

Building and Enhancing Startup Business Performance Using Entrepreneurial Marketing and Collaborative Business Incubation

M. Ariza Eka Yusendra, Niken Paramitasari and Lilla Rahmawati

Abstract--- *The purpose of this research is to develop a startup business performance improvement model through the exploration and expansion of collaborative business incubation and entrepreneurial marketing. In the development of the model, theories such as service dominant logic, dynamic capabilities, and entrepreneurship are used to obtain a model that is both operable and suitable for industry 4.0. The research model has been empirically tested with 240 startuppreneurs from 12 business incubators throughout Indonesia using an analysis of Structured Equation Modeling. The research results show that each of the hypotheses that were developed are acceptable. This means that startup business performance can be progressively improved when collaborative incubation and entrepreneurial marketing mediated by Value Cocreation Capabilities and Dynamic Capabilities are used. It is believed that this model can clearly explain the stages in improving startup business performance and is ready to be adopted as a baseline in developing the process of business incubation activities that are an additional asset for startup businesses.*

Keywords--- *Startup Business, Entrepreneurial Marketing, Business Incubation, Entrepreneurship.*

I. INTRODUCTION

Currently, we are witnessing that the industrial revolution 4.0 has had an enormous effect on global society (Geissinger et al., 2018). The massive use of information technology and the internet in every aspect of life has now grown to every sector, and the entrepreneurial world is no exception (Yi and Uyarra, 2018). Young entrepreneurs bring many new and varied business ideas and translate them into startup businesses with new models. In the industry 4.0 era, the current state of disruption has become an inevitable where many new business models are appearing and eroding established businesses and replacing old business models (Ritala et al., 2018). Some business researchers and entrepreneurs have even proclaimed that the 21st century is the era of the startuppreneur, where young entrepreneurs are taking advantage of information technology and the internet to acrobatically shape their intentions and creations in order to fulfill the needs of millennials using product and service solutions that have not existed in previous eras (Shams and Solima, 2019).

However, though many startup businesses are appearing, their survival rate is still relatively low. Studies by Deller and Conroy (2016), Vanderstraeten et al. (2016) and Mas-Verdú et al. (2015) have found that the success rate of a startup business is still less than 5%. Of the 5% that survive, only 25% are able to provide significant, stable earnings. In other words, only 1,25 % of startup businesses worldwide have a chance of succeeding and making a

*M. Ariza Eka Yusendra, Darmajaya Institute of Informatics and Business, Lampung, Indonesia. E-mail: arizaeka@darmajaya.ac.id
Niken Paramitasari, Darmajaya Institute of Informatics and Business, Lampung, Indonesia. E-mail: nikenparamitasari@darmajaya.ac.id
Lilla Rahmawati, Darmajaya Institute of Informatics and Business, Lampung, Indonesia. E-mail: lillakeling@darmajaya.ac.id*

profit. There are a few main factors that contribute to the high failure rate of startup businesses. Many times, entrepreneurs cannot provide a product or service that is truly new or innovative. Many of them merely act as followers despite the market already being controlled by the industry leaders. Even when they succeed in creating a business that can serve as a model, the market changes too quickly (Rodrigo-Alarcón et al., 2018). This can be seen by the many startup business that do not yet have dynamic capabilities to adjust to the demands and competition of the market (Lüftenegger et al., 2012). Another factor that causes many startup businesses to fail in their first few years is the tendency for pioneering entrepreneurs to be product oriented—focusing on what they can create. However, in the industry 4.0 era, business organization must transform and take on a marketing mindset where fulfilling needs and resolving customer problems are the backbone of business generation ideas (Beckman and Khare, 2018). There is weak interaction between those initiating startup businesses and their customers, which leads to a lack of understanding regarding what the customer wants and a startup business that cannot optimally serve its customers (Grönroos, 2016).

To overcome this problem, both private and government institutions have attempted to initiate growth incubators and business accelerators (Shams and Solima, 2019). The purpose of these incubators and business accelerators is to help startup businesses through the early phases and the quickly accelerate the growth of the business in order to help it adapt to a market that is extremely dynamic. Business incubators to play a role in improving the survival rate and success of startup businesses (Miranda and Borges, 2019). To fulfill this purpose, a business incubator usually provides 4 services: *infrastructure provider*, *business services*, *financial provider* and *connectivity*. In carrying out these services, business incubators assist and coach the startups that become their partners (Liu and Bell, 2019). This incubation is important because it can provide basic growth capability as well as resources to grow each startup. Every business incubator has various models of incubation, but generally speaking, the startup businesses who join as partners will typically receive basic business and management knowledge, business growth networking, marketing and market research training, access to capital and integration technology for commercialization (Iyortsuun, 2017). The desired result of a startup business's participation is increased business performance such that it is capable of graduating to another class and becoming a larger scale business (Bikse et al., 2018).

Unfortunately, not every startup business that completes the business incubation program is capable of improving its business performance. Studies by Hong et al. (2018), Wonglimpiyarat (2017), and Fischbacher-Smith (2017) show that in several developing countries, following the business incubation program, the performance of many startups is less than encouraging and could be described as stagnant. Other researchers such as De Mattos and Salciuviene (2017) and Bergmann et al. (2018), who conducted studies of entrepreneurship in several collegiate business incubators, found that interest and entrepreneurial orientation was stagnant even though the university students had joined the business incubator program. This signals a low startup business birth rate among *civitas academia*—possibly caused by its focus being more directed toward the completion of academic activities. Despite this, some researchers like Liu and Bell (2019) as well as Petrucci (2018) through their studies have stated that there is a significant impact on business performance when startuppreneurs join business incubation programs though this data originates from empirical data in developed countries. Researchers such as Galvão et al. (2019) and Blanck et al. (2019) also consider business incubators successful from the standpoint of *people connectivity* and *technology*

integration, though they do not touch on the prerequisites that are needed so that a business incubator is capable of supporting a startup business's performance. Based on these findings, it can be stated that currently the effectiveness of the business incubation process on startup business performance is still questionable and the entrepreneurial world has not yet found a startup business growth model that is both reliable and valid.

