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INNOVATION CAPABILITY AND PERFORMANCE IN CONSTRUCTION COMPANY (CASE STUDY SOE CONSTRUCTION COMPANY)

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ANALYSIS OF INNOVATION CAPABILITY AND THE IMPACT ON COMPANY GROWTH PERFORMANCE: A CASE STUDY OF PT XYZ

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ABSTRACT

The impacts of Covid-19 on the construction industry are unique and different, especially for State-Owned Enterprises in this sector. Having a role in national economic development, State-Owned Enterprises are required to improve their innovation capabilities to be able to adapt to conditions, while continue contributing as part of their obligations to the country. This research aims to analyze how innovation capabilities a company has and its impacts on the company growth performances. The analysis was carried out with a qualitative study using interviews. The findings reveal that PT XYZ, a state-owned construction services company, has three dimensions of innovation capabilities: customer, marketing, and technology focus. The three innovation capabilities positively impact XYZ, measured through ROA, ROS, and ROE. The presence of the client-focused innovation capabilities enabled the company to achieve an award from the Indonesian Record Museum. The existence of marketing-focused innovation capabilities brings in new innovative marketing program called creative financing. The technology-focused innovation capabilities have made the company able to respond to the existing technological challenges through a more up to date construction activities compared to its competitors. Finally, this research suggest that companies need to be agile and adaptive to changes in the business environment to better understand customers' needs and to encourage the recovery of the construction service industry affected by the pandemic.

Keywords: Construction, Covid-19, Innovation Capability, Performance, SOE.

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1. INTRODUCTION

Running a business, companies are required to continue to adapt in order to maintain business continuity in the midst of various uncertainties in the business environment. Furthermore, the emergence of the Covid-19 pandemic since the beginning of 2020 which is still ongoing today has had an impact that was never even predicted before. This pandemic has not only affected human health but also the operational health of businesses and organizations, including the construction industry (Ogunnusi et al., 2020). The impacts of Covid-19 on the construction industry are unique and different (Rokooei et al., 2022). This is due to the construction industry which often described as less innovative because its inherent conventional characteristics so that causes a lack of dynamics and innovation. On the other hand, the company's efforts to innovate are the most critical factor in surviving in highly volatile market conditions (Rajapathirana & Hui, 2018). Seeing these conditions, the challenges that exist in the construction sector should not be underestimated (Amoah & Simpeh, 2021) Either private or State-Owned Enterprises (SOE) companies in the construction sector must have innovation capabilities to maintain their business.

One of company which also face this challenges is PT XYZ, SOE construction company with 49% of its shares owned by the public. In its role as an SOE, according to Indonesian law, PT XYZ is one of economic activity agent in the national economy which plays a role in producing the goods and/or services needed in order to realize the greatest possible prosperity for the community. This role realized through direct assignments from the Government to work on Government projects related to the public interest and vital for the country's development. On the other hand, to obtain those projects, PT XYZ certainly needs to demonstrate its excellences and capabilities. This is because there are other SOEs consisting of non-listed companies (namely: PT K1 and PT K2) and publicly listed companies (namely: PT K3, PT K4, and PT K5), which also come under sub-cluster/construction service group companies and all of them have potential to get project assignments directly from the government. Seeing these conditions, PT XYZ must have innovation capabilities that shows their excellences compared to other SOE to increase the chances of gaining the government project.

When a company has better innovation capabilities, the chances of getting projects will be greater, both government projects and non-government projects. Those projects obtained by PT XYZ are profit centers that contribute to improving company performance in order to maintain business continuity. This condition is in line with Francis and Bessant (2005), which state that the development of innovation capability has a key role in the survival and growth of the company. This is also to meet the demands faced by PT XYZ as an SOE and also as a public company which has a wider responsibility to the public. Besides, there is conditions that construction companies also faces global demands to play a role in the success of global goals, namely the

Sustainable Development Goals (SDGs). The company's innovation capability must be increased so that the company can adapt to the growing market demand. Companies need to consider building construction structures that are more energy efficient, but on

the other hand they must also reduce unit costs. In addition, the increasing need for green buildings to create sustainable cities is also a market demand that must be met by construction service companies today. This shows the growing importance of increasing the company's innovation capabilities so that companies can adapt to the growing market demand.

