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Are Pharmaceutical Firms of Indonesia Serious about Social Sustainability? Role of Business Innovation, Competitive Pressure, Technology, and Quality Orientation

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ABSTRACT
The front-line employees in every organization typically experience social sustainability as well as business innovation, competitive pressure, technology, quality orientation in a sector. This study has an important aim to analyze the direct impact of competitive pressure, business innovation, competitive pressure and technology orientation on social sustainability, while the quality orientation plays an important mediating role between them. The data were collected from almost 424 individuals, these are the front-line employees of the pharmaceutical companies. The data has been mainly analyzed by applying various software such as AMOS and SPSS. Furthermore, the major data analysis techniques that have been used are SEM and CFA. The analysis and discussion have shown that all hypotheses have accepted. The results have shown that quality orientation has an important mediating role between competitive pressure, business innovation, competitive pressure, technology orientation, and social sustainability. Moreover, the given study is new and novel because no previous study has checked the of quality orientation act as mediator in the association between competitive pressure, business innovation, competitive pressure, technology orientation, and social sustainability. The study is also effective in terms of theoretical, managerial, and practical implications. The study has helped managers, employees, and company to understand social sustainability, technology orientation, business innovation, competitive pressure, quality orientation in a company.

Keywords: social sustainability, technology orientation, business innovation, competitive pressure, quality orientation

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INTRODUCTION

Pharmaceutical sector is one of the important sectors of the country. The services and products offered due this sector is to serve the health issue of nation. Pharmaceutical sector of Indonesia is on a growth track from last several years and the sector is growing at rate of 12.5 percent per annum. The main offerings that are going through increase sales and providing profit margins to the sector are vitamins and food supplements as well as prescribed medicine. The pharmaceutical sector of Indonesia is facing various constraints in regards to laws and capacity. However, the expectations and predictions of growth for this sector is quite high as the demands of domestic market are increasing from pharmaceutical firms. But this trend of growth is not limited to pharmaceutical sector of Indonesia, this sector is expanding all-over the world.

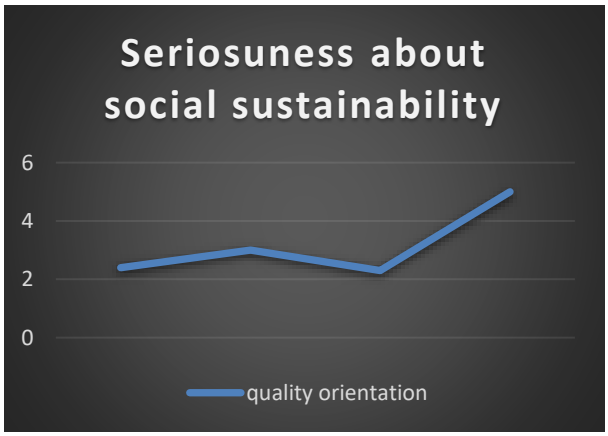


Figure 1: Seriousness level about social sustainability according to a survey

This situation is leading to increasing competition in pharmaceutical sector of Indonesia as well as other countries. In context of Indonesia, foreign direct investment is attracted toward this sector, although the competition and restriction are tough here. This attraction is mainly due to growth potential in sector. A large proportion of products and services produced by sector are consumed by domestic market. However, the export and sales of these products with ASEAN countries is also increasing with the passage of time.

The growth in production and service concern should be compatible to social sustainability. It is necessary for ecological conditions of economy as well. Firms that manage the positive and negative influences produced in response to their manufacturing activities, grow more than others. These firms take care of social aspect of society that can be in the form of securing rights of people, serving them in regard to health, offering improve working conditions, ensuring better quality of products offered and involvement in the activities of wellbeing of society. Pharmaceutical firms in Indonesia can improve their public image with utilization of social sustainability. However, this sustainability cannot be achieved in isolation. It is affected by various aspects of firms. Involvement in the activities of sustainability requires innovation in processes and products of firms. With improvement in the processes, firms reduce the harmful effects of their manufacturing activities. Likewise, it is necessary to innovate and update procedures if firm want to offer better working environment to employees. Competitive pressure is increasing, so the firms that are more reliable in regard to social sustainability receive attention from customers as well as those searching for job. Technology adoption is often seen in an effective relation with high quality products.

