

UTILIZING DESIGN THINKING APPROACH IN THE PRODUCT CREATION OF START-UP PROJECT 'S-MART'

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I. CASE

Indonesia is a currently thriving country with powerful economic potential (Santoso et al., 2018). In fact, according to the journal 'Sustaining Indonesia's Economic Expansion' published by AT Kearney in 2018, Indonesia had exploded in GDP size by five multipliers compared to the previous years. The country is also cited to have the fastest economic increase among the G20 and is placed number 16 on the world's most economically advanced countries (Santoso et al., 2018). Indonesia's annual GDP growth fell in the range of 3.5 to 7 percent with a standard deviation of 0.7, providing stable growth for the country (Santoso et al., 2018). Afterside the tremendous success of Indonesia's GDP in the past 5 years, lies several sectors that delivered the most prominent contribution to the national GDP (in descending order): Trade, hotels and restaurants; manufacturing; and transportation and communication (Ndiamo et al., 2018). However, the largest stable growth had been dominated by commodity-related and retail sector under the trade, hotels and restaurants segment (Ndiamo et al., 2018). The large market size and stable growth peaks the author's interest in creating a start-up project specifically in the trade sector. Annually, hundreds if not thousands of new ideas sprout in Indonesia, in a form of emerging start-up projects. However, considered a business of higher than high risk, start-ups have an extraordinarily high failure rate of 90% (Kalyanasundaram, 2019). According to Kalya in 2019, the reason of most failure is mainly due to the problem identification, solution generated, and management. On the late 2018, the author as the leader of a new start-up project in Bandung named 'S-MART' created a new sales recording product to be launched in the market. However, after conducting a pilot study to 30 customers, the acceptance rate was devastatingly low. The author's dilemma was, he had spent all his budget on creating his last prototype. Complicatedly, the author was supposed to present his result to investors on early 2019. Hence, a low risk and low-cost solution must be generated. Design Thinking approach is an ideal choice to answer the author's dilemma for its ability to generate superior solution with lower risks and costs (Liedtka, 2018). By the end of October 2019, the author aims to have officially launch S-MART's product to the market. The author had utilized design thinking approach in his process of creating a revised product. After the product is created, the author conducted another pilot test consisting of interview and product trial with of 7.63 confidence interval which then be used to determine required sample size using 95% confidence level that resulted in 152 *Warung* sample to be compared with previous pilot study with no design thinking.

II. COMPANY BACKGROUND

S-MART is a service, application-based start-up company originated from Bandung. Its main operation lies in supplying fast moving consumer goods (FMCG) towards local traditional retailers. The company was initiated on October 2018 by the author and three other members that currently acted as BODs as a response to unravel the perplexity of data vacancy and chaotic supply chain in traditional grocery retail segment. S-MART have 11 members with 4 members currently acts as Boards of Directors. The company targets traditional retail segment *Warung* specifically for FMCG products for its large market share and size. Indonesia's traditional market share according to Nielsen's QBN Asia Pacific research in the year 2017 dominated nearly 60% of the whole retail value. Traditional market's number of stores also substantially exceed the number of modern market (McCullough and Nurudin, 2019). There are 3.4 million *Warung* in Indonesia compared to 43 thousand modern stores (McCullough and Nurudin, 2019). S-MART have a long-term vision to create an ecosystem of trading harmony across all traditional retail shops *Warung* in Indonesia. To achieve that long-term vision, the company has three missions: to create One Brand, One System, and One Price. One Brand as in unifying 4 million of unnamed stored *Warung* under one recognizable logo to boost up their competitive advantage. This mission will be achieved by major store revamp and branding across the unnamed stores. One System as in applying a unified data centre to better equip stores facing volatile market, and to improve trading ethics and business operations to increase service and customer satisfaction. One Price as in creating efficiency in product distribution costs, by limiting distribution level up to 2 levels (1 distributor and 1 intermediary). This mission will be achieved by controlled and compressed supply chain. The author aims to launch a product with design thinking approach by the end of October 2019. Currently, S-MART operates in Bandung, specifically Hegarmanah and Dago area for its proximity to the author's residential area. On the design thinking approach, S-MART is currently on the prototype stage and is moving on towards the test stage.

