

CHAPTER II LITERATURE REVIEW

2.1. Financial Technology

Financial technology is widely called fintech. Based on National Digital Research Center (NDRC), fintech is define as innovation in the financial sector. Innovation means the integration of technology in its business process. In simple way, fintech is a combination of financial services and technology application. Indonesia is a country that hosts some of the world’s most thriving and rapidly growing banks and financial businesses. Indonesia’s financial landscape can be categorize into different groups based on financing, lending and multi-payment channels.

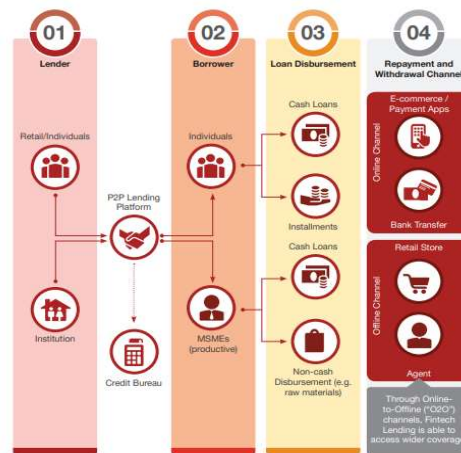


Figure 2.1 Fintech Lending to SME Growth

Source: (The World Bank, 2020)

The growth of fintech in Indonesia begins with the emergence of numerous productive loans. However, only a handful of these fintech platforms have obtained

licenses from OJK. Where there is lack of regulator control in the industry and restricting investor to enter. The second stage of growth seen with the increase in productive loan providers that have obtained license from OJK, POJK 77. At this stage, the tracking of fintech lending performance under OJK started to be enforced. The third and current stages, more loan providers registered under OJK and forming of the establishment of the Fintech Lending Association. At this stage, acquisition and partnership of registered Fintech Lending players started to occur. Acquisition and competition is being spearheaded by payment companies as well as e-commerce companies.

Fintech is a technology-based financial service where financial products are presented through technology-based financial application services. Fintech was not originally a bank. (Church et al., 2021) The world's fintech company that is considered successful and a pioneer of the fintech industry is PayPal, established in 1999. Since then, other Fintech companies have sprung up.

Economy analysts believe that the rise of numerous fintech companies are to balance existing banks and orthodox financial sectors, not disturbing them. However, the current stage seem to be headed to a different direction. With many banks feel they are in competition with these financial technology companies. Unlike the U.S that focus only on funding-lending activities for example, Indonesia large banks focus not only on funding-lending process but also in money movement infrastructure, remittance and disbursement activity as its revenue model. (Firmansyah et al., 2020) This mainly due to the high funding and lending rate in

Indonesia which exposed higher idiosyncratic risk whether having to pay higher interest for timely deposit fund as well to disburse its loan with higher rate causing the risk of Non-Performing Loan (NPL) and risk of default much higher compare to U.S. Banks. The idiosyncratic risk of high interest rate of Indonesia is the main driver why banks in Indonesia cannot fulfilled SMEs needs in Indonesia.

According to Agus Sugiarto, OJK, there are two types of Fintech operating in Indonesia. The first is fintech payment and the second is fintech financing or also called Peer to Peer (P2P) (Muhammad Anshari, Mohammad Nabil Almunawar, 2020). Fintech payment is a payment line infrastructure, especially online payments, even though Fintech infrastructure can also be found in retail payments in collaboration with Payment Point Online Banks (PPOB), such as Indomaret, Alfamaret, Pegadaian and POS Indonesia (Muhammad Anshari, Mohammad Nabil Almunawar, 2020). These on-line payment systems include payment via credit card, emoney, bank transfers, virtual digital accounts, crypto-currency, QR payment.

Whereas, Fintech financing or P2P Lending is the second type of Fintech. Fintech lending does its business by connecting the owner of the funds to the borrower where the fintech company has a smart machine intelligence and a very large and extensive database that can analyze the borrower's credit (Rahadi, 2021). Thus is similar to bank's credit scoring system.

As result of changing in the financial sector, many banks are collaborating with fintech companies and some are making subsidiaries in the form of fintech itself. Banks in Indonesia currently still feel safe with regulations from Bank Indonesia that protect the industry, but new competitors arise in this case, namely the world's giant digital companies from the United States that have controlled various types of businesses such as Alibaba, Tencent, Amazon, Apple, Google and Facebook (Zhang-Zhang et al., 2020). Amazon issues Amazon Prime for users of its e-Commerce services; Amazon also has a payment service, and cooperates with banks to issue checking accounts. Apple collaborated with GoldmanSach to issue an Apple Card in August 2019 with features that are difficult for banks to compete with, such as cash back and free of any fees. November 2019, Facebook released Facebook Pay where members can issue or make transfers between their communities such as the Facebook App and Instragram. Google Plex provides application services where transactions are cheaper, safer, and seamless. This is a new threat where fintech companies may pose a serious threat to banks.

With the entry of these giant players into the financial industry, banks feel very threatened. Previously, they only provided services for making transfers and withdrawing funds, now the applications they usually use to shop and then make payments, now they use also offer loans, and help them manage finances, so what makes them still need the presence of a bank? The question arises why these banks bother to buy new banks instead of turning their banks into digital banks or acquiring financial technology companies. The answer because traditional banks

have a legacy system that is very difficult to transform into a digital bank (Samsudin & Ismail, 2019). The physical strength that was previously own by traditional banks does not apply in the digital world. The infrastructure owned by traditional banks is not easy to transform into a digital ecosystem. Thus, the better option is to create a digital bank from scratch or buy a small bank to be converted into a digital bank. (Firmansyah et al., 2020) The second answer is that the rapid competition from non-financial companies requires banks to move quickly. (Firmansyah et al., 2020) The third reason is that the development of digital banks is currently still in its early stages where it has not yet produced a definite value or good revenue growth.

2.2. Human Capital

The development of human capital is very important for innovation. Studies show that an estimated 21.3% of infants are short and do not develop with age because they are warning signs of risk of physical and cognitive impairment (World Bank, 2021). The rapid global change in technology and education risks widening the human capital gap. Conflicts and pandemics such as the current Covid 19 crisis can disrupt human capital through lack of education. The effects of conflicts and pandemics can be protracted throughout the lives of many and limit productivity. Yet investment in human capabilities is often neglected (Handoko & Violeta, 2020).

(Fintech Indonesia, 2020) During IFS 2020 global event, Sri Mulyani Indrawati, Minister Finance of Indonesia, stated IFS 2020 offer the right momentum for the whole fintech industry palyers to help one another in educate and illiterate

the consumer and public together with regulatory government agency. She addressed the importance to prepare the human capital factor as capital for innovation. Without the right human capital, sustainable innovation process cannot be achieved (Handoko & Violeta, 2020).