Table 1: Recent Technological growth in Indonesia

Year	Technological growth
2017	10.0%
2018	12.0%
2019	13.5%

Statistics show that competition is increasing in pharmaceutical sector of Indonesia. This increase competition requires updates in the manner domestic firm used to behave. As this sector is attracting investment from outside, it is necessary to identify better ways of producing drugs and supplements. Foreign firms with better technology can grab the market share of domestic firms. Moreover, the waste produce by these pharmaceutical firms are the chemicals that can affect social life. Firms that belong to pharmaceutical sector need to pay attention to aspects like technology adoption, quality orientation and innovation in their production methods. If these areas of work are not handled properly, the pharmaceutical firms will lose their customer. Moreover, if resources are not utilized in best possible ways, it will cause a worse effect for whole nation. So, focus on general public's welfare is must.

In order to address this issue, present study measures the effect of business innovation, technological orientation and competitive pressure on social sustainability in presence of quality orientation. The study offers novelty as this mention relation is not studied before in context of pharmaceutical sector of Indonesia.

This study has following objectives.

1. To analyze the business innovation social sustainability impact in pharmaceutical sector of Indonesia.
2. To examine the effects of competitive pressure on social sustainability in pharmaceutical sector of Indonesia.
3. To examine the effects of technology orientation on social sustainability in the sector of pharmaceutical, Indonesia.
4. To analyze the mediating role of quality orientation between business innovation, competitive pressure, social sustainability and technology orientation in pharmaceutical sector of Indonesia.

The analysis of previous studies shows that business innovation is linked with a positive impact on environmental concerns. Moreover, with the help of technology, firms can improve their market share and profit margins. Likewise, with the utilization of latest technological ways, firms offer best environment to their inner customers.

This study includes other parts as well. Part two deals with previous literature and produce hypothesis for study. Part three include methodology of this study. Part four provides analysis of data collected for this study. The last part that is part five, it concludes the study on the basis of literature and data collected from participant.

LITERATURE REVIEW AND RESOURCE-BASED VIEW THEORY

Li, Chen, Chew, and Teo (2014) explained the theory of resource-based in their research that the main principle of the resource-based concept theory of organization emphasized the rationale behind the different performance of the inter-firm level. The resource-based view (RBV) theory indicate capabilities of the firms along with their particular structure of both intangible and tangible resources. Capabilities and resources of the firm were also identified as innovation capabilities, technical competencies, experience, financial resources and leadership. Therefore, by categorizing these capabilities, firms are capable to take up various designees, made above the rate of normal return and achieve an edge of sustainable competitive. Accordingly, J. Bamgbade, Nawi, Kamaruddeen, Adeleke, and Salimon (2019), the products sources are must important to the users' end, inimitable, less to competitors in order to achieve a sustainable benefit. The resource-based view theory (RBV) forecast that resources which are peculiar, valuable and rare to enhance practices of the firm, and firms can attain the competitive as sustainable benefit once their building is affirmed by specific competencies of firm-level. The resource-based view theory (RBV) is a method for an effectively concluding the organization level development with resources as the building blocks. Furthermore, the resource-based view theory (RBV) was also conceptual to include various strategies of sustainability which leading to the capabilities as specific for firm's development. This is the firm's natural-resource-based view which rooted in advantages as competitive and which is rely on relationship of firm with the natural environment with continuously enhancing operations to answered the calls for justice of environmental and social (J. A. Bamgbade, Kamaruddeen, & Nawi, 2017). The literature of management has extensively described sustainable capabilities of firms and competence of technology as significant commitments for minimize the effects on environment, especially in developing world where facilities of infrastructural and energy are at a premium. Sustainability should swing firms the chances for competitive benefit through the collection of rare and specific resources of firm, involving an orientation as deliberate towards recent technology (J. A. Bamgbade, Kamaruddeen, Nawi, Yusoff, & Bin, 2018). The construct of sustainable development, which involves being environmentally and socially responsible, has been entrenched into the operations of an organization (Hastalona, Iswanto, Ariyanto, Prastyorini, & Rahmanie, 2019).