The study in this paper will attempt to resolve the aforementioned issue by developing a startup business performance improvement model, taking advantage of service dominant logic, dynamic capability and entrepreneurship theories. These theories are employed because the entrepreneurial world has presently become significantly more disruptive when compared to previous eras. Collaboration between those who conduct business, the stakeholders, and the customers are necessary to achieve a high startup business success rate. The researchers also make use of the concept of entrepreneurial marketing to fill out an approach to startup business performance improvement through a marketing orientation that is more proactive, innovative, and opportunity focused. Not only that, but dynamic capability has also been added to the model to provide market adaptability and an ability to work together with customers to resolve the issues that they face.

II. LITERATURE REVIEW

The Entrepreneurial World and Market Competition in the Industrial Era 4.0

Since 2011, the world has entered the industrial era 4.0 as indicated by a growth in interaction, connectivity, and the absence of barriers between man and machine as well as other resources that are increasingly convergent through information technology and communication (Geissinger et al., 2018). A significant leap has occurred in the entrepreneurial world, particularly in the industrial sector where information and communication technology has been taken advantage of fully (Busca and Bertrandias, 2020). Not only in the production process, the impact of industry 4.0 has also affected the entire business value chain. As a result, many companies are attempting to grow contemporary business models that are digitally based to achieve better efficiency and higher quality products (Torres de Oliveira et al., 2019). This has caused digital business in recent years to become a tantalizing trend. The increase in internet usage and a variety of conveniences offered by smartphones are some of the reasons such businesses show potential (Priporas et al., 2019). Not only that, but digital business has also become a place for a young generation to channel its creativity to become business opportunities. Presently, many young entrepreneurs have contributed solutions to market issues that have resulted on promising businesses. Not surprisingly, the economic digitalization that has become the symbol of the industrial revolution 4.0, has also become a threat to businesses that still conduct and manage their businesses in conventional ways (Seet et al., 2018).

The business and customer environment in the 4.0 era has also experienced a significant transformation. In this era of connectivity customers tend to be more connected to their counterparts and often seek their opinion before purchasing something (Metze, 2017). In addition, customers are also dependent on ratings and online reviews of a product. Therefore, the number of opinions, reviews, and positive or negative recommendations are on the internet will strengthen or weaken the attraction of a particular product. This trend provides a new, more intimate way for businesses to approach customers. Supported by technology that is increasingly advanced as well as big data

analysis, companies can reach customers with a more human touch. Businesses can also more easily learn who their customers and the interaction between them is becoming something personal (Batabyal and Beladi, 2015).

Certainly, modern entrepreneurs who have just begun their startup business must be able to seize this opportunity. They must develop a dynamic ability so they adapt to changes in the business environment of the 4.0 era (Ojasalo and Ojasalo, 2018). Not only that, but the growth of values alongside the customer base has become a necessity which is made easier through connective information technologies such that startup businesses can better understand their customers and learn to make products that customers need to solve the problems they face (Neumeyer and Santos, 2018). Industry 4.0 has also made it possible for Incubators, business accelerators, startuppreneurs and entrepreneurial development to collaborate in improving business performance. In order to survive in the disruptive 4.0 era, incubators and business accelerators cannot work alone, but must collaborate often and struggle together to give something of value to the customer and develop competitive business capabilities. (Graça and Camarinha-Matos, 2017). With the aid of service dominant logic and dynamic capabilities, the researchers introduce a collaborative incubation process juxtaposed entrepreneurial marketing to improve business performance that is active, innovative, and opportunity focused.

The Relationship of Collaborative Business Incubation to Value Cocreation Capabilities and Dynamic Capabilities

Business incubation is a program designed to coach and speed up successful business growth through a variety of financing programs that are joined by supporting partnerships / other elements of business coaching with the purpose of helping the business become profitable and sustainable as well as maintain good financial and organizational management, so that it can eventually have a positive impact on society (Zhou et al., 2017). In order to be effective, the business incubation program must be conducted collaboratively with a variety of entrepreneurial stakeholders from every startup business value chain (Lüftenegger et al., 2015). A business incubation program can be said to be collaborative if the program's process is capable of facilitating business interaction between tenants and business partners, can provide broad access to the marketplace and connection to customers, and has entrepreneurial programs that are able to invite many stakeholders to participate in the growth of the business (Wonglimpiyarat, 2016). Through these collaboration activities, it is believed that a startup business can achieve value cocreation competitive capabilities, a product or service that is truly able to meet the desires and expectations of the customer, and make the new product launch much more successful in order better facilitate the business's competitive advantage. (Wieland et al., 2017). The collaborative business incubation process is also advantageous so that the startup business, through interaction with a variety of stakeholders, gains an ability to shape, reshape, configure, and reconfigure business capabilities so that it can respond to changes in the 4.0 business environment with a high degree of adaptability (Wang et al., 2019). From this description, a hypotheses can be formed that represents the relationship of Collaborative Business Incubation to Value Cocreation Capabilities and Dynamic Capabilities:

H1a: The greater the degree of collaborative business incubation, the greater the value of a startup business' cocreation capabilities

H1b: The greater the degree of collaborative business incubation, the greater a startup business' dynamic capabilities

The Relationship of Entrepreneurial Marketing to Value Cocreation Capabilities and Dynamic Capabilities