In the economy that is base on knowledge, human resource is considered as an invaluable form of capital that a company can invest on. (Fatihudin et al., 2020) Financial literacy is a set of knowledge and skills that enables a person to make effective decisions with all their financial resources. OJK states that the important mission of the financial literacy program is to do so that the Indonesian people can manage finances smartly so that education is needed in the field of finance, so that low literacy of knowledge of the financial industry can be overcome and the public is not easily fooled into investment products that offer high returns in the short term without considering the risks (Handoko & Violeta, 2020).

(Kasmawati, 2017) The theory of human capital attempts to address this phenomenon from the perspective of economy. This vision affirms that by investing in human capital, businesses will obtain a competitive advantage and sustainability. The theory of human capital is made as the measurement of human capital has implications for human capital and human resource development. (Adam Smith, 1937), started human capability improvement that is crucial for production capabilities of a nation. (Schultz, 1961) also coined the term human capital by publishing it the American Economic Review, titled “Investment in Human Capital”. The idea of human capital started mushrooming after Gary Backer won

the novel prizes by coming up with the theory of Human Capital that acknowledges that education levels and trainings will give employees different salaries, knowledge and capability that could lead them to get better career (Blair & Raver, 2012). (Teixeira, 2014), (Gary S. Becker, 1964) developed the economic approach to human behavior. (Swanson, 2001a) stated that Human Capital Theory, Scarc Resource Theory and Sustainability Theory can improve a company performance.

The theory of Human Capital in Economics describes the importance of maximization of labor and the way a company can gather their employees' ability, honing knowledge and skill, in order to boost the capacity of their employees. With the emergence of the knowledge-based economy, organizations put a heavy emphasize scarce resources and knowledge supply in order to increase organization, competitive advantage, and organizational effectiveness (Debrulle et al., 2014).

In other study, (McConnell et al., 2009) also conveyed that education, training and global technology trends that rapidly change will help maintain a companies' competitiveness. Aside from that, the study also added that in order to maintain a certain level of knowledge, skill-building and training must be continuously upgraded.

(Thomas O. Davenport, 1999) extended the (Gary S. Becker, 1964) human capital theory to five subsets: IQ, intelligence, specific and general knowledge to work; skill is expertise used in working, including the physical body, and movement of the job. Talent is a personal characteristic that is innate and can be improved by

development. Behavior is an expression and observable behavior, norm, ethics and personal belief; effort is when people tries to use their innate or personal resources including their talent, experience, knowledge and ability to work to be successful, and finally there is time.

Referring to what (Gary S. Becker, 1964) illustrated, human capital can be obtained in various forms of health, education, migration and training. The reason why companies invest in human capital is because they have the opinion that human resource is a valuable asset. Companies believe that their investment will bring them positive yields and value for their business in the future (Thuda et al., 2019). To illustrate the conventional view towards human resource, workers were viewed as an expense to be minimized. In today's world, human resource is seen as valuable human capital. To support the importance of human resource, the concept of human capital believes that employees are assets that should be developed and integrated with multidimensional perspectives (Vejchayanon N, 2005).

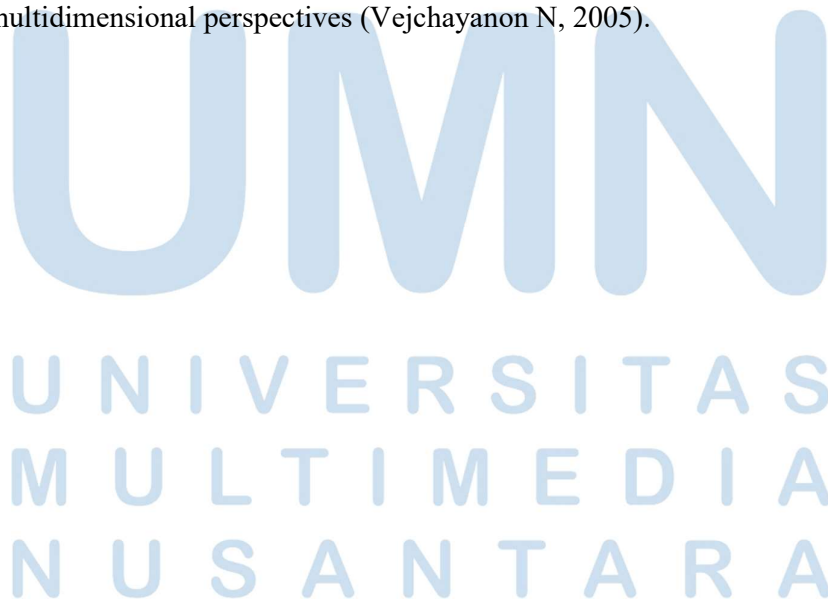


Table 2.1 Human Capital Perspectives

Human capital views	Traditional view	Present view
Employee	- are viewed as a cost of production that need to be controlled and closely monitoring.	- are viewed as a competitive advantage to the organization that can be developed in their own specific way.
Human capital	- was perceived as a costly capital that needs to be minimized.	- is a source of value creation to the organization.
The HR function	- used to work as supporting department.	- is considered as a part of strategic partner of the organization that work on executive level.
Work	- was functioned according to the manufacturing based.	- increasingly focuses on knowledge-based and cross functional collaboration.
Involvement	- HR involved in mostly in setting the management budget and planning. - only HR involved in budgeting.	- HR acts as the process function involving in designing, planning as well as allocating budgeting. - engages top executive in budgeting process.
Human capital matrices	- focused only on the input such as cost and routine practices and activities.	- are increasingly focus on design and metrics usage. - focuses on the impact and result to the organization.
ROI	- lacked of know-how and truly understanding in ROI	- more applied and engaged ROI in order to use as the tactic tool that help the organization creates the influential relationship of output and result.

Source: (Vejchayanon N, 2005)

The most recent studies of Human capital theory is further explain (Nieves & Quintana, 2018) :

1. Employees that possessed high skill-set.
2. Employees that are creative and high in capabilities.
3. Employees that are experts in their particular jobs.
4. Employees that are capable to develop new ideas and self-acquire new knowledge.