Role of Business Innovation and Social Sustainability

According to Zelenika and Pearce (2014), the firms attempt to enhance their markets and business in that competition is knowing forever large local or global in addition that is why innovation gave a critical strategic factor that can chip in to frim progress. The process of innovation stimulates the whole of economy (Perez-Carmona, 2013). The growth and progress of the economy propel with innovation which act as driving force and still act as driving

factor for economic. Innovation factor is mainly rely on creativity and initiative of designers, managers, investors and industrialists and it is established within companies. Shaker (2015) further describe in his study that the establishment of issues related to environment in pharmaceutical firms is becoming a component factor of activities related to international business. Capabilities of the business innovative captures and create new values with the help of implementing the models for new business within the external environment and workplaces for firms although a transforming the mind of managerial sets. In the same way, with changes in environment the capabilities of adaptive is a significant strength that describe how business innovativeness of the firms is helping in achieving an edge of competitive. However, adaptive good strategies and strength of firms alone would not be sufficient to meet with the present ever-dynamic environment of business. Accordingly with the theory of resource-based, the sustainability could effectively achieved at firm-level with the help of innovative business models. It is consider that a business innovative capabilities of firms will be benefit in adoption of sustainability (J. Bamgbade et al., 2019).

H1: relationship between Business innovation and social sustainability

Competitive Pressure and Social Sustainability

Farah (2015) describe in her study that the need for sustainability and competitiveness in the world, in addition to increasingly complex and dynamic scenarios of scientific, cultural and industrial are needed then a approach of systemic in which tasks of research affirm the coherent development, eco- efficient and interconnected industrial and social systems react to social, cultural both and market desires by competitiveness recovering in the patent productivity of industrial and research, enhancing the industrial value and production of research in the industries base developing nations, enhancing the change from a resource-intensive to sustainable, materials of knowledge-intensive and processes. Sustainable development is compatible with competitively such as Ecology, manufacturing and design are areas of interdisciplinary, which along with each other present a valuable potential for innovation (Aversa, Petrescu, Petrescu, & Apicella, 2016).

H2: relationship between Competitive pressure and social sustainability

Technology and Quality Orientation and social sustainability

For the adaptation and recognition of emerging technologies, firms have capability which is represented with technology and quality orientation. Firms explain the capability to achieve a substantial level for the improvement of technology to develop new products. This elaborate that organization with orientation of technology gave preference to utilization of update technologies in the release of products, however strongly investing also. By implication, orientation of technology in organization should prepared large agenda of sustainability as radical in motion moving to large advantages of competitive(Wong & Zhou, 2015). From past thirty years, the technology of CAD along with BIM have caused the patterns of designs which based on traditional building and construction in economies emerging and developed both, although the decisions related to projects of construction are made with the help of 3D simulations. orientation of technology in firms are effectively leveraged in describing the issue of social related, welfare of the employees, along with concern of regulators and clients as large precautions is wanted to deal with easy of the user particularly when employees claim improved products at less costs. In such manner, it is contend that orientation of technology improves the performance of services and products by being competitive, consequently it remain sustainable (Costa, Lages, & Hortinha, 2015).

H3; relationship between Technology and quality orientation with social sustainability

Mediating Role of Business Innovation

According to Wu and Issa (2014), business innovations have a positive relationship with social sustainability. Some studies have explained that business innovation significantly influences the performance of firms in respect of social sustainability performance (Wong & Zhou, 2015). Furthermore, most researches explained that as positively the innovativeness is linked to firm's performance of social sustainability, such type of association is not existential definitive at good (J. Bamgbade et al., 2019) meanwhile, Carayannis, Sindakis, and Walter (2015) elaborated that firms innovation may not improve their performance of social sustainability directly but many other aspects do intercede to permit for a high closefisted association. The research confirmed that whereas firm innovation strengthens the performance of firms in social sustainability, there are chances that such performance of firms may be mediated by aspects that have direct impacts on sustainability of social. Because of that, this research consider it is compulsory to highlight the potential variable of mediation in parallel links. Accordingly, the anterior theoretical analysis gave us to proffer business innovation as a mediating variable in determining the performance of firm as social responsibility. The two aforementioned relationships.