Entrepreneurial marketing is usually defined as a series of marketing activities that is conducted by a business that has limited resources and therefore must depend on creative and innovative tactics (Sadiku-Dushi et al., 2019). This concept is also used to describe a marketing action that is applied in a nonlinear, unfriendly market environment full of uncertainty that is typically faced by entrepreneurs. Entrepreneurial marketing is evidenced by a marketplace orientation that has seven dimensions: Proactiveness, an Opportunity Focus, Calculated Risk Taking, Innovativeness, Customer Intensity, Resource Leveraging and Value Creation (Chuang, 2016). Some researchers have stated that Entrepreneurial Marketing is closely related to the theoretical approach of service dominant logic, because it views entrepreneurs and customers as the main actors having an opportunity to collaborate in value cocreation to produce a product or service (Rezvani and Fathollahzadeh, 2018). A startup business' fluency in applying Entrepreneurial Marketing can be a significant competitive advantage. This is caused by a competitive business environment that is continually changing during the disruptive 4.0 era, such that expertise in the 7 dimensions of entrepreneurial marketing is needed. Through entrepreneurial marketing startup businesses are expected to have an ability to renew resources and capabilities quickly – through the reconfiguring capabilities, seizing capabilities and sensing capabilities – so they can take advantage of a variety of opportunities within the marketplace (Whalen and Akaka, 2015). From this description a hypothesis can be formed that represents the relationship of entrepreneurial marketing to value cocreation capabilities and dynamic capabilities:

H2a : The more capable a startup business in applying entrepreneurial marketing, the greater the increase in Value Cocreation Capabilities

H2b : The more capable a startup business in applying entrepreneurial marketing, the greater the increase in Dynamic Capabilities

The Relationship between Value Cocreation Capabilities and Startup Business Performance

Value cocreation capabilities are the ability to create a business strategy that emphasizes continual creation/development between the business and the customer across the entire business value chain (Dominici et al., 2017). The 4.0 era, with all its power of connectivity, enables startup businesses to interact and network with customers at various levels (Stokburger-Sauer et al., 2016). The activities are many and varied—from understanding the customers, to understanding their complaints, to asking what products they would like to see in the future, or even giving them the opportunity to customize their products (Dominici et al., 2017). With these Value Cocreation Capabilities, it is expected that startup businesses will gain a competitive advantage that is difficult for their competitors to imitate. The competitive advantage achieved through value cocreation capabilities usually directly impacts the startup business' performance whether in increased market share, sales growth, new product launches or even management development and economies of scale (Wilden et al., 2019). From this description a hypothesis can be formed that represents the relationship between Value Cocreation Capabilities and Startup Business Performance.

H3: The greater a startup business' Value Cocreation Capabilities, the better its Startup Business Performance

Relationship between Dynamic Capabilities and Startup Business Performance

Dynamic capabilities actually represent a strategic management concept which discusses how a company can survive in a business environment of continual change. Dynamic here refers to an understanding of the business environment that changes and therefore necessitates a capacity to continue generating new competencies and innovative responses (Mamédio et al., 2019). Capabilities, on the other hand, refer to the organizational methods that must adapt, combine, and reconfigure resources and competencies in order to respond to changes in the environment. There are six primary elements that together form an understanding of Dynamic Capabilities. First among them is the concept of capability as an ability or capacity that emphasizes a critical role in management strategy. Second, capability plays a role in integrating or coordinating, developing, and reconfiguring internal and external. Third, dynamic capabilities focus on the external context—the rapidly changing environment. Fourth, dynamic capabilities are formed in a typical way with their establishment and evolution being rooted in organizational processes determined by the position of assets and the evolutionary path of the organization. Fifth, dynamic capabilities are heterogenous in an organization because they depend on process, the position of unique assets and the business path of the organization. Finally, the key is to consider the competitive advantage as a direct, rather than indirect, influence that will impact a business' performance. From this description a hypothesis can be formed that represents the relationship Dynamic Capabilities and Startup Business Performance.

H4: The greater a startup business' Dynamic Capabilities, the better its Startup Business Performance

Based on the theoretical study and development of hypotheses above, a framework can be developed to explain how a model for startup business growth using collaborative business incubation and entrepreneurial marketing is to be formed. In addition, the researchers also incorporate Value Cocreation Capabilities and Dynamics Capabilities as mediating variables – borrowing from SDL theory and the theory of Dynamic Capabilities, to better understand the formation of startup business performance. This theoretical framework, based on the models that have been developed, can be seen in Figure 1.

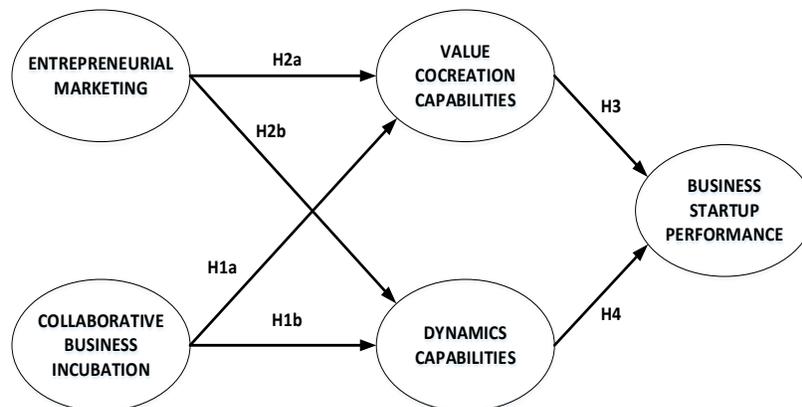


Figure 1: Theoretical Frameworks

III. METHOD

Sampling & Data Collection

This research was conducted using a sample of entrepreneurs from 12 business incubators in Indonesia, including both collegiate business incubators and those from the private sector. The sample was determined using purposive sampling methods. The total sample consisted of 240 entrepreneurs that had been coached and were also part of a business incubation program that was held by Business Incubators that were partnered with them. The method used for data collection was a survey questionnaire.