Table 2.2 Five Mind-Sets of Understanding Human Capital

Mind-set	Focus of mind-set	Methods used in IMPM ^a program	Outcomes
Reflective	Gaining an understanding of self in one's own context	Slow things down to help the students take time to think about how their life experiences have shaped them	Seeing self from a new perspective—this can be a life-changing experience
Analytical	Learning to analyze situations in a gestalt of functional disciplines	Engage in field studies and case studies to help students utilize functional theories in a manner that fuses them together	Learning to use a blend of analytic, artistic, and craft elements for managing and decision making
Worldly	Learning to understand different cultures and contexts from one's own	Live for a time in another national culture to encounter and appreciate cultural differences	Seeing that people around the world view things differently—no one is right, just different
Collaborative	Learning to manage a diverse set of people to accomplish complex tasks effectively	Engage in teamwork activities where there is no designated leader and learn from the study of cultures that are collaborative in nature	Learning to use the power of synergy that is built on appreciating and utilizing diversity of all types
Action	Developing the ability to manage change and develop action plans	Analyze students' change experiences and field studies of actual change initiatives	Learning some skills for managing change, which is an essential part of managing in the global environment

Source: (Mintzberg, 2004)

In addition, as shown in table above, (Mintzberg, 2004) stated that human capital must follow the five mindsets, which consist of Reflective, Analytical, Worldly, Collaborative, and Affirmative Action. Human capital can be measured in different ways according to the type of activities. For example, cost of recruitment process, turnover rate for employee retention, engagement survey on employee satisfaction, research on factor that impact employee high turnover rate, compensation survey, customer satisfaction survey, ROI in training of employee competencies, participation rate of employee in projects, and productivities ratio to revenue per employee, and etc. Human capital defined as the set of knowledge, skill and abilities that embedded into the company's human resource development landscape.

Human action is an important element in knowledge, therefore knowledge creation in the firm is closely related with the human capital in the firm (Nieves &

Quintana, 2018). Studies found that human capital have a positive significant impact on innovation. Therefore, it is critical to address the quality of human capital in management in order to be able to consistently create innovation and give strong impact to company financial performance as well as the welfare of individual.

2.3. Dynamic Capabilities

Dynamic Capabilities are the main aspect in strategic management. This shows how companies can adapt to the ever-changing environment. There have been many studies on dynamic capabilities. For instance, (Eisenhardt & Martin, 2000) conveyed that particular processes form Dynamic Capabilities namely the process of strategic decision-making, development of products and alliance. In the modern day, the environment can be challenging, for that reason companies must have the capabilities to adapt to the constantly changing business environment in order to survive market competition.

Dynamic Capabilities learn about how firms' capabilities to create, to evolve and to recombine their internal resources that will allow them to adapt with the dynamic turbulent environment (Teece, 2007). The study from (Teece et al., 1997) seems to rely on routines and procedures, while the study that (Eisenhardt & Martin, 2000) research conveyed that competitive advantage stems from how company managers utilize dynamic capabilities, instead of their own capabilities.

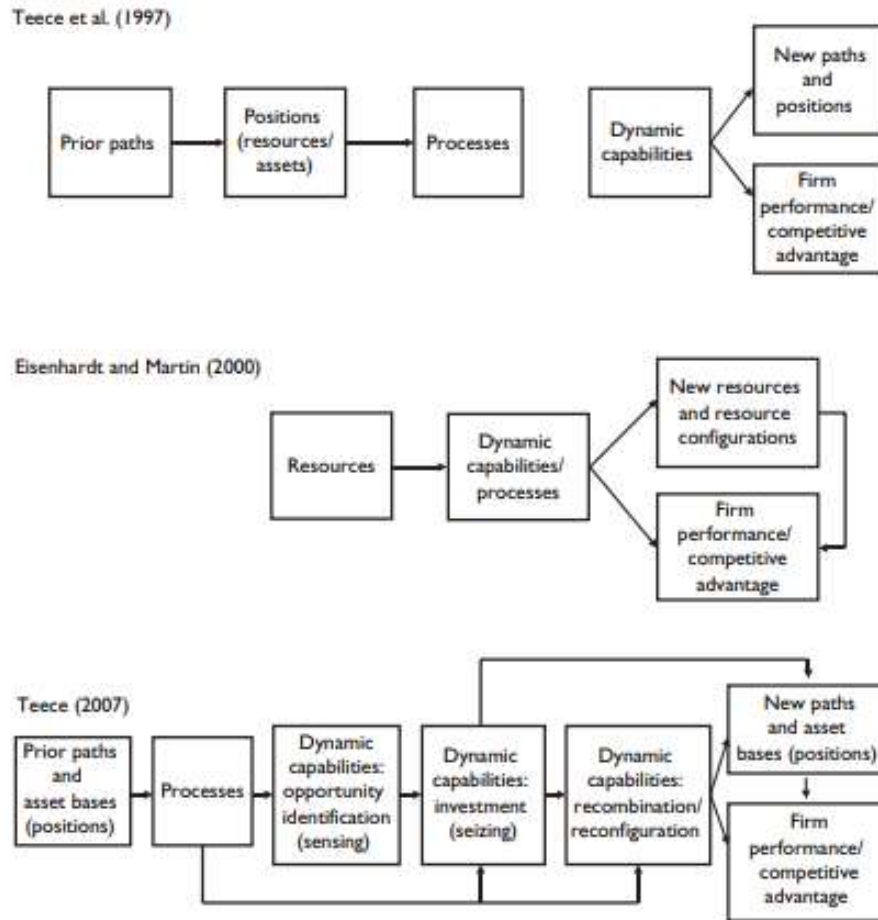


Figure 2.2 Flow Chart Diagram on Dynamic Capabilities Theory

Source: (Teece et al., 1997); (Teece, 2007); (Eisenhardt & Martin, 2000)

Capabilities can be define as something that differentiates a company with other companies (Apriza & Utami, 2018). For instance, several car manufacturers are all under the umbrella of similar industry, but they certainly reflect different performance. This difference is cause by differences within the companies due to their different strategic capabilities when these companies utilize their resources

and competencies (Johnson et al., 2014). It may be easy to define capabilities in theory; however, it could be a tough process to define it in practice. The measurement of Dynamic Capabilities is referencing to the study conducted by (Wilde et al., 2013) can be categorized and elaborate into three factors: sensing, seizing, and reconfiguring.

Dynamic Capabilities consist of several elements (Wilde et al., 2013). The first one is systematic development of processes, which is related to the sense of obtaining opportunities. Next, entrepreneurship role that creates dynamics of sense that may be important in seizing opportunities that might interest the stakeholders. Lastly, combination between entrepreneurial management and strategic management of innovation that will support transformation (Wilde et al., 2013).