H4: Mediating role business Innovation play a significant impact in pharmaceutical firm.

Mediating Role of Competitive Pressure

Typically, firms have some society responsibilities such as sustainable growth, environmental protection and contribution to the society as overall society. Performance f firms towers social sustainability is directly influence due to pressure of competence (Herrera, 2015), which in turn enhance the performance of the business. In China the Normative institutions apply heavy pressure on firms to start responsibilities near society due to customers that perceive responsibility in the direction of society as a lawful behavior of corporate that arrange with socially approved belief plus norms (Porter & Kramer, 2006; Rauch, Wiklund, Lumpkin, & Frese, 2009; Sarkis, Helms, & Hervani, 2010; Tate, Ellram, & Kirchoff, 2010). For exam-

ple, in China Haier and an enterprise of state-owned guaranteed its scope of brand by strengthen its attachment to save the natural environment along with eventually achieved competitive advantage, recognition of stakeholder on its competitors (Bai & Chang, 2015). The positive effect of social sustainability or responsibility performance of firms is due competitive benefit, satisfaction of customer and reputation. The concluded results by Saeidi, Sofian, Saeidi, Saeidi, and Saaeidi (2015) described that just advantage of competitive and reputation mediate the relationship among social sustainability or responsibility with performance of firms. Along with these results gave a task for society sustainability in indirectly enhancing performance of firm through enhancing the advantage of competitive and reputation while enhancing the level related to satisfaction of customer.

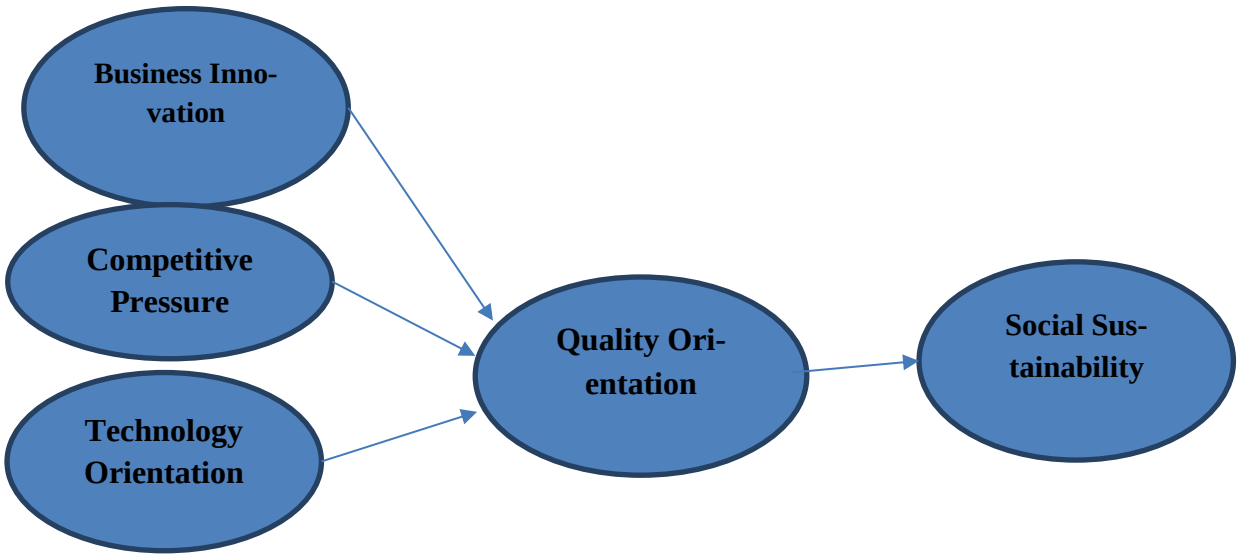
H5: Mediating role of competitive pressure have positive impact on a pharmaceutical firm.

