#### INTERNATIONAL JOURNAL OF eBUSINESS and eGOVERNMENT STUDIES

Vol: 13 No: 1 Year: 2021 ISSN: 2146-0744 (Online) (pp. 78-96) Doi: 10.34111/ijebeg.202113104 Received: 15.11.2020 | Accepted: 10.03.2021 | Published Online: 15.06.2021

#### -RESEARCH ARTICLE-

# THE IMPACT OF STRATEGIC ALIGNMENT ON THE SUSTAINABLE COMPETITIVE ADVANTAGES: MEDIATING ROLE OF IT IMPLEMENTATION SUCCESS AND IT MANAGERIAL RESOURCE

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#### -Abstract-

The key objective of this study is to examine the impact of strategic alignment on sustainable competitive advantages. In addition, the study has examined the mediating role of IT Implementation Success and IT Managerial Resource vis-a-vis the relationship between the strategic alignment and sustainable competitive advantages. Employing a survey-based methodology, this study is collected data from manufacturing firms in Indonesia through questionnaires. A total of 307 useable questionnaires are selected for research purposes, indicating a 76.75% response rate. The collected data is then statistically analyzed by employing the Partial Least Structural Equation Modelling (PLS-SEM).

Citation (APA): Hartani, N. H., Haron, H., Tajuddin., N. I. I. (2021). The Impact of Strategic Alignment on the Sustainable Competitive Advantages: Mediating Role of IT Implementation Success and IT Managerial Resource. *International Journal of eBusiness and eGovernment Studies*, 13(1), 78-96. doi:10.34111/ijebeg.202113104

In the context of Indonesia, this study also reveals a key finding about knowledge-sharing among IT managers and businesses. This finding suggests that for achieving greater strategic alignment, understanding the nature of work environment, which the two parties share, plays a key role. In addition, the interviews and both surveys also confirms that IT - business knowledge-sharing plays a significant role on the level of enhancement. In this study, the mediating role of strategic alignment is investigated between sustainable competitive advantage and IT managerial resource. However, results demonstrate a mediating role of strategic alignment in the relationship of sustainable competitive advantage and IT managerial resource. The present study theoretically contributes to the literature of sustainable competitive advantage and IT – business strategic alignment by introducing a causal model and the associated variables to the literature. Moreover, this study also has a number of practical implications i.e., recommending those mechanisms and approaches which support managers and practitioners in achieving as well as sustaining alignment under different circumstances.

**Keywords**: Strategic alignment, sustainability, competitive advantage, IT implementation, Indonesia

JEL Code: M15

#### 1. BACKGROUND

Due to increased globalization, organizations must operate within a borderless competitive environment. In this continuously changing business world, globalization is creating tremendous opportunities and bringing challenges for businesses. Therefore, business organizations are needed to become agile and flexible to be able to achieve competitive advantage in this current business environment. Traditionally, it has been defined as 'the organizational resources and attributes which enable them to outperform its competitors in the product market or in the same industry' (Hsieh & Wu, 2016). Therefore, competitive advantage refers to the ability of an organization to offer greater value in comparison to its competitors. Expressed differently, it may be described as 'to what extent an organization can meet the market demand, and also simultaneously growing and maintaining its profits under free market conditions'.

Based on post-rationalization, the concept of competitive advantage is considered as static. In a dynamic environment, this concept fails to explain how to achieve sustainability. On the contrary, strategic advantage is a relatively broader concept, as it enables firms to develop the ability of creating a strategic direction which could be helpful in shaping its future environment and in creating new market opportunities. Therefore, Arnott, Lizama, and Song (2017) mention that organizations are needed to develop understanding of the intelligence systems (IS), response barriers, pre-emption potentials, general management challenges, calculated sacrifices, punch and counterpunch planning and infrastructure requirements.