Various studies have revealed a positive relationship between innovation capability and firm performance (Donkor et al., 2018; Saunila, 2014; Saunila & Ukko, 2013; Siahaan & Tan, 2020). On the other hand, research that combines these two things on construction service SOEs was still not widely found. The existence of differences in the research objects used in previous studies made the results of existing research unable to be applied comprehensively to PT XYZ as an SOE. In addition, there was a condition that in 2020 the revenue earned by PT XYZ is the lowest of the other four SOE construction services companies, namely PT K3, PT K4, and PT K5 (see Table 1). Furthermore, the various projects that PT XYZ is working on in 2021, especially those related to handling Covid-19, require the right innovation capabilities so that project work can run effectively and continue to generate profits for the company. Therefore, research is needed to analyze the innovation capability possessed by PT XYZ which is associated with the company's performance growth.

No	Company	Revenue	
1	PT XYZ	Rp 3,609,227	
2	PT K3	Rp 5,512,127	
3	PT K4	Rp 5,277,129	
4	PT K5	Rp 5,396,819	

 Table 1. Public SOE Construction Companies Revenue in 2020

At the time this research was compiled, the Covid-19 pandemic was still ongoing and could affect the direction of customer and market needs. In addition, it can be said that the construction service industry is an industry with a very niche market which causes not do much research on the innovation capabilities and performance of companies in this industry. This causes a lack of references for construction companies to deal with changes that occur in their business environment. Based on the existing conditions, the problems to be analyzed in this research are: 1. How is the innovation capability of the company?; 2. How is the impact of the company's innovation capability on the company's performance growth? This research aims to analyze the company's innovation capabilities and analyze the impact of the company's capabilities on company growth performance.

2. LITERATURE REVIEW 2.1. Dynamic Capability

According to (Teece et al., 1997), dynamic capabilities are capabilities that can integrate, build, and relocate the company's internal and external resources and capabilities and respond to rapid changes in the external environment. The term "dynamic" refers to environmental change which means: it requires a strategic response; innovation is a speedy thing; time is significant; and the pattern of competition indicates volatility (Teece & Pisano, 1994). It is argued that dynamic capabilities and innovation capabilities are related to activities that require knowledge and the transformation of resources into capabilities through tasks and routines (Lawson & Samson, 2001; Teece et al., 1997). Based on this explanation, dynamic capability is a suitable theory to understand innovation capability better. In line with this, dynamic capability theory is also said to be a relevant topic when referring to improving company performance (Arend & Bromiley, 2009).

2.2. INNOVATION CAPABILITY

Aspects of innovation capability in previous studies have different definitions. According to Lawson & Samson (2001), innovation capability is a theoretical framework that aims to describe actions that can be taken to increase the success of innovation activities. On the other hand, some researchers link the definition of innovation capability with external conditions. As Akman & Yilmaz (2008) state, innovation capability is an innovative culture and organizational character that can provide understanding to organizations in responding to market changes.

The definition of innovation capability is also expressed by Hogan et al. (2011) in his research. They call innovation capability the ability of a company, compared to its competitors, to apply collective knowledge, skills and resources for innovation activities related to new products, processes or services, or management, marketing or work organization systems, to create added value for the company. company or its stakeholders. Looking at the background and problems raised in this final work, the definition of Hogan et al. (2011) are considered the most appropriate because the measurement indicators they developed were carried out in the service industry, namely industries that are in line with the background in this study.

2.3. INNOVATION CAPABILITY AND PERFORMANCE

Bitar and Hafsi (2007) argue that the analysis of capabilities and performance is like a "black box" speculation, but there have been studies that link and measure the capabilities and performance of companies. An example is Hult et al. (2004) which reveals that the company's performance is strongly influenced by innovation capability. Other studies have also found that innovation capability has a significant effect on performance (Allred & Swan, 2005; Jiménez-Jiménez & Sanz-Valle, 2011; and Wang & Wang, 2012). Saunila (2014) also revealed that innovation capability can lead to increased performance.