III. SPECIFIC AREA OF INTEREST

As inconceivable as it might seem, Indonesia's retail sector is predominantly flourished by the traditional market as compared to the modern counterpart, both in sales value and area coverage. In fact, GAIN (Global Agriculture Information Network) and Nielsen have disclosed traditional trade's superiority. A research by Global Agricultural Information Network revealed almost 83% of all retail sales value in Indonesia in 2016 is still dominated by the traditional market whilst supermarket like Indomaret and Alfamart only own a staggeringly bantam market of 5.13% (Rangkuti and Wright, 2016). Nielsen also published the same conclusion that is traditional market still dominating the retail industry, though with a different percentage result. According to Nielsen's QBN Asia Pacific research in the year 2017, Indonesia's traditional market dominated nearly 60% of the whole retail value, while the traditional market's number of stores substantially exceed the number of modern market (McCullough and Nurudin, 2019). There are 3.4 million traditional grocery stores in Indonesia compared to 43 thousand modern stores (McCullough and Nurudin, 2019). However, despite traditional grocery trade's preponderance in store universe number and sales value, it is steadily depleted from its reign by modern trade's extravagant growth. The traditional grocery trade loses on average 1% of the total retail value to its modern counterpart every year (Rangkuti and Wright, 2016). Even though the traditional grocery trade is still growing in value by (CAGR 2011-2016) 7.6%, it is not growing in store universe number (Rangkuti and Wright, 2016). The modern trade -convenience store in the other hand, boasted value growth (CAGR 2011-2016) 22.5% and store universe number (CAGR 2011-2016) 15.6% (Rangkuti and Wright, 2016). However, mathematically to dominate Indonesia's grocery retail industry, the modern trade still has a long way to go. At least 15 years is required by the modern market to rival traditional trade sales value, and another 20 years to flip its current condition (Rangkuti and Wright, 2016). Traditional retail sector's prodigious market size and share, also stability over the years had proven the sector to be highly appealing.

Given previous information of traditional sector's superiority in terms of market size and share, there is a concerning absence in terms of traceability. The sector can't be traced, yet there is monstrous demand for traceability. Hence, the author is aiming to create a product using design thinking approach to supply such demand. To support the author's argument, Indonesia's largest cigarette companies still rely on salesman's subjective research on its product sales across *Warung*. In reality, based on the author's exploratory research in Pacet, Bandung and Dago, Bandung, thousands of salesmen each visit tens of *Warung* per day just to ask a simple question "How many X company's cigarette do the shop sell today". The following reply by the shopkeeper usually goes as follows "Maybe around Y quantity". The word 'maybe' indicates a highly subjective approach in the matter. Based on information provided by the author's exploratory research and interview, the author sees a magnificent opportunity in Indonesia's traditional retail information unity. Hence, the author believes that with great design thinking approach, the author will be able to create a useful product to win this opportunity.

IV. SPECIFIC PROBLEM

Creating a new product for S-MART that answers real customer pain and problem need careful planning, capital, and in-dept problem understanding. Given the company's initial state and only having a budget of Rp 30.000.000 for product creation, the author needs to use efficient approach to identify company's capability, identify customer's needs and wants, and create a solution based on information. The author then utilizes design thinking approach for its ability to generate superior solution with lower risks and costs (Liedtka, 2018).

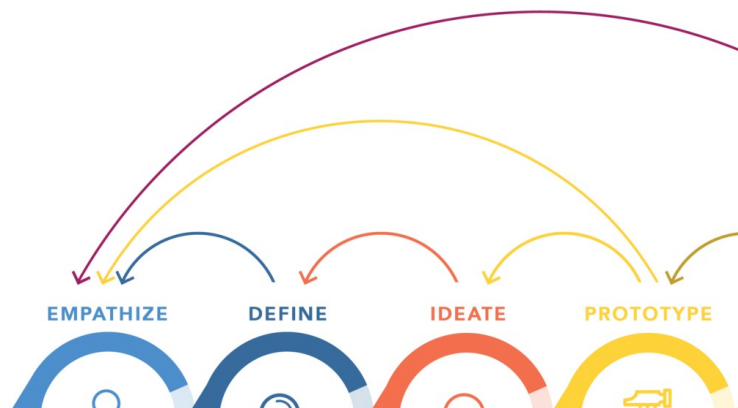


Figure 1: Design Thinking Approach, Source: NNGROUP.COM

The author's final objective using this approach is to create a useful and functioning product that really answer customer's real problem, whilst being targeted, implementable, and cost friendly.

