Innovation of Digital Start Up Business Model with 4As Marketing Approach and its Application in Small and Medium-Sized Enterprises in South Sulawesi

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Abstract: The purpose of this research is to discuss the innovation of Digital Start Up business model with 4As Marketing Approach and its application to Small and Medium-sized Enterprises in South Sulawesi. The 4As approach in Marketing is 1) Acceptability, 2) Affordability 3) Accessibility, and 4) Awareness. Dependent variable in this research is the performance of the SMEs. Independent Variable in this research is the Innovation of Digital Start Up Business Model. This research is a true experimental study, by giving treatment to the respondents in the form of simple Start Up training. In this study, a 2 x 2 design between subject pattern was used. Between subject design compares the effect of different treatments on different subjects. The results of this research showed that the innovation of the Start Up business model improving the SMEs sales performance. The 4A's Marketing approach shows percentages 70% for aspects of Acceptability and Affordability, 45% for aspects of Accessibility and 55% for Awareness.

Keywords: Innovation, Business Model, Startup, SMEs

Introduction

The speed of technological change changes the consumer paradigm in shopping. This is reflected in the consumption trend which is slowly but surely shifting from Retail Consumption to shopping in the Marketplace (Online). The survey of several independent research institutions shows that the shift is caused by the easier access of information about the goods that desired to be bought.

![Picture 1. Household Consumption in South Sulawesi](image)

Source: Bank of Indonesia, Regional Economic Studies 2018

Digital economic growth and e-commerce industries in South Sulawesi will continue to grow because the opportunity is still wide open, based on data on the transactions development through the digital world which is expected to continue to increase along with the growth of marketplace and online businesses, also supported by the data:
Table 1. E-commerce growth in Indonesia

| Region   | Percentage |
|----------|------------|
| Indonesia| 22%        |
| India    | 20%        |
| World    | 14%        |

Source: Bank of Indonesia, Regional Economic Studies 2018

Furthermore in this study of Bank Indonesia, the market share for e-commerce in East Indonesia Region is still very low, only around 1% compared to transactions in Java (95.3%) and Sumatra (3.7%) region.

McKinsey in his report entitled "Unlocking Indonesia's Digital Opportunity" also predicts that the transition to the digital domain will increase economic growth in Indonesia to US$150 billion in 2025. The report also states that 73% of internet users in Indonesia access the internet via smart phones and the numbers are expected to continue to grow in the next five years. The massive use of smart phones will also be one of the supporting factors for the growth of the e-commerce industry in Indonesia.

This is why it makes a lot of Start Up to be created and developed in Indonesia, especially digital technology-based startup. Startup is a company that just started by utilizing technology, especially internet technology. There are several arguments about how long the company stands, how many assets or company profits, how many employees and so on are included in the startup business criteria. But in this study the Start Up focuses on the applications used by SMEs owners to carry out their business activities. The growth of Start Ups in Indonesia indirectly affects the Business Model Innovations.

In Makassar, many SMEs have marketed various products through online, but some businesspeople still use traditional methods, this is very different from some other regions, which have used access to information technology. These programs are intensively carried out by the government by making various trainings for businessmen. Because not all businesses are able to do business digitally, this becomes a discourse for researchers to see opportunities that are still discussed practically.

Das Kaushik, et al. (2016) competing in the Digital Era, Indonesian Business must have five important strategies to support growth and efficiency, such as: 1) Customer Oriented, 2) Develop Omni channel systems to connect the world online and offline, 3) Take advantage of Data Base to encourage Real Time decisions throughout the value chain, 4) Information Security, 5) Build Digital capabilities to develop the digital age organization. Based on this opinion, it is in line with the 4 'Marketing approach by Sheth Jagdish N & Rajendra Sisodia, that is, marketing must be customer oriented by paying attention to the elements of Acceptability, Affordability, Accessibility, Awareness.

So in this paper, the author tries to review the Innovation of Digital Start Up-based Business Models with a 4as Marketing Approach and Its Application in Small and Medium-sized Enterprises (SMEs) in South Sulawesi.