According to Mansour and Gamal (2011) company performance can be measured by technical, financial and non-financial approaches. In this paper, the most extensive measure used to assess company performance only uses financial aspects, despite the fact that non-financial criteria are also important in describing company performance.

This is also supported by Meng and Fenn (2019) who state that non-financial indices related to performance measurement, especially for construction projects, are not easy to identify and have not been adequately researched, collected, and restructured into a model.

3. RESEARCH METHODS

In this study, the object that will be used is PT XYZ, which is one of the state-owned companies engaged in construction services. The approach used to answer the problems raised in this study is a qualitative approach using primary and secondary data. Primary data was collected through semi-structured interviews with six representatives of employees who are involved in daily activities related to innovation, customers, marketing, technology and corporate communication. Next, secondary data acquisition is done by financial reports and other documents published to the public through websites and portals that can provide supporting information for this research.

The determination of employee representatives refers to the data requirements and criteria of sources which are then synchronized with the company's organizational structure. The first type of informant is the General Manager in a department/unit with a field that is appropriate to the topic of this research. The position was chosen to represent the decision maker at the company's functional level which determines the direction of the company's innovation capability development. The second type is staff representatives in departments/units with fields that are in accordance with the topic of this research. The selected staff representatives are employees at the functional level whose work routine is most directly related to their respective focus on innovation capabilities. All interviewees were given interview questions according to their respective fields of work using a semi-structured interview method.

This research will be analyzed through two stages. The first stage is to analyze the results of interviews from the informants using qualitative content analysis. All interview results were transcribed and then imported into the NVivo software, which is a tool that can be very useful in facilitating the analysis of interview transcripts (Rowley, 2012). The imported interview transcripts were then coded to facilitate analysis. From repeated reading of interview transcripts as well as coding and theme refinement, the findings were then obtained. The findings are then analyzed according to the focus of innovation capability according to Hogan et al. (2011), Omar et al. (2016), Siahaan & Tan (2020), and Sivaslioğlu (2021) as in Table 1. Following the research of Miller & Shamsie (1996), in this stage a content analysis was also carried out using the company's Annual Report, including statements made by the company's Chief Executive Officer.

This is done to understand and assess how the organization adapts to new competitive conditions.

Focus-Pelln	novation Capabilities				
FP1	The company provides services/products that provide benefits that are				
	superior to those of competitors				
FP2	The company solves client problems in very innovative ways				
FP3	The company provides innovative ideas to its clients				
FP4	The company presents innovative solutions for enterprise clients				
FP5	The company are looking for new ways to solve problems				
Apabilityof	Apability of Focus-Marketing Innovation				
FM6	The company develops a 'revolutionary to industry' marketing program				
	for its services/products				
FM7	The company implemented a new way to market its business				
FM8	The company innovates in marketing programs to stay ahead of the				
	market				
Technology	r-Focused Innovation Capabilities				
FT9	The company innovating with new software				
FT10	The company innovates with new technologies				
FT11	The company can introduce the latest integrated systems and				
	technologies				
FT12	The company applies the latest technology in the industry				

Table 1. Innovation Capability Measurement

Source: Hogan et al. (2011), Omar et al. (2016), Siahaan & Tan (2020), and Sivaslioğlu (2021)

The second stage is to analyze the data on PT XYZ's innovation capabilities obtained in the first stage to see the impact on the company's performance. In the performance analysis of PT XYZ, it will be compared with the performance of competing companies. This refers to the opinion of (Wiklund & Shepherd, 2003), that a company's performance is multi-dimensional and is something that is 'compared to its competitors'. In this study, what is included as a competitor company to PT XYZ is a state-owned company that is incorporated in sub-cluster /group of construction services and public companies (Tbk), namely PT K3, PT K4, and PT K5. The limitation of competitors is only in public companies because it is to facilitate the process of studying the company's Annual Report library to find data on the innovation capabilities of competing companies. At this stage, data on innovation capabilities from competing companies is also included in the analysis as a comparison to further deepen the discussion. This study will use performance data in 2019-2021. The period was chosen to see how the company's performance grew during the Covid-19 incident, namely in 2020, and when the company began to adjust in 2021 through its innovation capabilities as the company's response to changes in the business environment due to Covid-19. The performance indicators used are financial performance which includes ROA, ROS, and ROE. These indicators have referred to various existing previous studies related to this topic (Manzani et al., 2017; Mejia Vallejo & Arias-Perez, 2017; Quelhas, 2021; Sher & Yang, 2005).