Measuring Methods

The survey instrument was a 10-level Likert Scale ranging from Strongly Disagree to Strongly Agree. The instrument was distributed both on and offline and had previously been tested for validity and reliability. The survey instrument was developed from the results of several previous research scales including Collaborative Business Incubation (Mrkajic, 2017), Entrepreneurial Marketing (Chuang, 2016), Dynamic Capabilities dan Value Cocreation Capabilities (Wilden et al., 2019), and Startup Business Performance (Selase Asamoah, 2014)

Analysis Methodology

The researchers used the Covariance Based-Structural Equation Modeling method of analysis that enabled the testing of several rather complex alternative models. Testing using SEM-AMOS was conducted in two stages, the first of which was measurement testing followed by structural testing.

IV. RESULTS & DISCUSSION

Data was gathered from 240 entrepreneur respondents then analyzed using Structured Equation Modeling (SEM) to test for compatibility and relation to the variables in the model. Before conducting further analysis, the researchers first tested the normality of the data to guarantee its quality. Based on the analysis and normality testing, the c.r. of all indicators ranged +2.58 to -2.58 and a multivariate kurtosis of 4.773, which was below the cutoff value of 8. As a result, there is no evidence of a non-normal distribution.

Once the model had passed the normality test, it was tested for validity and reliability. Table 1 shows a list of measurements with their standardized estimates used to evaluate the validity of the construct from the concepts used in this research based on an AMOS 24.0 output from confirmatory factor analysis.

Table 1: Scale, Measurement, Validity & Reliability

VARIABLE & INDICATOR	REFERENCE	STD. LOADIN G (Lambda Value)	Critic al Ratio ≥ 1.96	CONVERGE NT VALIDITY (AVE) ≥ 0.50	CONSTRUC T RELIABI LITY (CRI) ≥ 0.70
Collaborative Business Incubation	<i>Mrkajic (2014)</i>			0.869	0.982
Active Collaboration Business Partners		0.965	30.686		
Empowered Incubation Programs		0.908	24.555		
Access to Various Markets		0.923	24.555		
Entrepreneurial Marketing	<i>Chuang (2016)</i>			0.885	0.992
Proactiveness		0.946	27.353		
Innovativeness		0.962	29.107		
Value Creation		0.913	22.403		
Value Cocreation Capabilities	<i>Wilden et al (2019)</i>			0.956	0.994
Relational Interaction Capability		0.984	56.439		
Concerted Interaction Capability		0.972	50.541		
Individuated Interaction Capability		0.977	53.793		
Dynamic Capabilities	<i>Wilden et al (2019)</i>			0.884	0.958
Reconfiguring Capability		0.935	30.61		
Seizing Capability		0.944	30.61		
Sensing Capability		0.942	29.387		
Startup Business Performance	<i>Selase Asamoah (2014)</i>			0.964	0.995
Market Share		0.987	60.156		
Management Development		0.978	56.988		
Economies of Scales		0.980	58.423		

(Source: data calculated 2019)

As can be seen in the confirmatory factor analysis, the weight of value of each indicator demonstrates an acceptable value as all of them are above 0.60 with a critical ratio higher than 1.96. As a result, these indicators can be said to give an accurate reflection of the construct. At the same time, the construct's measurements of validity are also good, with respective AVE (Average Variance Extracted) values of: 0.869 (Collaborative Business Incubation), 0.885 (Entrepreneurial Marketing), 0.956 (Value Cocreation Capabilities), 0.884 (Dynamics Capabilities) and 0.964 (Startup Business Performance) all of which are above the cutoff value of $AVE \geq 0.50$. Therefore, the instrument used to measure the four variables and their indicators can be said to be both valid and reliable.

The reliability measurements of the construct demonstrated good results as well. Respectively, they are 0.982 (Collaborative Business Incubation), 0.992 (Entrepreneurial Marketing), 0.994 (Value Cocreation Capabilities), 0.958 (Dynamics Capabilities) and 0.995 (Startup Business Performance) all of which are above the cut off $CRI \geq 0.70$.

Based on the results of the validity and reliability testing, the model can move on to the next phase: testing the hypotheses. Graphically, the analytical results and the empirical model testing can be seen in Figure 2.