Business Model Innovation. Innovation business model is a part of work in a business model, and some authors argue that conceptualization is implicit. (Mitchell and Coles, 2003) Business model innovation is the ability to continually innovate and increase organizational resilience to changing environments and is a sustainable competitive advantage.

Evant, et al., 2017 A sustainable business model is explained in five proportions, combining economic, social and environmental benefits that are conceptualized as a form of value, 2) a sustainable business model requires a system of sustainable value flows among many stakeholders including key stakeholders, natural environment, 3) sustainable business models require value networks with goals, design and governance, 4) Sustainable business models require systematic consideration of stakeholder interests and responsibilities for the creation of reciprocal value, 5) Externalizing externalities through product services enables innovation towards a sustainable business model,

Digital Start Up. Understanding Start Up in business still causes debate in the business world. According to the online cambridge.org dictionary, startup (start-up) is a small business that has just
been started. A new small business starts. Whereas according to the business dictionary is the initial stage of a company where the entrepreneur moves from the business idea stage, financing, laying the foundation of the business structure then starting a business.

The term startup became popular at the time of the dot-com where at that time (1998-2000) many companies made use of the internet by creating company websites to expand their business. The presence of the internet which began to develop and became known to the public was used to open an internet-based business. New businesses that use internet technology are then known as startups. Internet-based businesses are also growing but not all are successful. Many businesses fail within a short time. Investment master Warren Buffett said that many investors were hypnotized by the drastic rise in shares of internet technology-based businesses and strong comments on dot.com (the internet-based business website) that issued shares and closed its online store a few months later. The most successful example of starting this startup business is Google and Yahoo.

Following the principles of Start Up, the model is based on feedback from the business system, seen as a closed boundary, which is to realize all the main variables related to the phenomenon being studied (Sterman, 2000). Specifically, startup modeling is adopted to map the system structure to capture and communicate both understanding of behavioral control processes and the quantification of relationships so as to produce a basis for simulating the possible system behavior over time. The Start Up model is a powerful tool to help understand and utilize feedback from complex management systems. This model also offers operational methodologies to support business enlightenment and decision making (Bianchi, 2016). Thus, Start Up modeling can be used to help people understand how strategies will work overtime, how things might go wrong and interventions that can be applied to reduce such situations. (Pidd, 2009).

The 4 A’s Marketing. Approach 4's Marketing is goal-based marketing, in line with Drucker’s suggestion that goals must be focused on results (not activities), and that they are consistent, specific, measurable, related to time, and achievable.

Approach 4’s Marketing has four values that are focused on customer orientation, namely 1) Acceptability: The extent to which the number of company product offerings meets and exceeds customer expectations. This has two dimensions: functional acceptance and psychological acceptance, 2) Affordability: The extent to which customers in the target market are able and willing to pay for the price of the product. It has two dimensions: economic affordability (ability to pay) and psychological affordability (willingness to pay), 3) Accessibility: The extent to which customers can easily obtain and use products. This has two dimensions: availability and comfort, 4) Awareness: The extent to which customer information about product characteristics is persuaded to try it, and, if the user is reminded to repurchase it. This has two dimensions: brand awareness and product knowledge.

Implementation and control show a large part of the work of marketers is to get customers moving. A 4 A framework is a very useful way to think about not only increasing demand, but also about how to control it. More broadly, we can use the 4A framework to shape the "level, time and composition of demand." In other words, the framework can help determine who buys, when they buy, and how much they buy. cases where offers are fixed but demand varies seasonally.

SMEs. Although there is no similar definition in each literature, but usually the definition of SMEs can be based on the number of employees and assets fixed or sales turnover. In the table below you can see the definition of UKM more clearly:

| Definition      | Micro | Small | Medium |
|-----------------|-------|-------|--------|
| Number of Employees | 1-4 people | 5-19 people | 20-99 people |
| Net Assets      | <=Rp 200 million or |
| Sales Volume    | <=Rp 1 billion |

Source: APEC, 1994b
Judging from its characteristics, SMEs units consist of many industries and products, many studies have been carried out to find out the specific characteristics of small businesses (Poon, Swatman & Vitale, 1996). SMEs differ from organizations that are large from a variety of reasons such as fewer employees, and the support and great influence of SME owners on company operations (Poon, Swatman & Vitale, 1996).