4. ORGANIZATION PROFILE

PT XYZ is one of the SOEs engaged in construction services. Originally, PT XYZ was formed under the name of the State Building Company which was hereinafter referred to as PN XYZ. The company was formerly a former Dutch-owned building company that had been subject to nationalization in 1960 through a Government Regulation of the Republic of Indonesia. Then in 1974 the status of PN XYZ was changed to a Limited Liability Company under the name PT XYZ which was ratified through the Minister of Justice of the Republic of Indonesia. PT XYZ is one of the construction SOEs that also listed its shares on the Indonesia Stock Exchange. In its initial listing, PT XYZ's share composition consisted of 51% (fifty-one percent) owned by the Government of Indonesia, 24.4% (twenty-four point five percent) was employee management buy out, and 24.5% (twenty-four point five percent) was owned by the public.

According to the company's Articles of Association, the business activities organized by PT XYZ cover four business lines, namely engineering & construction, property & hospitality, manufacturing, and investment & concessions. In addition, PT XYZ also carries out other supporting business activities that directly or indirectly support its main business activities. Along with the company's increasing capabilities, PT XYZ is trusted to work on various National Strategic Projects to support Government programs. These projects include the construction of toll roads, dams, railway infrastructure, etc. PT XYZ has also made a history of contributing to building various infrastructures of Indonesia's pride as well as various nationally known landmarks.

5. RESULT AND DISCUSSION

The findings in Table 2 revealed a number of innovation capabilities owned by PT XYZ in 2021 and the impact of these capabilities on performance.

5.1 CUSTOMER-FOCUSED INNOVATION CAPABILITY

Table 2. Customer-Focused Innovation Capability and Impact on Growth
Perfomance

	Innovation Capabilities	Findings	Impact on Growth Performance
Custon	ner-Focused Innovation Capabili	ty	
FP1	The company provides services/products that provide benefits that are superior to those of competitors	The working method has been recognized as 'superior by MURI	- Customer- focused innovation capabilities
FP2	The company solves client problems in very innovative ways	Through innovative working methods	positively impact ROA growth
FP3	The company provides innovative ideas to its clients	Provide innovative ideas even though the opportunity to provide ideas is quite limited	- PT XYZ's ROA growth was the
FP4	The company presents innovative solutions for enterprise clients	Meet unmet customer needs	highest among its competitors
FP5	The company are looking for new ways to solve problems	<i>Brainstorming</i> and research	0.15%

In the customer-focused innovation capability, it connects three types of dimensions of innovation capability, namely: service and products innovation capability, problem solutions, and behavior (Hogan et al., 2011). Based on Table 2, this innovation capability is reflected in the success of the company which received an award from the national record keeping institution for its achievement as the fastest contractor to build an office with a modular box system. From the results of the brainstorming carried out along with the company's capabilities, resources and experience, PT XYZ then proposed an innovative work methods using systems and technology that had not even been done by contractors in Indonesia before. So that's how the record awarded. When a company understands its customers better, it can provide innovative ideas to its customers. On the other hand, bearing in mind that most of the projects undertaken by PT XYZ are design and build projects, in several tenders the project owner has often determined the work methods that must be used by the contractor in carrying out the project. This then limits PT XYZ's space to provide innovative ideas to customers.

Table 3	. Return o	on Asset	Construction	Companies
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Company	ROA	ROA	ROA	ROA	ROA	ROA
Name	2019	2020	2021	Growth	Growth	Growth
				(2020)	(2021)	Rank
PT XYZ	1.82%	0.06%	0.22%	-1.76%	0.15%	1
PT K3	4.22%	0.47%	0.31%	-3.75%	-0.16%	3

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PT K4	2.16%	0.58%	0.65%	-1.57%	0.07%	2
PT K5	0.84%	-9.22%	-1.77%	-10.06%	7.44%	N/A

Sources: Companies Financial Report, reprocessed.