V. ALTERNATIVE

From the author's research and test using design thinking approach towards 152 *Warung* across Bandung area, a Point on Sale (POS) system seem an appropriate solution to serve the *Warung* segment and to answer the problem of data traceability in the traditional trade sector. In addition, using design thinking approach, the author was able to increase acceptance rate to 56% from previously 13% with no design thinking. Below is the illustration of how POS system idea functions.

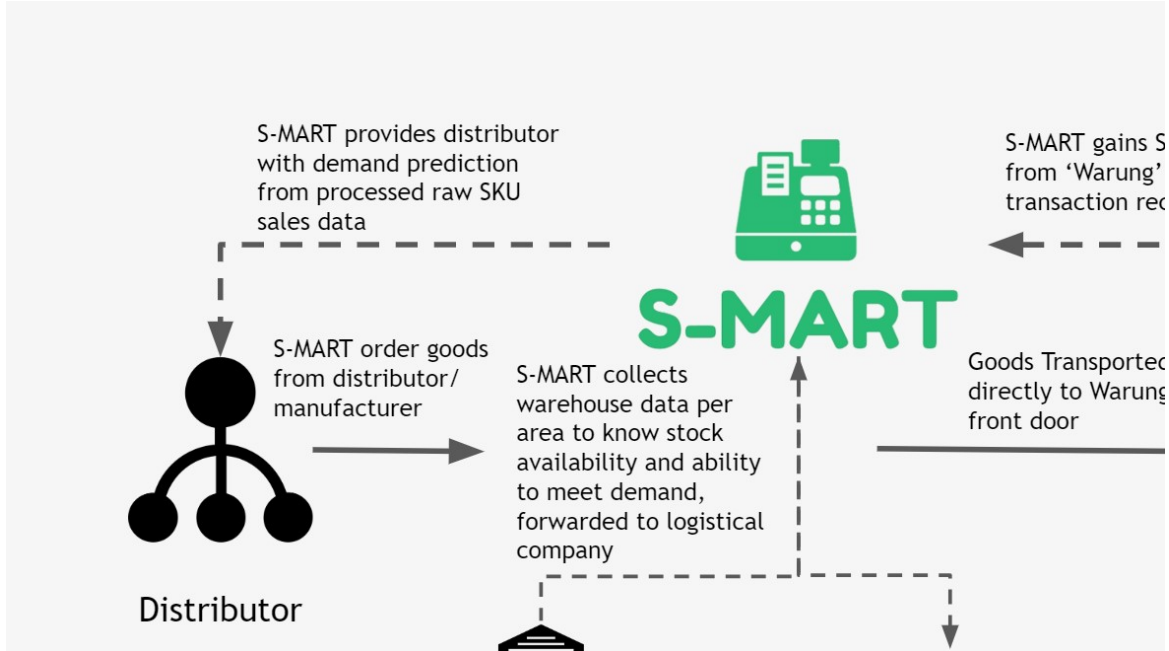


Figure 2: Illustration of POS System Product's Ideation

S-MART should gain SKU sales data from Warung's transaction using S-MART app. Utilizing that data, the company can create, predict the demand from certain goods, and predict market's volatility. This way, the company can minimize supply chain levels up to only two levels since market risk can be easily predicted there will be no need for long supply chain. Also, using data as leverage, the company can gain higher bargaining power to distributors. Hence, the company will minimize costs and maximize profits. In addition, retailers will be able to order goods online, hence minimizing the needs of human labour.

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