Conceptual Model. This study tries to look at SMEs based on Start Up with the approach of 4 's Marketing, the concept is simply as follows:

Picture 2. Variables in Experiments.

- Independent Variable: Sales Training with Start Up
- Conventional Sales Training
- Dependent Variable: Participants Experiencing Sales Increase
- Experiment Condition
- Control Condition

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Research Methodology
The type of research used in this study uses a type of Experimental research in which Experimental research uses Treatments with Training and Questionnaire methods to answer the questions before and after the Treatments.
The research location in South Sulawesi was represented by 4 cities, namely Makassar, Maros, Gowa, and Pare-pare. The location of this study is based on the circulation level of its trading activities.
The population of this study was all SMEs engaged in fashion in the four cities where they were researched.
The sampling technique used was purposive sampling with the Cluster Random Sampling method which is sampling where each element in the population does not have the same probability of being sampled, only elements that meet the criteria of the researcher who will be chosen as the research sample (Cooper and Emory, 1995). The criteria of respondents who became the choice of researchers were:
  a. Small and growing businesses are in Makassar, Maros, Gowa, Wajo, and Pare-pare, not branches of the head office outside Makassar.
  b. Small businesses that have made transactions online.
  c. Small businesses that have been established for three years in Makassar, Maros, Gowa, Wajo, and Pare-pare.
  d. Small businesses registered with the Makassar, Maros, Gowa, Wajo and Pare-pare Cooperatives and SME Offices.
Based on the sampling criteria above, a sampling of 20 respondents was obtained, with each region consisting of 5 people representing according to the criteria of the sample. Of the 20 participants / respondents were divided into 2 (two) groups divided according to the proximity of the close region. Group 1 from Makassar and Gowa, and Group 2 from Maros and Pare-pare.
In this study using quantitative and qualitative data. Quantitative data obtained from the calculation of the questionnaire and qualitative data in this study is a general description and responses of respondents from the treatment using the FGD method of the questionnaire relating to the respondent's answer regarding Start Up.
Primary and secondary data. Primary data used in this study were obtained from the results of questionnaires distributed on the sample distributed to respondents. Secondary data used is obtained in the form of company documents and other written information that has a direct bond with the problem under study. Secondary data sources are literature studies.
In this study, Data Analysis uses Descriptive Analysis of the results of the Treatments carried out. The hypothesis in this study is the Innovation of the Start Up business model improve SME sales performance

Results and Discussion
Based on the results of processing data and information obtained from the Treatments and Questionnaire distribution in four cities in southern Sulawesi, namely Makassar, Maros, Gowa, and Pare-pare, the following results were obtained:
Researchers developed \( n = 10 \) for \( p = 2 \) types of groups. This research was conducted by giving numbers 1 to 20 for participants, then with participants divided into two groups based on the level of proximity of the region based on the district. Groups 1 and 2.
Table 3. Independent Test Sample Layout.

| Group | Participant       | TreatmentLevel | Mean  |
|-------|-------------------|----------------|-------|
|       | Participant 1     | A1             | 58.75%|
|       | Participant 2     |                |       |
|       | Participant 3     |                |       |
|       | Participant 4     |                |       |
|       | Participant 5     |                |       |
|       | Participant 6     |                |       |
|       | Participant 7     |                |       |
|       | Participant 8     |                |       |
|       | Participant 9     |                |       |
|       | Participant 10    |                |       |
| Group2| Participant 11    | A2             | 38.75%|
|       | Participant 12    |                |       |
|       | Participant 13    |                |       |
|       | Participant 14    |                |       |
|       | Participant 15    |                |       |
|       | Participant 16    |                |       |
|       | Participant 17    |                |       |
|       | Participant 18    |                |       |
|       | Participant 19    |                |       |
|       | Participant 20    |                |       |