1. STATISTICAL MEASURES

Chi-Square = 7,213
Degree of Freedom = 268
Signification = ,491

2. NON-STATISTICAL MEASURES

GFI = ,930
TLI = ,942
CFI = ,959
RMSEA = ,073

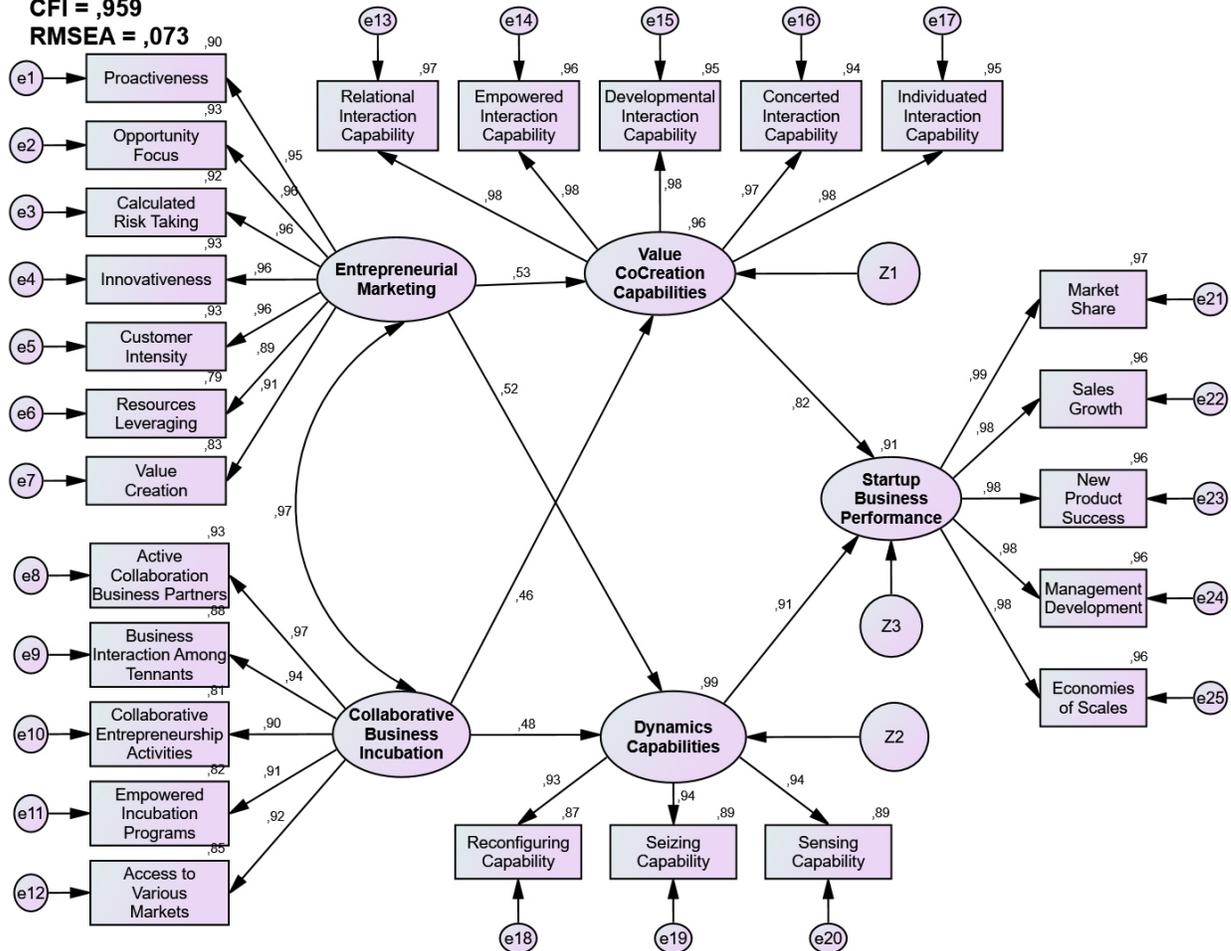


Figure 2: Empirical Research Model Testing

Figure 2 shows the results of the structural equivalent model analysis. A goodness of fit test was performed using both Statistic and Non-Statistic Measurement. The Statistics Measurement method produced a Chi Square value = 7.213, Degree of Freedom = 268 and Probability = 0.491. The testing performed using Statistical Measurement therefore demonstrates that the model is fit as it aligns with the prerequisites of the structural test having Chi Square that is small or near zero and a probability value that must be above 0.05.

Structural testing performed via Non-Statistical Measures also yielded a fit structural equivalent with a GFI of 0.930, a TLI of 0.942, and a CFI of 0.959 which are above the cutoff value of 0.90. The RMSEA also demonstrated a good result of 0.073 which is within the desired range of 0.03 – 0.08. Since the model satisfied all of the testing requirements for both Statistical dan Non-Statistical Measurement, it has therefore been developed in a way that is both fit and aligned with the empirical data.

Table 2: The Coefficient of Regression

HYPHOTHESIS	Std. estimate	Estimate	Std. error	Critical Ratio	Significance	Conclusion
H1a: Collaborative Business Incubation -> Value Cocreation Capabilities	0,462	0,685	0,126	5,929	***	Supported
H1b: Collaborative Business Incubation -> Dynamic Capabilities	0,483	0,518	0,094	5,542	***	Supported
H2a: Entrepreneurial Marketing -> Value Cocreation Capabilities	0,527	0,696	0,113	6,184	***	Supported
H2b: Entrepreneurial Marketing -> Dynamic Capabilities	0,518	0,495	0,083	5,929	***	Supported
H3: Value Cocreation Capabilities -> Startup Business Performance	0,824	0,814	0,165	7,241	***	Supported
H4: Dynamic Capabilities -> Startup Business Performance	0,913	0,896	0,178	7,687	***	Supported

It can be seen from the above analysis that hypothesis H1a which states “*The greater the degree of collaborative business incubation, the greater the value of a startup business’ cocreation capabilities*” can be accepted since the critical ratio of $5.929 > 1.96$ with a parameter value of 0.462. The testing of hypothesis H1b which states “*The greater the degree of collaborative business incubation, the greater a startup business’ dynamic capabilities*” can also be accepted with its critical ratio of $5.542 > 1.96$ and a parameter value of 0.483. Hypothesis 2a which states “*The more capable a startup business in applying entrepreneurial marketing, the greater the increase in Value Cocreation Capabilities*” is found to be acceptable as critical ratio is $6.184 > 1.96$ with a parameter value of 0.527. Likewise, Hypothesis H2b stating “*The more capable a startup business in applying entrepreneurial marketing, the greater the increase in Dynamic Capabilities*” is also accepted with a critical ratio of $0.518 > 1.96$ and a parameter value of 0.518.

Hypothesis H3 stating “*The greater a startup business’ Value Cocreation Capabilities, the better its Startup Business Performance*” is also accepted because its critical ratio of $7.214 > 1.96$ with a parameter value of 0.824. Finally, Hypothesis H4 which states “*The greater a startup business’ Dynamic Capabilities, the better its Startup Business Performance*” can also be accepted as seen from its critical ration of $7.687 > 1.96$ and parameter value of 0.913. The interpretation of this analysis can be discussed by next subsection hereby in much detail.

This research was conducted to discover an answer to answer question “What is a good startup business performance model?” To answer this, the researchers initially conducted observation and analysis of the business environment which is facing the 4.0 era with digital technology as its primary leverage in a variety of business value chains. The Industrial Revolution 4.0 Era has not only changed how business is conducted, but also influenced customer behavior in fulfilling their needs and desires. Customers are now more empowered and make demands related to their experiences in consuming a particular product or service—especially in the form of product service and engagement. Certainly, unique and dynamic capabilities are needed as a competitive advantage to respond to the demands of this type of market.

