Rp19.4 trillion in net income (PT Telekomunikasi Selular, 2014) and also its physical assets.

Human Capital Management: Telkomsel is transforming its human capital management to increase its employees' skill, knowledge, ability, and attitude to fit into the new digital era (PT Telekomunikasi Selular, 2014). The company sets strategic programs to find the best people, develop its people, and retain the best talent.

Technology Development: T-Cash developed its technology from USSD to mobile apps and recently with NFC technology. Before publicly launched, the NFC sticker was soft-launched first for trial to Telkomsel's employees and can be used only at merchants near the headquarter building.

4.2. Strategy Formulation

4.2.1 Business Strategy Formulation

• SWOT Analysis

The SWOT elements based on the external and internal environment analysis are:

TABLE I: SWOT Analysis Strengths Weaknesses Large customer base and wide coverage Advertising Limited merchant partnerships Good reputation and secured system NFC technology utilization Limited EDC installments Strong financial performance **Opportunities Threats** GNNT program conducted by BI Unfavorable regulation Cash-usage dominance and e-Money unfamiliarity Increasing e-money usage High rate of mobile phone penetration Lack of interoperability & interconnection Booming consumer class/middle class Many substitutes product

• TOWS Matrix

TOWS matrix is created to generate four sets of possible strategic alternatives based on the SWOT analysis

TABLE II: TOWS Matrix

	Strength	Weakness
Opportunities	Introduce T-Cash Tap at GraPARIs Make an investment to improve infrastructures for T-Cash Tap Further develop technology for T-Cash	 Intensify digital advertising and print ads in strategic locations Offer promotions to attract customers Create positive word-of-mouth by increasing customer experience
	Infrastructure leverage	 Add more merchant partnerships and EDC installments
Threats	 Intensify GraPARI as direct distribution channel Aggressively socialize T-Cash Tap to the public Persuade bank players for partnership 	 Adding more T-Cash posters at cashiers Create manual video and TVC to increase awareness Create co-branding ads with other issuers Enhance T-Cash Tap advantages compare to substitute products

• Porter's Generic Competitive Strategies

Based on the TOWS matrix, the suitable business strategy for T-Cash Tap is *differentiation* which combines uniqueness with broad target. With 140 million subscribers as of 2014, Telkomsel is targeting broad market for its T-Cash Tap. Regarding uniqueness, T-Cash Tap is one of Telkomsel's product innovations and the first in the industry. So far, there has not been any mobile money that utilizes NFC technology except T-Cash Tap.

4.2.1 Marketing Strategy Formulation

• Market Segmenting

According to Mr. Aji Ahimsyah, T-Cash in general is addressed for middle-upper pyramid and middle-lower pyramid. However, due to some limitations mentioned before, T-Cash services are currently focusing on customers living in urban areas, therefore the tendency is currently to the middle-upper pyramid. As stated by Mr. Hasnul Suhaimi, the idea is to create a trend that will become a lifestyle in the future. T-Cash Tap is launched to initiate this trend by providing a new way of in-store purchase payment.

To support the statement, collected survey data is used for market segmenting. The 130 respondents are divided into four segments as follows:

		Č	
1. Those who are aware	2. Those who are aware but	3. Those who are not fully	4. Those who are not fully
and interested in using it	not interested in using it	aware but interested in	aware and not interested in
		using it	using it

To assess whether the segments are useful or not, the segments are evaluated using five effective segmentation criteria according to Kotler and Keller (2012): measurable, substantial, accessible, differentiable, and actionable. The result shows that only Segment 1 and Segment 3 that passed the assessment. Using cross-tabulation, the major characteristics of each segment are as follows:

Segment 1: Male, 26-35 years old, employees, spend 5-10 million per month

Female, under 25 years old, university students, spend up to 5 million per month

Segment 3: Male and Female, less than 25 years old, university students, spend up to 5 million per month

• Market Targeting

Selecting the two segments that are potential and profitable to reach as well as relating to the research objective to increase customer usage, the target market in this research is Segment 1 and Segment 3 in which both are interested in using T-Cash Tap. The combined characteristics of the two targets are:

Male, 26-35 years old, employees, spend up to 10 million per month

Male & Female, less than 25 years old, university students, spend up to 5 million per month

• Market Positioning

For Telkomsel subscribers who seek practicality and fast payment process, T-Cash Tap is edgy mobile money that provides easiness and simplicity for their convenience. With the combination of mobile phone and advanced NFC technology, it offers uniqueness and a new way to pay.