Mediating Role of Technology and Quality Orientation

Monteiro, Kugelmeier, Pinheiro, Batalha, and da Silva César (2018) describe in their study that technology have mediating effect in the achievement of sustainability. They analyzed in their research the patents related to the use of glycerol in the period from 1993 to 2015, showing the diversity and quantity of work related to the search for alternatives to add value to glycerol. They was found that the innovation of new technologies in utilization of glycerol are fundamental, without the requirement for purification steps which were traditional. Their study portrays that new technology have impacts on society in the form of sustainability. Various firms along with Society have been giving high immersion to the sustainability of social while the mediating role of quality orientation in the association between social sustainability and performance of firms. practically, the relation with stakeholders can be strengthen by managers then ultimately it enhance the performance of the firms, if responsibility of social towards stakeholders is constituent in operational processes and routines (Mehralian, Nazari, Zarei, & Rasekh, 2016).

H6: Mediating role of technology and quality orientation have positive impact on pharmaceutical firm

RESEARCH MODEL



METHODOLOGY

Sample Selection

In the given study, the authors selected the highest grade of pharmaceutical firms in Indonesia. The major reason behind the given selected is that the organizations in the given category get leveraged better to accept social sustainability where other smaller pharmaceutical companies face more of the complexities while making adoption to it. The table given below basically gives a detail of the profile related to demographic of responding organizations. The demographic features of these pharmaceutical companies involve the age, education and gender and total employees' number. For determining the size of sample from the given population, GPower 3.1 software that helped in determining the size of sample. The size of sample was calculated as a function of the given level of power (1-b), the pre-defined significance level and the total effect population size that is identified through 1-b probability. It should be considered that in cases of priori tests, there is a control over the statistical power before conducting the actual research (Faul, Erdfelder, Lang, & Buchner, 2007). As given by Cohen (1977), the thumb rule has been used in order to calculate the size of sample. Total four predictors were identified in this research that were quality orientation, technology, competitive pressure and innovation.

The outcomes of statistical test have identified that minimum 119 sample is needed for doing the analysis of multiple based regression. However, for the given research the size of sample was 424, which was good enough. Abidin

(2005) suggested a 0.95 value for determining the effect sizes that are being used in the research. However 119 sample size is considered inappropriate for the population of large number of organizations. Same like this, an additional size of sample determination process was identified. Dependent on the given process, 424 respondents were considered as the sample of the given research. When referring to the unit of sample in this research, as the analysis unit is the pharmaceutical sector, the respondents of questionnaire are basically the individuals from each of the organization. The respondents can be construction manager, contract manager, an engineer, marketing manager, project manager or employee that is conversant with the research variables. The researcher did the personal administration of questionnaire. Moreover, the researcher also sent copies of questionnaires to different pharmaceutical companies. 9 incomplete and invalid copies of questionnaire were removed and other such 8 cases removed that had outliers. The detection of these outliers was done with the help of Mahalanobi's distance.

Measures

Such research utilize different authenticated scales, therefore the researcher develop some important accommodation to instrument of survey involving language. The measurements that were utilized within the questionnaire are provided in Appendix. All of the variables in the research were measured with the help of scale 1 to 5. The author did the measurement of innovativeness in business through the scale of Kamaruddeen, Yusof, and Said (2012). In accordance with the given scale, the measurement of organizational innovativeness was done like as the construct of 2nd-order involving different dimensions given in the literature of innovativeness (Damanpour, Szabat, & Evan, 1989). The measurement of innovation in technology was done through integrating the scale that was utilized in the empirical study of Gatignon and Xuereb (1997). When referring to social sustainability, the scale that was introduced by Abidin (2005) was used. This measurement has been utilized in various researches (Al-Saleh & Taleb, 2010).The scale targeted on if the responding organization identify the core issues of social sustainability in the pharmaceutical sector on 1 Likert scale to 5 point likert scale. For the preparation of final survey, the validation of instruments was done by research through content and face validities with experts over all of the sections of survey.