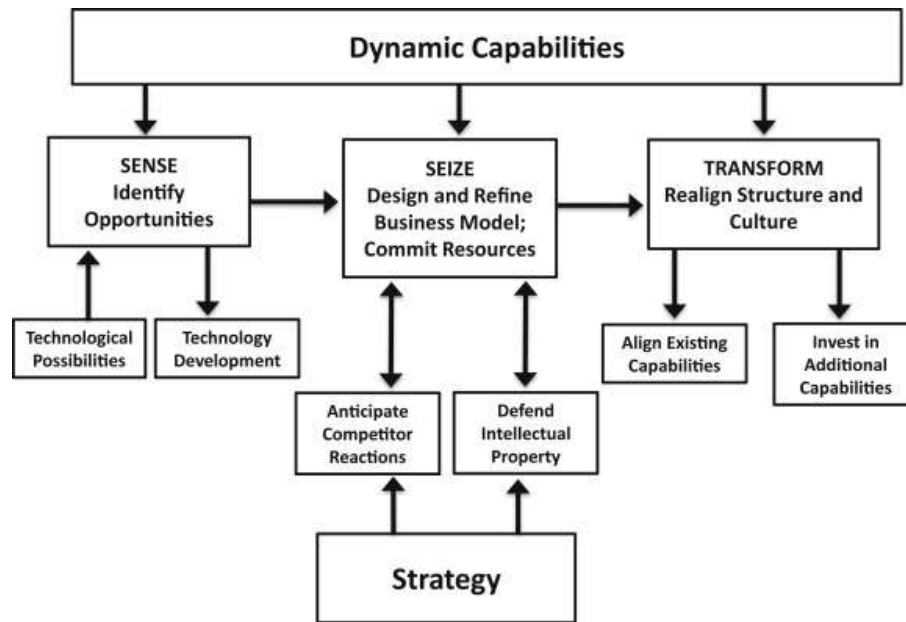


Figure 2.3 The Domain of Dynamic Capabilities and Its Measurements

Source: (Wilden et al., 2013)

The subject area of dynamic capabilities includes the extent of strategic and content processes. (Tobias Adrian, Ghiath Shabsigh, 2020) It also involves analysis levels, from management decision-making processes, organizational practices, and competitive interactions to changes in the environment. (Teece, 2018) Dynamic Capabilities is define as the integration between a region's ability, knowledge, experience, technology, resources and competency. Therefore, in this study, the dynamic capabilities levels are assessed with similar multilevel approach conducted by (Rothaermel & Hess, 2007), which made the effort in learning the ties between Dynamic Capabilities and innovation. The three levels are namely (Rothaermel & Hess, 2007):

- a) Individual level, indicating internal investments such as intellectual capital
- b) Firm level, indicating internal investments such as market orientation
- c) Network level, indicating external investments such as strategic alliances

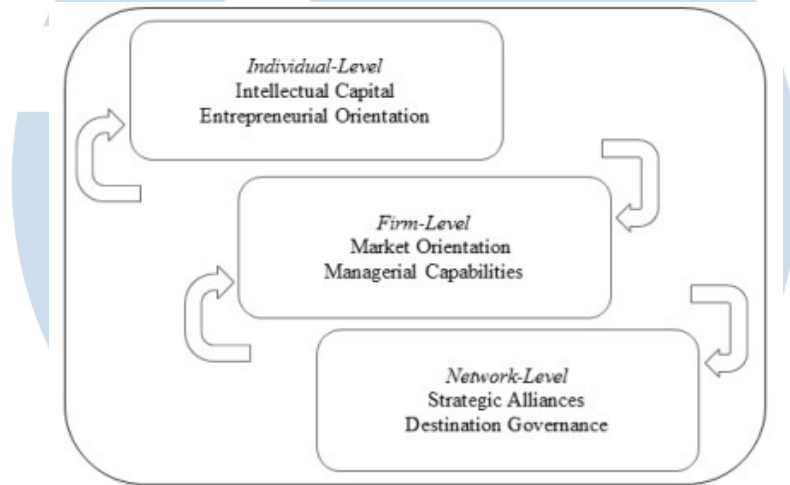


Figure 2.4 Three Levels of Analysis of Dynamic Capabilities

Source: (Rothaermel & Hess, 2007)

(Menguc & Auh, 2006) in their research found that market orientation transformation into dynamic capability is bridge by innovation. For them, resources' reconfiguration that is combine with market-oriented decision-making can have a powerful impact. (Arend & Bromiley, 2009) also conveyed that when companies are force to react to changes and adjust their operational capabilities, companies would depend on dynamic capabilities that demands extensive management involvement.

The capabilities of the management seem to affect dynamic capabilities in regards to influencing decisions about allocation of resources and finding strategies

of organizations (Mohamud & Sarpong, 2016). (Eriksson, 2014) also stated that managers may contribute to a positive or negative impact on dynamic capabilities. Also, (Teece, 2014) mentioned that managerial processes affect how dynamic capabilities are identified, constructed and fostered. In the process of development, the dynamic dimension is essential in analyzing the establishment and development of networks, non-formal networks, knowledge and trust. (Nguyen et al., 2020) Dynamic capabilities are related to utilizing resources in order to fulfil the needs of existing customers. In addition to that, it is also related to coming up with competitive advantage by modifying the companies' capabilities as a response to the changes in the environment (Vu, 2020) This can also mean that the same problem, with the same situation and different era, can lead to a very different solutions one to the other. Different era can be perceive as different customer orientation and behavior (Teece, 2018). Thus, factors namely intellectual capital, strategic alliances and market orientation and governance if successfully integrated, can result in dynamic capabilities that are proven to be crucial for the company's competitiveness.

2.4. Customer Orientation

Consumer orientation plays an important catalyst as the antecedent of digitization of the payment system as innovation that plays a very important role in supporting the digital economic and financial transformation. The biggest bank and market share in Indonesia, Bank BRI, is developing its fintech through open

Application Programming Interface (API). Through the open API, fintech can become an extension of the banking arm in providing financial services to consumer. With this collaboration, Bank BRI and Fintech are able to provide a faster and safer service for customers.

In addition, the products offered will be more diverse and able to respond to changes in customer behavior that are more inclined to digital services (Rezkiiana N., Infobanknews, 13 April 2021). The number of transactions through Mandiri API also continues to increase. Top up e-money transactions, for example, have reached 2.5 million transactions per month, disbursement through seller financing has reached IDR 45 billion per month, while transactions via direct debit have reached 40,000 transactions per month. This shows the benefits of Mandiri API that have been felt directly by partners and customers (Suheriadi, 2021).

The definition of customer orientation is information collection process that tries to obtain the knowledge on current and potential customers. Then, such information will be socialized within the companies (Jaworski & Kohli, 1993). To practice customer orientation strategy, firm need to focus on the role of inter-functional coordination between units in the company. In the beginning, inter-functional coordination will increase the information and insight flow within the organization to help generate new perspectives and knowledge. Then, such coordination will build trust among the functional units to realize a condition that facilitates customers orientation (Ho, et. al, 2018; Jaworski et. al, 1993). Narver and Slater develop consumer orientation indicators (Narver & Slater, 1990):

1. I continuously try to discover additional customer needs;
2. I anticipate customer need and able to suggest new products and services that could satisfy them;
3. I think about the benefit on customers received from my products and services;
4. I always engage with customers' journey and try to recognize their needs months or even years before the majority of market may notice them;
5. I always need to know customers' behavior and its changing behavior during certain times and different situations.