In this disruptive business ecosystem, many startup businesses are flourished and spreading—not just in one region. Rather this explosion can be seen across nearly the entire globe. In Indonesia the growth in the number of

startup businesses can be said to be exponential with Indonesia being one of the Southeast Asian countries with the highest number of startupreneurs. This growth is also supported by government decisions that have successfully promoted entrepreneurship both to the academic world, especially at the collegiate level, and society at large. To assist startup businesses in the early phases, entrepreneurial stakeholders in Indonesia have aggressively initiated business incubators and accelerators. These programs, armed with a variety of business incubation activities, attempt to help startup businesses to improve their performance in order to level up and become more empowered. However, over time it appears that not many startup businesses have been able to improve their business performance despite many of them having joined business incubation programs. There are several factors that cause a startup business to fail to improve its performance. The first is that startupreneurs are not capable of comprehensively understanding business conditions in the 4.0 era, resulting in their inability to create products and services that fit the market needs. Many of these startupreneurs act merely as followers and fail to demonstrate a proactive, creative, and innovative mindset in conducting their business. Another factor that causes startup business to fail is that those helping them, incubator and accelerator programs, do not yet have a valid model to develop startup businesses. Rather than improving the performance of startup businesses, many business incubators and accelerators are stuck dwelling on a business incubation process that is not well-defined, exclusive, and individualistic. Meanwhile, in order to conquer the market in the 4.0 era, business must prioritize collaboration, interoperability and integration both horizontally and vertically.

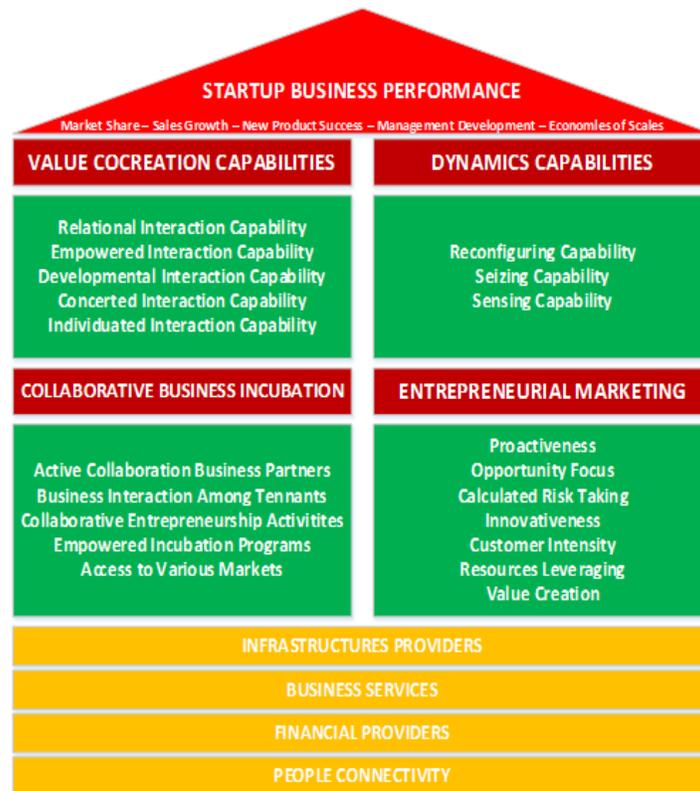


Figure 3: Startup Business Performance Development Model

Through verification study, the researchers have attempted to present a startup business performance model that is both comprehensive and operable. This model has been statistically tested and empirically proven to explain how startup businesses can improve performance by prioritizing certain factors/variables. This startup business performance growth and improvement model is presented graphically in Figure 3.

Based on the results of the empirical testing, we see that all of the hypotheses are acceptable and each of the variables used to demonstrate how startup business performance can be improved do, in fact have a significant impact. The model developed by the researchers uses Collaborative Business Incubation dan Entrepreneurial Marketing as the antecedent of startup business performance. Collaborative Business Incubation was introduced because the current business incubation process can no longer be carried out independently or even with just a few stakeholders. Business incubators and accelerators must work together with other parties including government, the private sector, academics, the media, entrepreneurial communities, financing organizations, and even other business incubators and accelerators. Not only should they emphasis partnership, but business incubators and accelerators need to initiate collaboration between stakeholders and their business partners with the startup businesses that are their tenants. In addition, business incubators and accelerators should also facilitate interaction between tenants so that they work together and contribute from their individual areas of strength. If this occurs, it is not impossible that a business cluster that together is oriented to fulfill the various needs of the clients—a one-stop business solution for customers. The interaction between business and tenant must certainly be facilitated by entrepreneurial activities that enable collaboration such as a mixed approach for business matching as well as product demos and fairs that invite a variety of parties who have a proven track record in entrepreneurial growth. Further, business incubators cannot forget the stages and incubation programs that empower tenants and provide access to various markets for the purpose of marketing performance.

The initiative for entrepreneurial marketing strategy to be juxtaposed with collaborative business incubation was brought about because this strategy is well applied to the incubation period and is able to overcome the rapid change of technology and consumer mindset that result in an uncertain business environment. Incubators and accelerators need to implant an entrepreneurial mindset in their tenants based on the 7 dimensions: Proactiveness, an Opportunity Focus, Calculated Risk Taking, Innovativeness, Customer Intensity, Resource Leveraging, and Value Creation, as well as develop marketing programs based on these seven dimensions. Through the combination of these two antecedents, it is believed that startup business tenants will receive Value Cocreation Capabilities and Dynamic Capabilities--two capabilities which, according to the verification testing, have a significant impact on improving the startup business' performance.

Value Cocreation Capabilities are necessary for a tenant because these are the very capabilities that help a business approach, understand and interact with 4.0 consumers that are more interested in personalization and even volunteer to design products and services based on their desires. These Value Cocreation Capabilities are the hallmark of businesses which demonstrate equally important Dynamic Capabilities. These capabilities facilitate the management reconfiguring process, the seizing of market opportunities, and the sensing of industry and market trends. Via these two capabilities, startup business performance can be improved in the areas of Market Share, Sales Growth, New Product Success, Management Development dan Economies of Scale.