Data analysis and interpretation

Demographic details

The aim of the present study is to know about the seriousness of the Indonesian Pharmaceutical firms regarding the social sustainability and also to know the role of business innovation in this, the role of competitive, technology and quality orientation between these. The study took a total sample of 424 individuals, out of which 239 were males and 185 were females. The percentage of males was higher than the females in sample. Out of 424 individuals, 58 were under graduation, 206 were graduates, 122 had master's degree and 38 had some other degree. Out of 424 individuals, 100 were between 18 to 25 years of age, 133 were between 26 to 30 years of age, 129 were between 31 to 35 years of age and 62 were above 50 years of age.

Descriptive statistics

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
SociSus	424	1.00	5.00	3.4292	1.13854	-.582	.119
QuaOri	424	1.00	5.00	3.5967	1.16273	-.534	.119
BusInno	424	1.00	5.00	3.4283	1.17683	-.654	.119
CompPr	424	1.00	5.00	3.5123	1.19266	-.644	.119
TechOri	424	1.00	5.00	3.4906	1.14688	-.659	.119
Valid N (listwise)	424						

The table 1 above is showing the descriptive details of the study, there is a complete summary about the explanations of the variables, the descriptive coefficients are being shown in the above table. The data given in the table is a representation of the whole population in the form of a sample. It can be seen through the data that no outlier is present in it, because the maximum values and the minimum values lie exactly in the threshold range of the 5-point Likert scale. The values for skewness are present between -1 to +1 and so it can be observed that it is present in the threshold range of normality. The given data is proved to be normal and valid and can be proceeded for further testing.

Factor Loading and Convergent Validity

Table 2: Factor Loading and Convergent Validity

	1	2	3	4	5	CR	AVE
SS1	.825					0.912	0.835
SS2	.824						
SS3	.845						
SS4	.842						

SS5	.811						
SS6	.856						
SS7	.848						
QO1				.761		0.921	0.812
QO2				.761			
QO3				.765			
QO4				.730			
QO5				.760			
BI1					.714	0.965	0.906
BI2					.706		
BI3					.723		
BI4					.699		
CP1			.792			0.921	0.898
CP2			.823				
CP3			.807				
CP4			.807				
CP5			.831				
CP6			.819				
TO1		.760				0.908	0.864
TO2		.769					
TO3		.776					
TO4		.795					
TO5		.785					
TO6		.780					
TO7		.771					

The above table 2 is showing the factor loading and the discriminant validity of the given variables. All of the indicators have a factor loading of more than 0.7, which shows that all of the indicators are reliable and also eligible for further testing and analysis. All of the factors are in a suitable threshold level and all of the factors are in a suitable and valid sequence and range as well. This data is good to go for further testing and analysis, data is reliable.

Discriminant validity

Table 3: Discriminant Validity

	QO	CP	TO	SS	BI
QO	0.955				
CP	0.565	0.948			
TO	0.546	0.513	0.929		
SS	0.447	0.606	0.671	0.914	
BI	0.545	0.564	0.585	0.617	0.952
SH	0.361	0.479	0.407	0.898	

The validity master sheet is used to confirm the convergent and discriminant validity of the variables of the research model. The discriminant validity provided the discrimination between variables while the convergent validity was measured with the help of composite reliability and average variance extracted. The outcomes and the convergence of each of the variable is more than 70%. Average variances extracted are more than 50%, while the discriminate validity showed that the loading of each of the variable has a discrimination from the other one. All of the variables have maximum loading with itself as compared with other, so collected data is authentic.