Other studies focused its attention on product and service quality, communication, and ongoing service and support which is the main three drivers of customer value. It stated that product and service quality, communication, and ongoing service are the antecedent that influence customer value (Vikas Mittal, Shrihari Sridhar, 2020). A high customer value will increase loyalty to the brand and higher conversion rate on consumers.

Technology-based system advancement has caused an entirely different way for organizations to establish communication with their customers. With innovation in technology, the service industry, especially the banking industry, has been revolutionize in relation to its relationship with their customers. The banking sector has maximized this growth for their benefit by building various channels of distribution in order to gain tech-savvy customers, enhance their business prospects and maintain the loyalty of their customers (George, et. al, 2014).

According to (J.Y. Wang & Wu, 2006), internet banking has risen as the most profitable e-commerce application. To reflect this, numerous banks have started to introduce internet banking, so that they can get better customer service and at the same time reducing costs. Furthermore, this mode of banking will not only be beneficial for banks, but in the end, it will also fulfil their customers' needs (Shahzad et al., 2017); (Rahi et al., 2016). With digital banking, customers can perform numerous banking activities from anywhere in the world and do so any time they please.

The inclusion of financial technology is in addition adding the fact that it create cost efficiency and reduce expensed for the management (Yoon & Barker Steege, 2013). Based on statistics historical and projected from Central Bureau of Statistics stated that the population-based age of 15 to 64 are the main drivers of the national economy. Therefore, it is crucial for companies/SMEs/banks to understand the orientation of the consumer in this segment. In order to boost the growth of economy, it will be necessary to provide equal access to funding since it can multiply economic growth in Indonesia. One of the main factors that can stimulate the growth of economy is credit utilization to promote spending and accelerate the capability of production.

U N I V E R S I T A S
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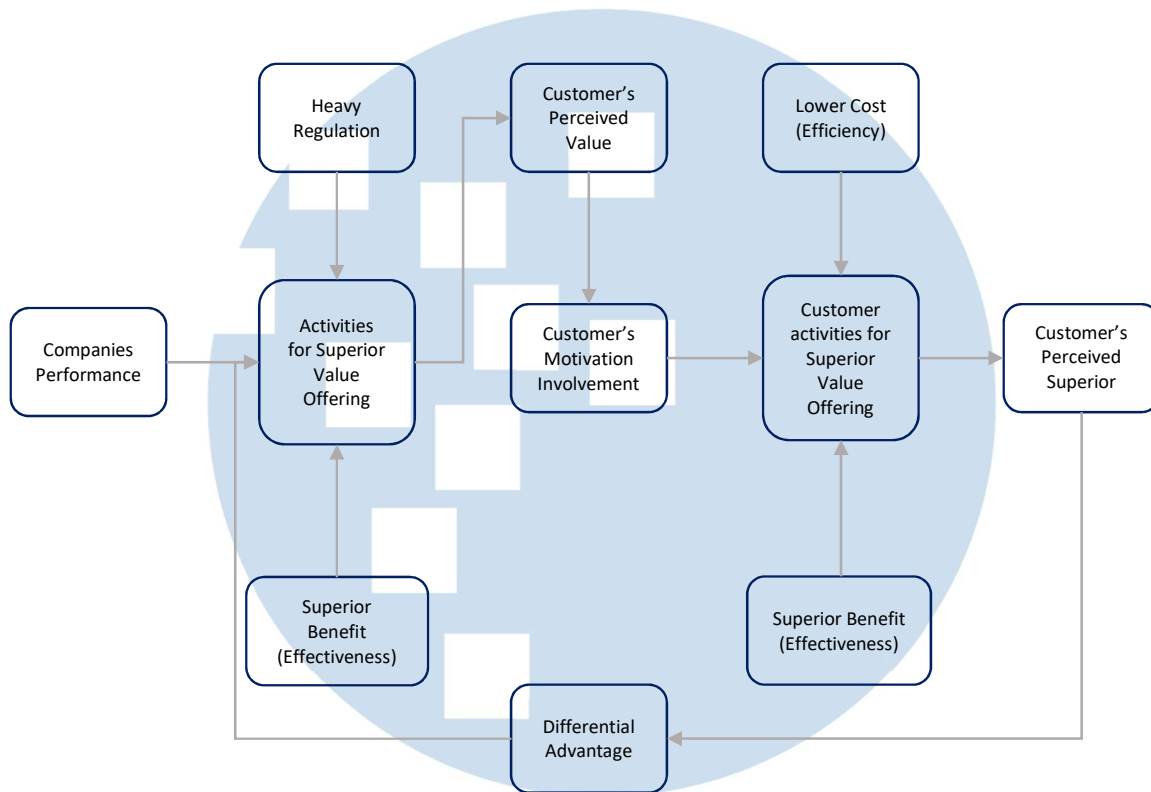


Figure 2.5 Customer Orientation as Drivers of Company Performance

Source: Author (2021)

As shown above table. There are three key drivers for the growth of fintech in Indonesia, namely positive customers' behaviors change towards the aspect of digital services and convenient financial technology; second is lower fees that can meet under-served segments and grass-root segment cost preference that offers lower in transaction fees to consumers. Thirdly, government regulation that support the financial technology industry. The first two drivers: customer perceived value and lower cost are both influenced by customer orientation in which create superior benefits which under (F. D. Davis, 1989), the Technology Acceptance Model

(TAM) positively influenced the perceived superior value of customer. Base on the TAM model, perceived ease of use and perceived usefulness of customer will increase company performance as the ultimate objective. (Saroia & Gao, 2019)The technology acceptance model introduced two new constructs: perceived usability (the certainty that using the application will improve performance) and the perceived ease of use (the understanding that the use of an application will be effortless to the user).

2.5. Innovation Capabilities

The discovery of the link between innovation research and innovation skills may provide interesting insights into the use of terminology. We conducted a literature review on innovation skills and analyzed papers that used the terms innovation and skills together. In doing so, we discovered traces back to (Lawson & Samson, 2001) study of innovation management.

Research on innovation capabilities is primarily related to specific factors in the industry or company. Some studies have focused on the broader development of innovation capabilities in industry, geographic areas, or different regions. Some studies have been conducted by Keskin et al. (2006), focuses on SME's innovation capabilities and reports on the positive relationship between SME's market orientation, learning and innovation capabilities. The innovation pattern of SMEs shows that there is no big difference between manufacturing companies and service companies.