At the base of the model, the researchers added 4 primary services of business incubators and accelerators. The first of these is Infrastructure Provider which includes offices, meeting rooms, laboratory facilities, internet access, and other things. The purpose of these is to develop economies of scale, decrease expenses, initiate business and create a professional and branded appearance. The next aspect is business services like strategy consultation, market research, finance training, and brand licensing and registration. The purpose of these is to facilitate the development a business' management. The third service is the provision of, or capability of working with those who can provide, financing and capital. This service's purpose is to give leverage to pioneering businesses in order to business development funds. The final service illustrated in the model is People Connectivity which includes mentoring, coaching, interaction with other entrepreneurs, or even the provision of market connections.

V. CONCLUSION

1. Based on the results of structural testing, all of the proposed hypotheses used in the development of the model have been deemed acceptable. This means that the Collaborating Business Incubation and Entrepreneurial Marketing variables are able to impact the formation Value Cocreation Capabilities and Dynamics Capabilities which are, in turn, able to improve startup business performance.

2. A startup business development model has been developed which can serve as a foothold for business incubators and accelerators in conducting their incubation activities. Using this model business incubators and accelerators can clearly direct their incubation activities alongside entrepreneurial marketing strategies to form Value Cocreation and Dynamic Capabilities to improve startup business performance in Market Share, Sales Growth, New Product Success, Management Development and Economies of Scale.

REFERENCES

- [1] BATABYAL, A. A. & BELADI, H. 2015. Aspects of the accumulation of creative capital in a regional economy. *Technological Forecasting and Social Change*, 98, 88-92.
- [2] BECKMAN, T. & KHARE, A. 2018. A Service-Dominant Logic and Value Co-creation Approach for Online Business Education. 21-35.
- [3] BERGMANN, H., GEISLER, M., HUNDT, C. & GRAVE, B. 2018. The climate for entrepreneurship at higher education institutions. *Research Policy*, 47, 700-716.
- [4] BIKSE, V., LUSENA – EZERA, I. & RIVZA, B. 2018. Innovative start-ups: challenges and development opportunities in Latvia. *International Journal of Innovation Science*, 10, 261-273.
- [5] BLANCK, M., RIBEIRO, J. L. D. & ANZANELLO, M. J. 2019. A relational exploratory study of business incubation and smart cities - Findings from Europe. *Cities*, 88, 48-58.
- [6] BUSCA, L. & BERTRANDIAS, L. 2020. A Framework for Digital Marketing Research: Investigating the Four Cultural Eras of Digital Marketing. *Journal of Interactive Marketing*, 49, 1-19.
- [7] CHUANG, S.-H. 2016. Facilitating the chain of market orientation to value co-creation: The mediating role of e-marketing adoption. *Journal of Destination Marketing & Management*.
- [8] DE MATTOS, C. & SALCIUVIENE, L. 2017. The negative influence of the entrepreneur's level of higher education on the attractiveness of European SMEs as alliance partners in Brazil: the role of practical experience and international entrepreneurial orientation. *The International Journal of Human Resource Management*, 1-29.
- [9] DELLER, S. C. & CONROY, T. 2016. Business survival rates across the urban–rural divide. *Community Development*, 48, 67-85.
- [10] DOMINICI, G., YOLLES, M. & CAPUTO, F. 2017. Decoding the Dynamics of Value Cocreation in Consumer Tribes: An Agency Theory Approach. *Cybernetics and Systems*, 48, 84-101.