Confirmatory Factors Analysis and KMO

Table 4: Confirmatory Factors Analysis and KMO

CFA Indicators	CMIN/DF	GFI	IFI	CFI	RMSEA	KMO
Threshold Value	≤ 3	≥ 0.80	≥ 0.90	≥ 0.90	≤ 0.08	0.6 – 1.0
Observed Value	2.737	0.850	0.972	0.792	0.064	0.969

The table 4 is showing results for confirmatory factor analysis and KMO, the table is showing that CMIN is less than 3, GFI is more than 0.80, CFI is more than 0.90, IFI is more than 0.90, and RMSEA is less than 0.08. All of the results showed that the data is in valid range and is good to go for further testing. Following is the screen shot of CFA in figure one.

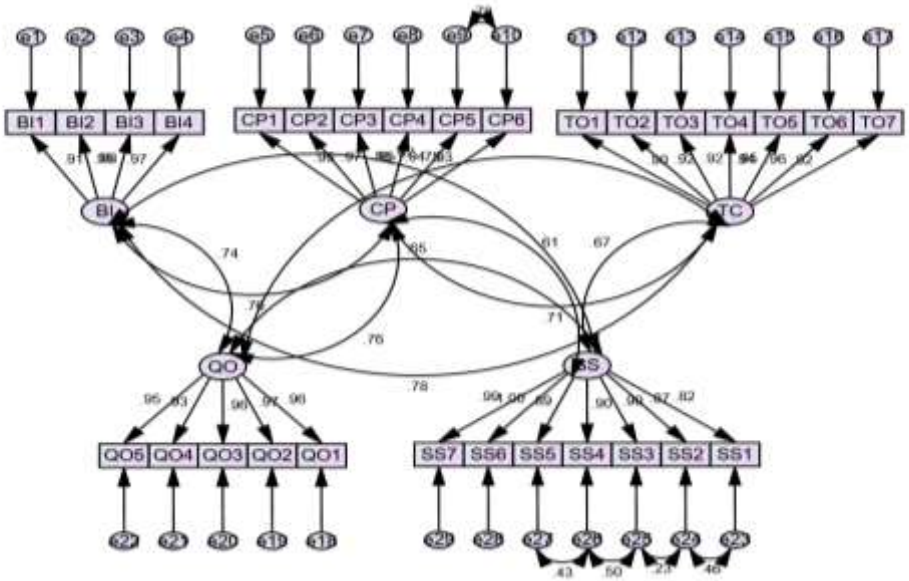


Figure 1: CFA

SEM

Table 5: Structural Equation Modeling

Hypothesis	B-Value	SE	P-Value	Decision
BI→SS	.143	.057	.015	Accepted
CP→SS	.093	.053	.090	Rejected
TO→SS	.353	.056	.000	Accepted
BI→QO→SS	.050	.021	.010	Accepted
CP→QO→SS	.090	.028	.010	Accepted
TO→QO→SS	.069	.025	.010	Accepted

The table 5 above is showing the relationships among the different variables, it can be seen that the value of significance for relationship between BI and SS and TO and SS is significant as it is .015 and .000 respectively and are less than .05. The value of p for relationship between CP and SS is more than .05 so it is not a significant relationship at all. The mediation of QO between BI and SS, CP and SS, TO and SS are all significant as the p value is less than .05. Following is the screenshot of SEM.