Referring to Table 3, based on PT XYZ and competitors financial report data which has been reprocessed, PT XYZ experienced the highest ROA growth in 2021 of 0.15% after previously in 2020 there was a sharp decline. The increase in ROA indicates that the company earns a greater profit on every rupiah invested compared to the previous year. PT XYZ are now more efficient and productive in using their assets to generate profits. From the results of the analysis, it is known that the increase in PT XYZ's ROA is the impact of the company's innovation capabilities in 2021 which focuses on customers. The company's ability to provide services/products that provide superior benefits than competitors' services/products, is a value in itself owned by PT XYZ in 2021 in the midst of pandemic conditions.

From further analysis, it was also found that there is a positive impact of clientfocused innovation capabilities on company performance. From the 2021 PT K3 Annual Report, there is no information about the company's innovations that can provide added value for stakeholders. The company actually seems unable to understand customer needs well, so the operating activities carried out have not been effective. This also shows that, when the company has innovation capabilities that can provide added value for customers, the company can focus on operating activities and business processes which can then increase the return on assets owned by the company.

5.2. MARKETING-FOCUSED INNOVATION CAPABILITY

]	Innovation Capabilities	Findings	Impact on Growth Performance
Market	ting-Focused Innovation Capal	oility	
FM6	The company develops a 'revolutionary to industry' marketing program for its services/products	Carrying out the creative financing program as a price advantage strategy in participating in auctions	- Marketing- focused innovation capabilities positively impact
FM7	The company implemented a new way to market its business	Through a creative financing program	ROE and ROA growth
FM8	The company innovates in marketing programs to stay ahead of the market	Pioneer of creative financing for project funding schemes	- PT XYZ's ROE growth was the highest among its competitors at 1.10%

Table 4. Marketing-Focused Innovation Capability and Impact on Growth Perfomance

In marketing-focus innovation capability, PT XYZ has innovation in marketing its services, namely through creative financing. Creative financing is an alternative project funding scheme offered by PT XYZ to project owners with a sharia concept. This sharia-based funding scheme is not new especially in Indonesia, but the use of sharia concepts to fund infrastructure projects has never been done before. This makes PT XYZ the first construction company to apply this concept in the construction industry and makes PT XYZ leading the market in marketing its services compared to its competitors even in the current pandemic conditions.

Company	ROE	ROE	ROE	ROE	ROE Growth	ROE
Name	2019	2020	2021	Growth	(2020-2021)	Growth
				(2019-		Rank
				2020)		
PT XYZ	9.73%	0.43%	1.53%	-9.31%	1.10%	1
PT K3	13.64%	1.94%	1.23%	-11.70%	-0.71%	3
PT K4	8.12%	2.24%	2.52%	-5.88%	0.28%	2
PT K5	3.53%	-81.26%	-11.89%	-84.80%	69.37%	N/A

Table 5. Return on Equity Construction Companies

Sources: Companies Financial Report, reprocessed.

In table 5, PT XYZ's ROE grew by 1.10% to 1.53% in 2021. This growth is also the largest ROE growth among its competitors. From the analysis, it is found that this growth is inseparable from the positive impact of one of the company's innovation capabilities, namely the innovation capability that focuses on marketing. Based on the results of the analysis of interviews with speakers in the previous sub-chapter, it is known that PT XYZ has a new marketing program innovation, namely a price advantage strategy through creative financing. The purpose of this creative financing is to ease the cash flow of the contractor and the employer (customer) itself during the project implementation period, so that the contractor and customer still have more space to utilize their respective resources. The existence of benefit sharing from the program has provided its own value for PT XYZ in the eyes of its customers. When PT XYZ succeeds in utilizing its resources effectively by suppressing obligations that can arise and trying to increase its sales, the company's profit will increase which is also followed by an increase in the company's ROE. These findings are in line with the research of Aboramadan et al. (2020) which states that marketing-related innovations result in higher performance.