(Ozkaya et al., 2015) argued that innovation skills mediate the relationship between knowledge and product innovation, and the relationship between departmental collaboration and product performance. As an important note to research on innovation capabilities, some of these studies relate those concepts to the long-term survival of an organization. (Hurley et al., 1998); Catalone, et. al, 2020; (Ho et al., 2018) The indicators for innovation can be simplify as example of questions listed below:

1. Our company like to try out new ideas;
2. Our company is creative in its methods of operation;
3. Our company has the ability to reinvent its marketing strategies;
4. Our company has continuously development of new product innovation;

(Teece, 2007) argued that the role of entrepreneurs is not only adapting to the environment, but also shaping the environment. That being said, dynamic capabilities involve the development of products and entrepreneurial actions, so innovation capabilities are included in the dynamic capabilities' contribution. (C. hsien Wang et al., 2007) used 'innovation' to illustrate innovation capabilities nature, aside from adaptive and absorptive capabilities. (Teece, 2007) believes that product selection and business model are a part of dynamic capabilities foundation. The two main business processes are an integral part of innovation. It can be understood that dynamic capabilities are not only about innovation capabilities. Referring to what (Winter, 2011) mentioned, product development can also be

related to current business. It can be argued that innovation and innovation capabilities are an integral part of dynamic capabilities.

In relation to managerial implication, it is necessary for managers to refer to several factors to grow innovation capabilities such as systematic development process/methods, organizing entrepreneurial roles, and nurturing dynamic innovation capabilities (Idris, et. al, 2016); (Saunila & Ukko, 2012).

Since innovation is an essential prerequisite to organization survival and performance (Yousaf et. al, 2020), it shows the capability of a firm to link the capability to introduce new ideas, products and also services which will may have an impact on firm performance. Innovation can be viewed from many perspective: the development of new product or services, alternative business model or strategies, new knowledge information, and an alternative delivery method (Ho, et. al, 2018). According to (Hurley, et. al, 1998) define firm innovativeness as firms culture openness toward new ideas. In this study, the focus of innovation lays on the development of new product or service and new technology or process.

In short, dynamic capabilities research is related to a company's overall strategy, while the research on innovation that uses the term innovation capability, takes a functional stance on innovation. In these two fields, both innovation capabilities and innovation hold an essential role and to a certain extent overlap. Researches that use the term innovation capability regard innovation as a performance driver. Thus firm innovativeness is the most important predictor of firm performance (Calantone, et. al, 2020). Previous studies in strategy

management stated that firm innovativeness is the most important construct in building firm performance.

2.6. Company Performance

In a very competitive business environment, the competitive advantage would be in the company's favor if it can be measured. (Poppy et al., 2013) Measurement of company performance can be driven by monetary capital, physical and intellectual capital. (Irawanto & Hussein, 2017) Measurement plays a critical role in the everyday management of service businesses and in the development, implementation and adaptation of both strategy and operations. (Pratama et al., 2019) It also plays an important role in monitoring and enhancing the quality of the service experience and in the creation of service innovations. Measurement plays an important role in underpinning and informing the everyday and strategic management of service businesses. (Sofyan, 2019); (Yunita Karlina, 2020).

Most frequent and common measurement of banks/financial company/company performance is by using quantitative numbers in the financial statements and financial ratios such as: financial report of income statement/profit and loss, balance sheet, cash flow, management accounts, changes in equity statement; financial ratios such as Credit Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Price Earnings Ratio (PER), NPL (Non-Performing Loan Ratio), Return on Asset (ROA), Return on Equity (ROE), Price to Book Value (PBV), Debt to Equity Ratio (DER), and Current Ratio (CR).

(Isfianadewi et al., 2019) There is a significant positive correlation between innovation capabilities on SME performance. It shows that SMEs and companies with high innovation capabilities will be able to improve its growth thru adoption in financial technology. (Yunita Karlina, 2020) Research also stated that there is a significant positive effect of innovation capability on fintech company and bank performance.

(Burhany, et. al, 2021) (Kaplan, Robert S, Norton, 1996) identified four performance areas, which should be included:

1. Financial performance: quantitative measurement from financial statements.
2. Customer relations: qualitative survey from CRM satisfaction.
3. Internal business processes: internal and external audit report.
4. Innovation: specific KPI matrix on research and development on product and services at certain time-period.

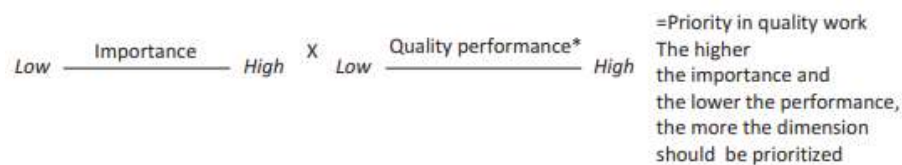


Table 2.3 Measurement of Company Performance

Performance area	Strategic goal	Measure	Target
Financial performance	Saving costs	Expenses as % of the budget	90%
	Initiatives to save costs	Number of suggestions for cost savings	2 per employee
	Use a specific cost sheet to obtain an overview of the costs	Number of employees using the sheet	75%
Customer relations	Identify customer needs	Number of new customer needs reported to the innovation and development department	2 per employee
	Increased efficiency in saving customer problems using hotlines	Reduced answer time	Answering time reduced by 10%
	Increase customer satisfaction	Customer satisfaction survey	>15% increased customer satisfaction
Internal business processes	Provide a reliable IT architecture	Number of service calls related to IT architecture	>5% reduction of these calls
	Action regarding software training and knowledge base	Number of inquiries for new training activities	>1 per employee
	Employees handling own stress and work environment situation	Work satisfaction survey	>10% increased satisfaction score
	Reduction of internal procedure failures	Number of reported failures	>20% reduction
Innovation, learning and growth	Leader training development with mutual exchange of experiences	Leaders attending internal training courses	>30% of the leaders attending
	Innovative ideas	Number of ideas for innovations from employees	>20 ideas
	Investment in innovation projects	Investment in new innovation projects	>100,000 €
	Information from projects stored in a learning database	Number of experiences from projects stored	>50

Source: (Kaplan, Robert S, Norton, 1996)

Table 2.4 Measurement of Company Performance



Source: (Kaplan, Robert S, Norton, 1996)

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Table 2.5 Previous Research Table