- [11] FISCHBACHER-SMITH, D. 2017. When organisational effectiveness fails. *Journal of Organizational Effectiveness: People and Performance*, 4, 89-107.
- [12] GALVÃO, A., MARQUES, C., FRANCO, M. & MASCARENHAS, C. 2019. The role of start-up incubators in cooperation networks from the perspective of resource dependence and interlocking directorates. *Management Decision*.
- [13] GEISSINGER, A., LAURELL, C. & SANDSTRÖM, C. 2018. Digital Disruption beyond Uber and Airbnb—Tracking the long tail of the sharing economy. *Technological Forecasting and Social Change*.
- [14] GRAÇA, P. & CAMARINHA-MATOS, L. M. 2017. Performance indicators for collaborative business ecosystems — Literature review and trends. *Technological Forecasting and Social Change*, 116, 237-255.
- [15] GRÖNROOS, C. 2016. Adopting a service logic for marketing. *Marketing Theory*, 6, 317-333.
- [16] HONG, J., YANG, Y., WANG, H., ZHOU, Y. & DENG, P. 2018. Incubator interdependence and incubation performance in China's transition economy: the moderating roles of incubator ownership and strategy. *Technology Analysis & Strategic Management*, 1-15.
- [17] IYORTSUUN, A. S. 2017. An empirical analysis of the effect of business incubation process on firm performance in Nigeria. *Journal of Small Business & Entrepreneurship*, 29, 433-459.
- [18] LIU, P. & BELL, R. 2019. Exploration of the initiation and process of business model innovation of successful Chinese ICT enterprises. *Journal of Entrepreneurship in Emerging Economies*.
- [19] LÜFTENEGGER, E., COMUZZI, M. & GREFEN, P. W. P. J. 2015. Designing a tool for service-dominant strategies using action design research. *Service Business*, 11, 161-189.
- [20] LÜFTENEGGER, E., GREFEN, P. & WEISLEDER, C. The Service Dominant Strategy Canvas: Towards Networked Business Models. In: CAMARINHA-MATOS, L. M., XU, L. & AFSARMANESH, H., eds. Collaborative Networks in the Internet of Services, 2012// 2012 Berlin, Heidelberg. Springer Berlin Heidelberg, 207-215.
- [21] MAMÉDIO, D., ROCHA, C., SZCZEPANIK, D. & KATO, H. 2019. Strategic alliances and dynamic capabilities: a systematic review. *Journal of Strategy and Management*, 12, 83-102.
- [22] MAS-VERDÚ, F., RIBEIRO-SORIANO, D. & ROIG-TIerno, N. 2015. Firm survival: The role of incubators and business characteristics. *Journal of Business Research*, 68, 793-796.
- [23] METZE, T. A. P. 2017. Discursive power in deliberations: A case of redevelopment for the creative economy in the Netherlands. *Policy and Society*, 28, 241-251.
- [24] MIRANDA, M. G. & BORGES, R. 2019. Technology-based business incubators. *Innovation & Management Review*, 16, 36-54.
- [25] MRKAJIC, B. 2017. Business incubation models and institutionally void environments. *Technovation*, 68, 44-55.
- [26] NEUMEYER, X. & SANTOS, S. C. 2018. Sustainable business models, venture typologies, and entrepreneurial ecosystems: A social network perspective. *Journal of Cleaner Production*, 172, 4565-4579.
- [27] OJASALO, J. & OJASALO, K. 2018. Service Logic Business Model Canvas. *Journal of Research in Marketing and Entrepreneurship*, 20, 70-98.
- [28] PETRUCCI, F. 2018. The incubation process of mid-stage startup companies: a business network perspective. *IMP Journal*, 12, 544-566.
- [29] PRIPORAS, C.-V., STYLOS, N. & KAMENIDOU, I. 2019. City image, city brand personality and generation Z residents' life satisfaction under economic crisis: Predictors of city-related social media engagement. *Journal of Business Research*.
- [30] REZVANI, M. & FATHOLLAHZADEH, Z. 2018. The impact of entrepreneurial marketing on innovative marketing performance in small- and medium-sized companies. *Journal of Strategic Marketing*, 1-13.
- [31] RITALA, P., HUOTARI, P., BOCKEN, N., ALBAREDA, L. & PUUMALAINEN, K. 2018. Sustainable business model adoption among S&P 500 firms: A longitudinal content analysis study. *Journal of Cleaner Production*, 170, 216-226.
- [32] RODRIGO-ALARCÓN, J., GARCÍA-VILLAVARDE, P. M., RUIZ-ORTEGA, M. J. & PARRA-REQUENA, G. 2018. From social capital to entrepreneurial orientation: The mediating role of dynamic capabilities. *European Management Journal*, 36, 195-209.
- [33] SADIKU-DUSHI, N., DANA, L.-P. & RAMADANI, V. 2019. Entrepreneurial marketing dimensions and SMEs performance. *Journal of Business Research*, 100, 86-99.
- [34] SEET, P.-S., JONES, J., OPPELAAR, L. & CORRAL DE ZUBIELQUI, G. 2018. Beyond 'know-what' and 'know-how' to 'know-who': enhancing human capital with social capital in an Australian start-up accelerator. *Asia Pacific Business Review*, 24, 233-260.

- [35] SELASE ASAMOAH, E. 2014. Customer based brand equity (CBBE) and the competitive performance of SMEs in Ghana. *Journal of Small Business and Enterprise Development*, 21, 117-131.
- [36] SHAMS, S. M. R. & SOLIMA, L. 2019. Big data management: implications of dynamic capabilities and data incubator. *Management Decision*.
- [37] STOKBURGER-SAUER, N. E., SCHOLL-GRISSEMAN, U., TEICHMANN, K. & WETZELS, M. 2016. Value cocreation at its peak: the asymmetric relationship between coproduction and loyalty. *Journal of Service Management*, 27, 563-590.
- [38] TORRES DE OLIVEIRA, R., INDULSKA, M., STEEN, J. & VERREYNNE, M.-L. 2019. Towards a framework for innovation in retailing through social media. *Journal of Retailing and Consumer Services*.
- [39] VANDERSTRAETEN, J., VAN WITTELOOSTUIJN, A., MATTHYSSENS, P. & ANDREASSI, T. 2016. Being flexible through customization – The impact of incubator focus and customization strategies on incubatee survival and growth. *Journal of Engineering and Technology Management*, 41, 45-64.
- [40] WANG, W., CAO, Q., QIN, L., ZHANG, Y., FENG, T. & FENG, L. 2019. Uncertain environment, dynamic innovation capabilities and innovation strategies: A case study on Qihoo 360. *Computers in Human Behavior*, 95, 284-294.
- [41] WHALEN, P. S. & AKAKA, M. A. 2015. A dynamic market conceptualization for entrepreneurial marketing: the co-creation of opportunities. *Journal of Strategic Marketing*, 24, 61-75.
- [42] WIELAND, H., HARTMANN, N. N. & VARGO, S. L. 2017. Business models as service strategy. *Journal of the Academy of Marketing Science*, 45, 925-943.
- [43] WILDEN, R., GUDERGAN, S., AKAKA, M. A., AVERDUNG, A. & TEICHERT, T. 2019. The role of cocreation and dynamic capabilities in service provision and performance: A configurational study. *Industrial Marketing Management*, 78, 43-57.
- [44] WONGLIMPIYARAT, J. 2016. The innovation incubator, university business incubator and technology transfer strategy: The case of Thailand. *Technology in Society*, 46, 18-27.
- [45] WONGLIMPIYARAT, J. 2017. Technology auditing and risk management of technology incubators/science parks. *World Journal of Entrepreneurship, Management and Sustainable Development*, 13, 44-56.
- [46] YI, G. & UYARRA, E. 2018. Process Mechanisms for Academic Entrepreneurial Ecosystems: Insights from a Case Study in China. *Science, Technology and Society*, 23, 85-106.
- [47] ZHOU, J., WANG, G., LAN, S. & YANG, C. 2017. Study on the Innovation Incubation Ability Evaluation of High Technology Industry in China from the Perspective of Value-Chain An Empirical Analysis Based on 31 Provinces. *Procedia Manufacturing*, 10, 1066-1076.