• Marketing Strategies

Using cross-tabulation, the respondents' age, gender, occupation, and spending are correlated with their activities and interests in order to create effective marketing strategies. The results are as follows:

TABLE IV: Marketing Strategies based on Activities and Interests

Target Market	Activities	Interests	Strategies
Male, 26-35 years old, employees, spend up to 10 million per month	Working, spending time with family, doing sports	Technology, film, music	- Adding EDC installment at outlets, especially F&B and cinemas
MILE		MILE	Create family networkSports and music events sponsorship
Male & Female, less than 25 years old, university students, spend up to 5 million per month	Attending class, hang out with friends, doing sports	Male: Technology, music, culinary, film Female: Fashion, culinary, film	 Promotional activities through conventional media and social media
			- Sports and music events sponsorship (for men)
			- Adding EDC installment at outlets, especially F&B and cinemas
			 Fashion events sponsorship (for female)

5. Conclusion

Regarding external factors that influence T-Cash Tap's business, the political factor, in this case the regulations, have not fully supported the development of mobile money since it gives telco operators some restrictions and are more favorable to bank players. In terms of economy and sociocultural, the penetration rate of mobile phone that reached 123,1% in 2014 is a contributive factor to mobile money industry's potential which is high compared to banking service penetration rate which is only 30%. However, the level of mobile-money awareness is still low since not many Indonesians are fully aware and understood how to use it. With the recent utilization of NFC technology, mobile money offers a more practical and secure way to pay. Meanwhile, the result of industry analysis shows that the attractiveness of e-money industry is relatively low. Even though the threat of new entrants is low and bargaining power of supplier is low to moderate, the rivalry intensity, bargaining power of buyer, and threat of substitute products are moderate to high. Based on the value chain analysis, the marketing and sales as well as service enhance the business activities.

With the industry's low attractiveness, Telkomsel is expected to offer a unique and innovative product than others. Based on the TOWS matrix, the suitable business strategy for T-Cash Tap is *differentiation* which combines uniqueness with broad target. Regarding uniqueness, T-Cash Tap is one of Telkomsel's product innovations and the first in the industry. So far, there has not been any mobile money that utilizes NFC technology except T-Cash Tap.

T-Cash Tap is launched to initiate a new trend for middle-upper pyramid by providing a new way of in-store purchase payment. Based on the survey conducted to 130 respondents in Jabodetabek and Bandung, the target

market for T-Cash Tap are male aged 26-35 years old who work as employee and spend up to 10 million per month as well as university students, both male and female aged less than 25 who spend up to 5 million per month. With positioning as edgy mobile money that provides easiness and simplicity for its target market convenience, effective marketing strategies can be formulated for T-Cash Tap based on the target market activities and interests.

6. References

- [1] Bank Indonesia. (2013). 2013 Economic Report on Indonesia. Retrieved from http://www.bi.go.id/en/publikasi/laporan-tahunan/perekonomian/Pages/lpi_2013.aspx
- [2] Business Monitor International. (2015). *Indonesia Telecommunications Report Q2 2015 Includes 5 Year Forecasts to 2019*. Retrieved from http://search.proquest.com/docview/1648812674/fulltextPDF/62B70D87073D4061PQ/1?accountid=31562
- [3] Camner, G. (2013). Snapshot: Implementing Mobile Money Interoperability in Indonesia. *Mobile Money for the Unbanked*. [Online]. pp. 1-11. Available: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/10/Implementing-mobile-money-interoperability-in-Indonesia.pdf
- [4] Dewi, S, "Prospek Pembayaran Non Tunai," Gerai Info: Newsletter Bank Indonesia, vol. 50, pp. 10, 2014.
- [5] Ghosh, A, "Why Cash is Still King: Examining the Effectiveness of Alternate Delivery Channels," presented at the Mobile Money & Digital Payments Asia 2014. Jakarta, January 22, 2014.
- [6] Hitt, M. A., Ireland, R. D., & Hoskisson, R. E, *Strategic Management: Competitiveness & Globalization*, 9th ed. Mason, USA.: South-Western Cengage Learning, 2011.
- [7] Kotler, P. and Armstrong, G., *Principles of Marketing*. New Jersey: Pearson, 2010.
- [8] Kotler, P. and Keller, K. L., *Marketing Management*, 14th ed. Essex: Pearson Education Limited, 2012.
- [9] Litbang Kompas. (2014, July 30). Indonesia Belum Melek Finansial, Kompas, pp. 30.
- [10] Mars Indonesia. (April 2014). e-Money Baru Dikenal 23% Masyarakat di Indonesia. *Mars Research Specialist.* [Online]. Retrieved February 7, 2015. Available: http://www.marsindonesia.com/newsletter/e-money-baru-dikenal-23-masyarakat-di-indonesia
- [11] Martowardojo, Agus D. W, "Memaksimalkan Transaksi Non Tunai," *Gerai Info: Newsletter Bank Indonesia*, vol. 50, pp. 3, 2014.
- [12] McKinsey Global Institute. (2012). The Archipelago Economy: Unleashing Indonesia's Potential. *McKinsey & Company.* [Online]. pp. 27. Available: http://www.mckinsey.com/insights/asia-pacific/the_archipelago_economy
- [13] Prasentiatono, A. T. (2015, February 23). Berakhirnya Era Uang Tunai. Kompas.
- [14] PT. Telekomunikasi Selular. (2014). 2014 Annual Report. Retrieved from http://www.telkomsel.com/media/upload/annualreport/AR_TSEL2014.pdf
- [15] Wheelen, T. L. and Hunger, J. D., *Strategic Management and Business Policy Toward Global Sustainability*, 13th ed. New Jearsey: Pearson, 2012.