Author & Journal	Variables	Data Analysis Method	Limitations	Related Theory
(Pratama et al., 2019) Intellectual Capital and Firm Performance in ASEAN: The Role of Research and Development. Journal of Accounting and Investment, 20 (3), 236-250.	Financial performance, Intellectual Capital, Research and Development, Firm Size, Leverage	Data Regression model analysis	Not enough awareness of the efficient and effective use of intellectual capital so that they can face challenges. Dynamic Capabilities is not mentioned. Lack discussion on Consumer Orientation.	Resource-Based Theory Intellectual Capital
(John R. Bryson, Jon Sundbo, Lars Fuglsang, Peter Daniels, 2020). Service Management,	Service quality, Customer satisfaction, Innovation capability	Descriptive	There is also the added difficulty in that a service experience is a very immediate experience. Perceptions of the experience may fade in time. Dynamic Capabilities is not mentioned.	Balanced scorecard approach
(Isfianadewi et al., 2019). Proceeding of The 3rd International Conference on Accounting, Business & Economics (UII-ICABE 2019)	Company Performance, Innovation Capability, Supply Chain Integration	SEM-PLS	Lacking the critical aspects that must be improved for SMEs. Dynamic Capabilities and Customer Orientation is not mentioned.	Innovation capability theory
(Erbas, 2016). Competitive Determinance–performance Analysis: An Illustration on Turkish Winter Tourism Destinations. Tourism Analysis, 21(1), 93–106.	Importance Measurement, Performance Measurement, Placement of Crosshairs, Attribute Determinance	Attribute determinance analysis (ADA) Importance–Performance Analysis (IPA) Competitive Determinance–Performance Analysis (CDPA)	The research rely too much on financial ratios. Dynamic Capabilities is not mentioned. Customer Orientation can be explained in more in-depth.	Analytic Hierarchy Process (AHP)

Source: Author (2021)

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2.7. Conceptual Framework

For the research purpose, the researcher suggested that the independent variable as antecedent of Innovation Capability (IC) are Customer Orientation (CO), Dynamic Capabilities (DC), and Human Capital (HC). Furthermore, the researcher believes that company performance cannot simply influenced by simple model of one or two direct variables. In order to increase company performance, the innovation process of an organization and system must continue to roll. So that the innovation of an organization requires three main components that are outlined as three variables that affect the Innovation Capability (IC) of an organization, namely Customer Orientation (CO), Dynamic Capabilities (DC), and Human Capital (HC).

The research construct is base on three independent variables that influence one single dependent variable: Innovation Capabilities (IC). To create innovation, all three independent variables are equally shared importance in value. Innovation capabilities (IC) is also a mediating variable for Customer Orientation (CO), Dynamic Capabilities (DC), and Human Capital (HC) to influence company performance (CP).

Therefore, Customer Orientation (CO), Dynamic Capabilities (DC), and Human Capital (HC) can influence Company Performance (CP) directly or indirectly thru IC as mediating construct. Whereas IC is the independent variable that influence Company Performance (CP). The intention of the research findings it not only to find out whether Company Performance (CP) is simply influenced by

Innovation capabilities (IC), Customer Orientation (CO), Dynamic Capabilities (DC), and Human Capital (HC).

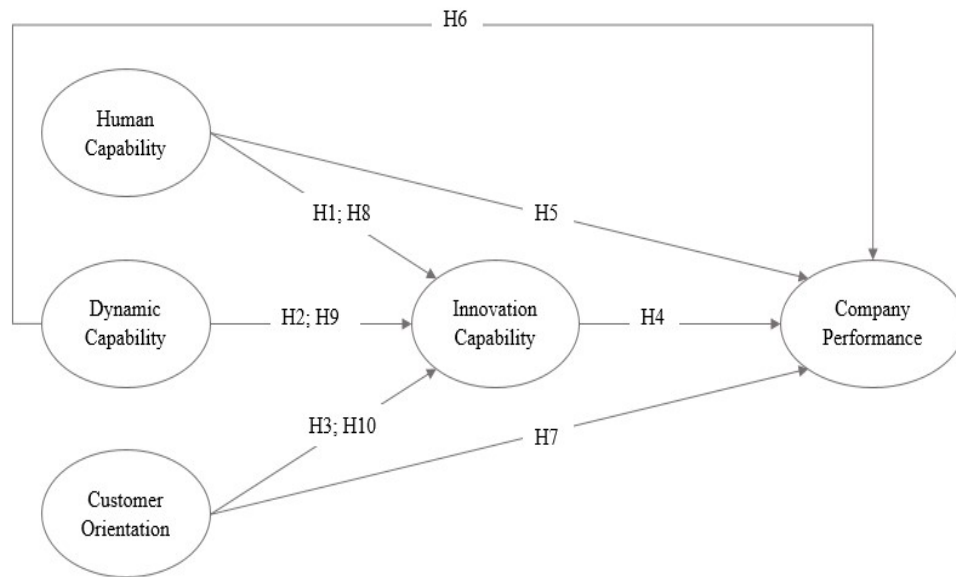


Figure 2.6 Research Framework

Source: Author (2021)

2.8. Hypothesis Development

In order to continue to the research study, the research model and the testing model will be tested base on these following hypotheses:

2.8.1. The Effects of Human Capability on Innovation Capabilities.

The Theory of Human Capital in Economics describes the importance of maximization of labor and the way a company can gather their employees' ability, honing knowledge and skill, in order to boost the capacity of their employees. With the emergence of the knowledge-based economy, organizations put a heavy

emphasize on knowledge supply in order to increase innovation in organization (Debrulle et al., 2014). Hence, researcher would like to formulate a hypothesis for this study as follow:

H1: There is a positive relationship between Human capital (HC) and Innovation Capabilities (IC).

2.8.2. The Effects of Dynamic Capability on Innovation Capabilities.

The second independent variables are dynamic capabilities. Where dynamic capabilities (DC) is a variable that precedes the IC variable. Dynamic capability is a variable that is consider an important role in uniting the HC and CO variables in their role as variables that make up the IC (Teece, 2018). DC is a variable that performs an adaptation function where flexibility to change can occur. The adaptation process occurs continuously so that it encourages HC and CO to continue to grow following developments and changes that occur in the digital era (Wong et al., 2021). Dynamic Capabilities is define as the integration between a region's ability, knowledge, experience, technology, resources and competency (Teece, 2018). By being flexible and adaptive, problem solving can be solve by creativity and combination of multi-set of skills. Therefore, in this study, the dynamic capabilities is detrimental to innovation creation, and thus:

H2: There is a positive relationship between Dynamic capabilities (DC) and Innovation Capabilities (IC).

2.8.3. The Effect of Consumer Orientation on Innovation Capabilities.

According to (Vikas Mittal, Shrihari Sridhar, 2020), studies focused its attention on product and service quality, communication, and ongoing service and support which is the main three drivers of customer value. It is being stated that product and service quality, communication, and ongoing service keep changing and adapting to customer behavior. Therefore, the research suggest that:

H3: There is a positive relationship between Consumer Orientation (CO) and Innovation Capabilities (IC).

2.8.4. The Effect of Innovation Capabilities on Corporate Performance.

The company performance is the main measurement for a business. Where these parameters will be a reference for users of the information to do strategic planning. Digital financial transformation is measure by indicators of a desire to use information technology in obtaining business information. The desire to adopt information technology in the payment process, and the desire to use information technology in business management decision (Liu et al., 2019a). To learn more about the independent variables that affect Company Performance (CP), it is necessary to understand and influence the mediating variable of innovation capabilities on the dependent variable of CP and the independent variables that influence it. (Lawson & Samson, 2001) study of innovation management stated that organizations that possess innovation capability have the ability to integrate key

capabilities and resources of their firm to successfully stimulate innovation. (Teece, 2007) argued that the role of entrepreneurs is not only adapting to the environment, but also shaping the environment, thus it is suggested:

H4: There is a positive relationship between Innovation Capabilities (IC) and Corporate Performance (CP).