Source: Data Processed, 2018

Based on the table above, the level of sales performance for Treatment A1 is 58.75% and the sales performance level for A2 treatment is equal to 38.75%. This percentage is obtained from the results of a questionnaire distributed to respondents as participants in the treatment after a period of 1 (one) month to make a sale from the short training period that has been given. From these percentages there are differences in SME sales performance by 20% of the treatments that have been carried out. The percentage of respondents' answers is based on the A1 treatment with the 4' Marketing approach as follows:

Table 4. Percentage of A1's treatment

| Approach 4A'sMarketing | Percentage (%) |
|------------------------|---------------|
| ACCEPTABILITY          |               |
| 1 Functional acceptance| 70            |
| 1 Functional reception  | 70            |
| 2 Psychological acceptance | 70        |
| AFFORDABILITY          |               |
| 3 Economic affordability (ability to pay) | 80 |
| 4 Psychological affordability (willingness to pay) | 60 |
| ACCEPTABILITY          |               |
| 5 availability         | 40            |
| 6 convenience          | 50            |
| AWARENESS              |               |
| 7 brand awareness      | 50            |
| 8 knowledge of product | 60            |

Source: Data Processed 2018
Based on the above data, the highest percentage of conditions are Acceptability and Affordability of 70%. Based on the answers and information of the Respondents / Participants the factors are influenced by the level of development of very rapid technology and the most supportive factor is when the community has a Smartphone that can be used to carry out online shopping systems and get information quickly.

Furthermore, the concentration of Awareness is 55%, it is because most of the consumption is affected by the manifestation and interaction, so that the awareness of the brand is quite influential. The latter is the percentage of accessibility (Accessibility) of 45%. Based on the answers of the respondents / participants who observed the behavior of consumers directly, things that affect the effect is because sometimes the items needed are not in accordance with the available information, besides, the quality is sometimes could not meet the consumer expectations. Based on the results of the experiment the hypothesis was accepted that the start Up's business model innovation enhances SME sales performance.

**Conclusion**

The innovation of the startup business model improves the sales performance of SMEs. The approach of 4 " Marketing ' shows a percentage of 70% for the Acceptability and the Affordability, 45% for Accessibility and 55% for Awareness.

Based on the results of the research conducted, it shows that the Business Model-based Business Unit is quite helpful for the SME owners in the Fashion field. However, based on the results of the research, the owner of SME cannot create its own Start Up, because the cost of the investment is very high so that the used Startup that is used is the existing startup and its type is the C2C Marketplace. The benefits obtained by using Startup can save on cost of distribution, for SME owners and marketers. For consumers, it provides time efficiency.

The reconciliation can emerge when the establishment of the startup for the risk of investment because it is not rare for a number of banks to experience bankruptcy until it closes. The following are the Successful and the failed data in Indonesia.

**Table 5. Startup Classification**

| No | Startup Classification | Name of Startup          | Founder                           | Place and the year of establishment | Condition |
|----|------------------------|--------------------------|-----------------------------------|-------------------------------------|-----------|
| 1  | Digital Agency         | MagniteGroup->XMGraffity | Kevin Mintaraga                   | 2008                                | Success   |
| 2  | C2C                    | Bukalapak                | Achmad Zakydan Nugroho Herucalhyo | 2011                                | Success   |
| 3  | Service Application    | Tastrous.com             | Ronaldfshak                       | 2011                                | Success   |
| 4  | Logistic               | aCommercece             | Thailand                          | 2014                                | Success   |
| 5  | Delivery               | HappyFresh               | Jakarta& Kuala lumpur             | 2015                                | Success   |
| 6  | Private Assistant      | YessBoss                 |                                   |                                     |           |
| 7  | Fishpond management    | eFishery                 | Gibran Chuzaeafah AmsiEl Farizy   | 2012                                |           |
| 8  | Health and education service facilities for poor children | Jualo | ChaimFetter | Mataram |           |
| 9  | Furniture commodity    | Fabelio                  | Christian Sutardi                 |                                     |           |