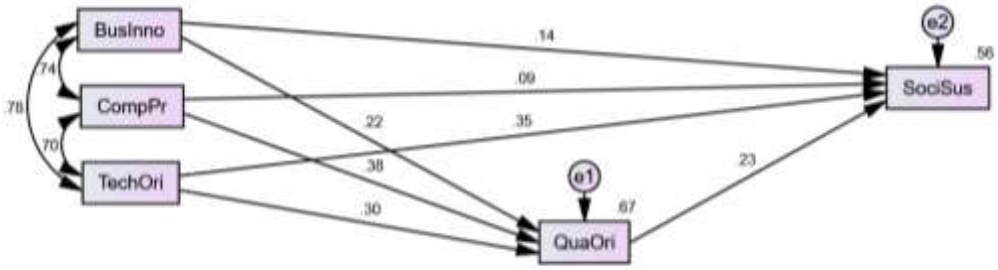


Figure 2: SEM

DISCUSSION AND CONCLUSION

Discussion

The aim of the present study is to know about the seriousness of the Indonesian Pharmaceutical firms regarding the social sustainability and also to know the role of business innovation in this, the role of competitive, technology and quality orientation between these. The first hypothesis proposed by the study was that, "The impact of BI on SS is significant." This hypothesis has been accepted as the p value is less than .05 and moreover, results are also supported by the study of (Sohn, 2015). The second hypothesis proposed by the study was that, "The impact of CP on SS is significant." This hypothesis has been rejected as the p value is more than .05 and moreover, results are also supported by the study of (Sidharta & Affandi, 2016). The third hypothesis proposed by the study was that, "The impact of TO on SS is significant." This hypothesis has been accepted as the p value is less than .05 and moreover, results are also supported by the study of (Rentschler & Kornejew, 2018). The Fourth hypothesis proposed by the study was that, "The impact of mediation of QO between BI and SS is significant." This hypothesis has been accepted as the p value is less than .05 and moreover, results are also supported by the study of (Khadijah, Kamaluddin, & Salin, 2015). The fifth hypothesis proposed by the study was that, "The impact of mediation of QO between CP and SS is significant." This hypothesis has been accepted as the p value is less than .05 and moreover, results are also supported by the study of (Plummer & Boyle, 2016). The sixth hypothesis proposed by the study was that, "The impact of mediation of QO between TO and SS is significant." This hypothesis has been accepted as the p value is less than .05 and moreover, results are also supported by the study of (Kis-Katos & Sparrow, 2015).

CONCLUSION

The basic purpose of the given study is to highlight the importance and impact of business innovation, technology orientation, and competitive pressure on the social sustainability process of the pharmaceutical firms through the mediating role of quality orientation. It is well known that the role of competitive forces and technology is very fundamental for the significant performance of the companies. The data majorly has collected from 424 individuals and pharmaceutical companies. The results and findings have illustrated that business innovation, as well as technology orientation, has a significant impact on the social sustainability of the pharmaceutical companies. The facts recently have also illustrators that continuous innovation in business through technology and competitive forces helped to increase the profit of the pharmaceutical companies and organizational capabilities. It has also examined that technology orientation has enhanced the social sustainability of the firms positively. This relationship is also supported different theories ad helped to understand the impact of technology and business innovation on sustainability performance. The relationship has helped to understand the theory of resource-based view as well as an institutional theory concerning innovation and technology. The theory has said that resources are the key indicators and sources for a firm to bring and introduce new technology within the firms and operations. Furthermore, the results have indicated that the quality orientation has a significant mediating role in the relationship between technology orientation, competitive pressure, and business innovation. This shows that the quality orientation has significantly helped in creating the organizational capabilities that further helped to gain and sustain a competitive position. The quality orientation positively affects the product quality and customer loyalty of the pharmaceutical firms.

Policy Implications

The following research has various implications and provides benefits to the firms and individuals as well. First of all, the given study has helped the overall pharmaceutical companies to increase the role of innovation and business technology that further impact sustainable performance. The study findings have significantly helped pharmaceutical firms to nurture the leverage within the operations of the companies in terms of innovative capabilities, customer loyalty, product diversity, quality orientation, and flexible design. The overall pharmaceutical industry of Indonesia has to take benefits from this study because organizational capabilities are the core components of the firms. Moreover, the findings of the study also provide benefits to society individuals to understand the dimensions of technology.

LIMITATIONS

The following study has some of the limitations, such as the given study is a cross-sectional study which only considers the dynamic capabilities and organizational capabilities that occur over time. However, it is recommended that future studies should focus on longitudinal studies or time series analysis. The future researcher should also be focused on analyzing the impact of business technology as well as technology orientation on the sustainability orientation of the pharmaceutical companies only. However, it is highly recommended that future studies to conduct the study and analyze the outcomes in another different sector as well. Therefore, to cover these limitations, future studies should focus on these outcomes.

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