The findings above are also supported by the results of further analysis in the literature study of the Annual Reports of PT K3 and PT K4. In the two companies, it was found that both PT K3 and PT K4 did not yet have innovation capabilities that focused on marketing. Unlike PT XYZ, PT K3 and PT K4 have not made efforts to create unique differences compared to competing contractors in marketing their business. This makes the two have not been able to specifically explain where the company's positioning is, thus causing any equity invested into the company's business to not be able to generate maximum net income.

5.2. TECHNOLOGY-FOCUSED INNOVATION CAPABILITY

On PT XYZ technology-focused innovation capabilities (see Table 6), PT XYZ has reflected the company's ability to adopt new software, integrated systems and technologies, and the ability to innovate with new software and technologies to stay ahead of the market. In PT XYZ's technology and information (IT) roadmap, Enterprise Resource Planning (ERP) is one of the tools that the company develops and implements gradually. In 2021, PT XYZ introduced several applications that were successfully created by a team from the IT Departement. Another innovation carried out by PT XYZ related to technology is innovation in the field of Architecture, Engineering, and Construction (AEC) called Building Information Modeling (BIM).

I	nnovation Capabilities	Findings	Impact on Growth Performance
Techno	ology-Focused Innovation Cap	abilities	
FT9	The company innovating with new software	Using software that has never been used before and developing in-house software	- Technology- focused innovation capabilities
FT10	The company innovates with new technologies	Applying technology that has never been used in a construction company before	positively impact ROS growth
FT11	The company can introduce the latest integrated systems and technologies	ERP upgrade	- PT XYZ's ROS growth was the highest among
FT12	The company applies the latest technology in the industry	Applied both in the method of work and the use of information technology	its competitors at 0.53%

 Table 6. Technology-Focused Innovation Capability and Impact on Growth Perfomance

In table 7, presented the ROS value of PT XYZ and its competitors. It can be seen that, PT XYZ has the highest ROS growth compared to its competitors, which is 0.49%. From the analysis carried out, it was found that the high ROS growth of PT XYZ is inseparable from the positive impact of one of the company's innovation capabilities, namely innovation capabilities that focus on technology. The company's focus on technology-related innovations has succeeded in lowering the company's operating costs. The company's ability to innovate with new software has helped optimize business processes within the organization. In addition, the most up-to-date innovation in the use of BIM also contributes to reducing the costs of working on projects that can arise, so that companies can be even more effective in making profits. This capability has made the ROS of PT XYZ in the following year experience the highest growth compared to its competitors, which is 0.49%. This condition is in line with the findings

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of (Joo et al., 2018) that technology-related innovation capabilities have a positive impact on company performance.

Company	ROS	ROS	ROS	ROS	ROS Growth	ROS
Name	2019	2020	2021	Growth	(2020-2021)	Growth
				(2019-		Rank
				2020)		
PT XYZ	4.34%	0.22%	0.75%	-4.13%	0.53%	1
PT K3	9.63%	1.95%	1.20%	-7.68%	-0.75%	3
PT K4	4.90%	1.97%	2.16%	-2.93%	0.19%	2
PT K5	3.28%	-57.37%	-15.04%	-60.64%	42.32%	N/A

Table 7. Return on Sales Construction Companies

Sources: Companies Financial Report, reprocessed.

The positive impact of innovation capabilities in ROS is increasingly visible from the results of further analysis through literature studies in the Annual Reports of PT K4 and PT K3. From the Annual Report of PT K4, it was found that PT K4 did not try to develop in-house software and only relied on third parties, so this caused the business burden borne by the company to be greater and caused the growth of PT K4's ROS to not maximal. In addition, the absence of the application of other technology-focus indicators to PT K3 also further shows that the company's lack of innovation capabilities can have an impact on decreasing the ROS value of PT K3. This is supported by the results of research by Omar et al. (2016) which states that innovation capabilities are the most significant antecedent to company performance.