Source: Data Processed, 2018
| No | Startup Classification | Name of Startup | Founder | Place and the year of establishment | Condition |
|----|------------------------|----------------|---------|-------------------------------------|------------|
| 10 | Moslem wears HijUp     | Diaheng Lestari | 2015    | Success                             |            |
| 11 | Application for giving information about ecommerce Kudo | AbertLucius danAgung Nugroho |         | Failed                             |            |
| 12 | Live Streaming Service | Zeemi.tv       | TomDamek |                                     |            |
| 13 | Social Network for fitness and sports activists SixReps | Denny Santoso |         |                                     |            |
| 14 | Food Marketplace website SEdapur.com | Soegianto Widjaja | 2011    | Too focus on the market rather than the buyer |            |
| 15 | Education BukuQ.com/ GoodReads | FajarEndra Nusa. | 2009    |                                     |            |
| 16 | Photography website UpdateTerus.com | Kevin Mintaraga | 2011    | (closed in 2013)                     |            |
| 17 | All about golf information Golfnesia.com | Natali Ardianto | 2010    | V                                   |            |
| 18 | Portal to learn IT Benpinter.net | Isak Rickyanto | 2003    | v                                   | (Closed in 2009) |
| 19 | Online reservation service RServe.me | Yohan Totting&Reza Prabowo | 2010    |                                     |            |
| 20 | Indonesian Creative Service website KayaKarya.com | JeannieTan | 2010    | (closed in 2011)                     |            |
| 21 | Platform to create online shopping site Kassa9.com | Citra Purnawijaya | 2009    | (Closed in May 2013)                 |            |
| 22 | Service Go-Jek | Nadiem | 2010 |                                     |            |

Online Taxi Go-Car, Food delivery Go-Food, Goods delivery Go-Send, moving out service Go-Box, Buy-in service Go-Metamessage service- Go Massage, Home Cleaning service Go-Clean, and skin care and face treatment service in home Go-Glam

Source: Data Processed, 2018
Table 5, cont.

| No | Startup Classification        | Name of Startup | Founder                                                                                     | Place and the year of establishment | Condition |
|----|-------------------------------|-----------------|------------------------------------------------------------------------------------------------|-------------------------------------|-----------|
| 23 | For people who travel frequently | Traveloka       | Ferry Unardi (CEO), Derianto Kusuma (CTO), dan Albert Zhang (Head of Design)                  | 2012                                | Success   |
| 24 | Online shopping website       | Tokopedia       | William Tanuwijaya dan Leontinus Alpha Edison                                               | 2012                                | Failed    |
| 25 | Agriculture                   | jGrow           | Andreas Senjaya                                                                               | 2012                                | Success   |
| 26 | Apps for photo sharing & editing | PikMix          | Calvin Kizana                                                                                | 2012                                | Success   |
| 27 | Foods                         | FoodPanda       | Juan Chene                                                                                   | 2012                                | Success   |
| 28 | Beauty equipment              | BeautyTreas     | Romeo Reijiman                                                                                | 2012                                | Success   |
| 29 | Education                     | RuangGuru       | Muhammad Iman Usman                                                                            | 2014                                | Success   |
| 30 | C2C                           | BukaLapak       | Achmad Zaky                                                                                   | 2011                                | Success   |
| 31 | Kitabisa                      | Kita bisa       | M. Alfatih Timur                                                                              | 2013                                | Success   |
| 32 | e-marketplace                 | Lazada          | Alexander Samwer                                                                              | 2012                                | Success   |
| 33 | Website C2C Marketplace, Trade| Shopee          | PT. Shopee Internasional Indonesia                                                            | 2015                                | Success   |
| 34 | Website                       | Blibli.com      | PT. Global Digital Niaga                                                                      | 2011                                | Success   |

Source: Data Processed, 2018

In this research, there is a nuisance variable which becomes a flaw in this study: which is the personality, the level of intelligence and the different experiences. Therefore, it can cause systemic errors in the participants' variables.

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