2.8.5. The Effect of Human Capability on Corporate Performance.

The first independent variable is human capital or human capabilities. HC is very important for the creation of innovation because it is the ability of the individual that gives birth to innovations for the organization (Shahzad et al., 2017). The ability of humans to perform an analysis that requires very complicated complexity is the main basis why human capability is very important in studying what kind of innovations are needed by consumers. Innovation really requires cognitive abilities and imagination of a mind. In his book entitled *Homo Deus and Sapiens* (Yuval, 2019) it is stated that the human ability to imagine and analyze so that they can plan for the future is the basic thing that makes humans today the main species in this era (Nugroho et al., 2021). (Gary S. Becker, 1964) developed what he would later call "the economic approach to human behavior". The theory of human behavior describes the importance of maximization of labor and the way a company can gather their employees' ability, honing knowledge and skill, in order to boost the capacity of their employees. Hence will will maximize the company output and performance. Thus, it is suggested that:

H5: There is a positive relationship between Human capital (HC) and Corporate Performance (CP).

2.8.6. The Effect of Dynamic Capability on Corporate Performance.

The concept of dynamic capabilities is rooted and based on the resource based view (Birger Wernerfelt, 1984); (Jay Barney, 1991); (Peteraf, 1993); (Amit & Schoemaker, 1993) a perspective that emphasizes on the distinct resources of the firm which leads to the sustainable competitive advantage. Research scholars consider dynamic capabilities as antecedents which are the strategic routine of the firm that help to alter or change the resource base of the firm when needed; the aim is to design such value creating strategies that enhance the performance of the firm (Eisenhardt & Martin, 2000). This suggests that the role of the dynamic capabilities is to act as a buffer mainly between the two factors that are the firm's resources and the shifting or responsive business environment by assisting the firm in terms of the adjustment of the resource base so to create and sustain the competitive advantage. Therefore, the research suggested:

H6: There is a positive relationship between Dynamic Capability (DC) and Corporate Performance (CP).

2.8.7. The Effect of Consumer Orientation on Corporate Performance.

Perception of the needs of consumers is the third basis for producing good innovation results. Without knowing what consumers want, innovation will not be right on target. Innovating without researching consumer behavior will also result

in a loss of time and money for the organization. (Nieves & Quintana, 2018). Conversely, companies that understand the needs of their customers will be able to increase loyalty to the products and services of the organization so that the innovations created can turn into value from the company itself. (Kaplan, Robert S, Norton, 1996) identified that customer relation is determinant to innovation creation, which become a crucial factor for a company performance. Therefore, the research suggested:

H7: There is a positive relationship between Consumer Orientation (CO) and Corporate Performance (CP).

2.8.8. The Mediation Roles of Innovation Capabilities on the Relationships between Human Capability on Corporate Performance.

Base on (Swanson, 2001b) stated that Economic Theory is one of the three important theories (Human Capital Theory, Scare Resource Theory and Sustainability Theory) is the basis of innovation creation capability. Hence, a consistent innovation can improve a company performance, therefore:

H8: Innovation Capability (IC) fully mediated the relationship between Human Capital (HC) and Company Performance (CP).

2.8.9. The Mediation Roles of Innovation Capabilities on the Relationships between Dynamic Orientation on Corporate Performance.

(Ozkaya et al., 2015) argued that innovation capabilities mediate the relationship between human knowledge and product innovation, as well as the

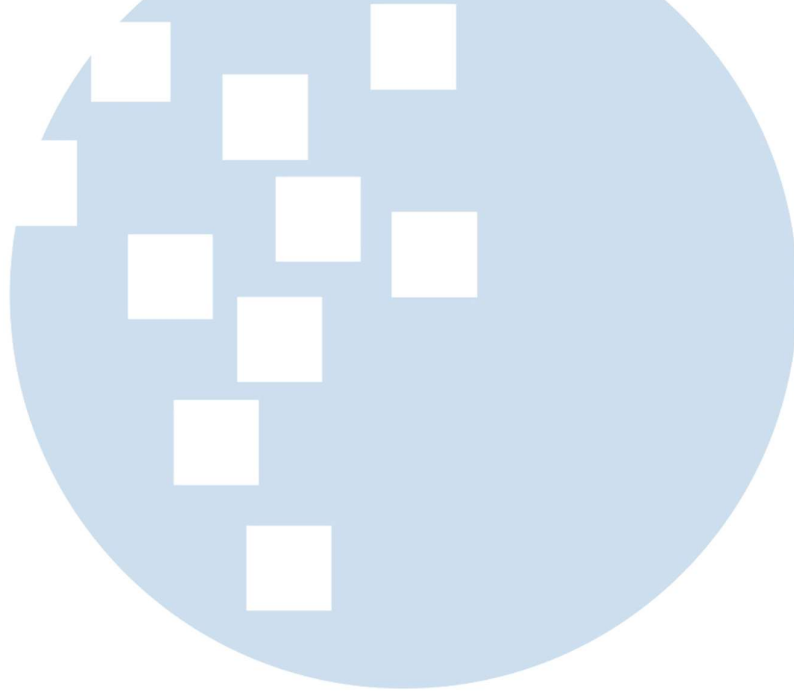
relationship between inter-functional cooperation of human performance and product value that correlated with the long-term survival of organizations. It also stated that Dynamic Capabilities theory studies firms' capabilities to create, to evolve and to recombine their internal resources that will allow them to adapt with environment (Teece, 2007). (Eisenhardt & Martin, 2000) conducted researched conveyed that competitive advantage stems from how company managers utilize dynamic capabilities, instead of their own capabilities. In addition, the paper suggest understanding the correlation deeper in context that how strong the influenced in DC to able to support HC and CO is needed in innovation creation. This idea can be challenging since the consumer behavior is changing, thus human skill-set must equally adapt. Therefore, the importance of dynamic capabilities is assumed to be adaptive mechanism that keeps all the dynamics able to keep moving and adapting with the future changes.

H9: Innovation Capability (IC) fully mediated the relationship between Dynamic Capital (DC) and Company Performance (CP).

2.8.10. The Mediation Roles of Innovation Capabilities on the Relationships between Consumer Orientation on Corporate Performance.

According to (Shahzad et al., 2017), innovation will lead to high customer value that will increase loyalty to the brand and higher conversion rate on consumers and thus lead to increase of company performance. Hence, he researcher suggests it that:

H10: Innovation Capability (IC) fully mediated the relationship between Consumer Orientation (CO) and Company Performance (CP).



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