6. CONCLUSION AND DISCUSSION

Based on the analysis and discussion that has been carried out in this research, so to answer the purpose of the study, here are some conclusions that can be drawn:

- PT XYZ has three dimensions of innovation capability in accordance with the innovation capability indicators used by previous researchers (Hogan et al., 2011; Omar et al., 2016; Siahaan and Tan, 2020; and Sivaslioglo et al., 2021), namely, innovation capability client-focused, innovation capability marketing-focused, and innovation capability technology-focused.
 - a. Customer-focused innovation capabilities are reflected in PT XYZ's ability to provide services that provide unique benefits and are superior to its competitors and from PT XYZ's ability to solve customer problems in innovative ways.
 - b. On the dimension of innovation capability related to marketing focus, the company's capabilities are reflected through the development and implementation of innovative marketing programs, namely creative financing which has been applied to PPP projects undertaken by PT XYZ.
 - c. On the dimension of technology-focused innovation capability, PT XYZ has reflected its capabilities through the adoption of new software, introducing integrated systems and technologies, as well as the ability to innovate with new software and technology in order to remain leading in the market.

2. The three innovation capabilities have had a positive impact on PT XYZ's performance growth and made PT XYZ ahead among its competitors in terms of performance growth as measured by ROA, ROS and ROE. This is in line with the findings of Allred and Swan (2005), (Jiménez-Jiménez & Sanz-Valle, 2011), and Wang and Wang (2012). The highest growth is ROE, the second is ROS, and the smallest is ROA growth. The results of the analysis show that the customer-focused innovation capabilities that focus on marketing, this dimension has a positive impact on ROE growth. Lastly, in terms of technology-focused innovation capabilities, a positive impact is seen in the growth of ROS.

Based on the conclusions of this study, it can be seen that although the company already has innovation capabilities in the three existing dimensions, these capabilities have not been maximized because the company has not fully implemented every existing indicator. In order to deal with these weaknesses, recommendations that can be made for the Management of PT XYZ to improve the company's innovation capabilities are as follows:

- To increase customer-focused innovation capabilities, companies need to carry out more intense external communication through project team meetings with consultants and also project owners as customers. This communication aims to encourage companies to better understand the evolving needs of their customers. Armed with a better understanding of customer needs, it can spur companies to continue to innovate to create new services/products that provide unique benefits and have added value for their customers.
- 2. To increase the capability of marketing-focused innovation, creative financing needs to be applied as funding for a wider range of project types/segments that are targeted by PT XYZ. Not only for use in PPP projects, but its use also needs to be optimized for private projects, BUMN projects, and consortium projects. The more projects carried out by PT XYZ with innovative creative financing programs, the company's performance can be improved through more optimal cash flow management as a result of implementing the creative financing innovation capabilities.
- 3. To enhance technology-focused innovation capabilities, companies need to increase employee competency in the IT function. This is done so that the new software that has been adopted and the integrated technology that has been introduced by the company can be implemented optimally to support the company's performance growth.

This research has been attempted and carried out in accordance with scientific procedures. On the other hand, this research still has limitations, namely:

 This study uses the measurement of the dimensions of innovation capability which was initially only used in Professional Service Firms (PSF), then developed to be used by various studies using service companies as research objects (Omar et al., 2016; Siahaan & Tan, 2020; Sivaslioğlu, 2021). On the other hand, the unique nature of a construction service company can allow for other indicators that can help determine/discover the company's innovation capabilities.

- 2. Obtaining information related to the innovation capabilities of competitors' companies is only done through literature studies. This can cause the information obtained regarding the information capabilities of competitor companies to be less comprehensive.
- 3. This research only uses the company's innovation capabilities carried out in 2021 to see the company's response when trying to recover from the impact of the Covi-19 pandemic. On the other hand, some innovation capabilities may be just in the planning stage and will see results (in terms of performance) in the next few years.

In order to overcome the existing limitations, in further research the following things can be done:

- 1. Further research can be carried out to find out what dimensions can shape innovation capabilities, especially in construction service companies.
- 2. It is necessary to conduct research both qualitatively and quantitatively in order to further enrich the existing literature.
- 3. Case studies were conducted on more than one research object and data collection related to innovation capabilities was carried out using primary data so that the information obtained was more comprehensive.
- 4. Follow-up research can be carried out using a longer observation period for implementing innovation capabilities, so that the impact of innovation capabilities can be seen more comprehensively on the company's performance growth.

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