Business organizations can better utilize their strength and competitive advantage by adopting information technology that has become an essential element in a majority of the industrial and business organizations (Kamariotou, Kitsios, & Grigoroudis, 2018). In most organizations, the role of IT has evolved as it is considered to be a cost center (Mukerji, 2020). However, in current business environment, it is considered to be a strategic tool to facilitate effective business management and an enabler of competitive advantage for an organization (Mao, Liu, & Zhang, 2016). Businesses around the globe have been undergoing significant and rapid changes due to the information technology. Among various business organizations, the role of information technology (IT) is evolving from a traditional to a strategic one. IT helps organizations in shaping their organizations' business strategies and also supports their chosen strategy (Iamratanakul, 2018; MacLean & Titah, 2018). However, it has been argued that the expected value of IT investment has not been achieved (MacLean & Titah, 2018). Another study highlights that strategic alignment between business and IT has become one of the major concerns among the top management for more than two decades (Shannak & Obeidat, 2016). Therefore, IT executives and businesses are trying to identify ideal management practices which could align their IT strategies and businesses. Thus, it seems that strategic alignment will consequently grow with the business efforts to link IT and business and will allow rapid technological changes. Thus, in order to remain competitive, organizations are required to understand the ways to strategically manage IT under a dynamic business environment, as the strategic IT management is expected to provide support to the business processes and their strategies (MacLean & Titah, 2018). For effective organizational performance, the significance of strategic IT usage has been recognized by the businesses. The use of IT contributes in creating business value (Iamratanakul, 2018; MacLean & Titah, 2018). Thus, aligning business-IT strategy has now become the top concern among decision-makers in top management. In addition, it is one of the major issues in both IT and business sectors. Several scholars (Kamariotou et al., 2018; Sha, Chen, & Teoh, 2020; Wikhamn, 2019) confirm that strategic IT-business alignment is a key issue because information technology is considered a main constituent of almost all businesses, which facilitates in restructuring industries, merging of companies, global competition and leveraging business competencies.

Obeidat, Hadidi, and Tarhini (2017) posits that misalignment between IT and business occur when there is a lack of understanding about strategic alignment, ad-hoc IT investments in firms, and traditional assumptions associated with the strategic planning process. Furthermore, the author argues that misalignment of IT and business may lead to time wastage, missing opportunities and competitive advantages, creation of unfavorable environment in terms of IT investments, and increasing cost. Scholars argue that sustainable competitive advantage depends upon the current cost, environment, and efficiency of the organization. Consequently, some scholars (Järlström, Saru, & Vanhala, 2018; Kamariotou et al., 2018; Weerasinghe, Scahill, & Taskin, 2018),

particularly from the developed and the European countries have attempted to study the sustainable competitive advantage and business-IT strategic alignment. However, there is dearth of such studies in developing countries, such as, Indonesia, which have a different cultural environment as compared to other developed and European countries. Therefore, a preliminary study was conducted by a researcher to identify factors that cause misalignment between business strategy and IT strategy in context to Indonesia (Adaileh, 2017). This preliminary study is conducted on the basis of interviews, and confirms the proposition that process and structure, belief and values, successful IT implementation, leadership and IT managerial resource are the key factors that explain the cultural gap between business strategy and IT strategy (Haseeb, Hussain, & Kot, 2019). In addition, the absence of these factors acts as an obstacle in obtaining benefits arising from IT investments made by the organization. The preliminary study reveals that lack of communication leads to poor leadership by the top management. In this context, the study only identifies verbal communication to be inadequate to recognize business requirements. (Loeser, Recker, & Brocke, 2017) assert that if there is a lack of communication among senior executives and IS, it may result in a misalignment of business objectives and IS investments. Moreover, it is concluded in Shannak and Obeidat (2016) study that for strategic alignment, information technology (IT) is a key enabler. Besides, the basic requirement for Chief Information Officer is the effective leadership quality. These scholars also recommend that behavioral and technical skills must be acquired by the CIO leaders to improve their strategic alignment ability.

## 2. LITERATURE REVIEW

In today's world, competitive advantage is perhaps one of the most common concepts of business. Even though it is extensively used in research, only a limited number of researchers and scholars tried to explain the concept and it is also frequently mixed up with concept of distinctive competence. In this regard, Warnaby and Shi (2018) work is an exception since he explains this term as 'the properties of individual market or product that provides the firm with strong competitive position'. Similarly, in the book named Competitive Advantage, Stead and Stead (2019) also explain competitive advantage term in a commonly used business language. However, no proper definition is provided by Porter; instead, he refers to competitive advantages as 'the organizational factors that empower the organization to perform better than its competitors'. Porter also suggests that an organization's competitive strategy must be aimed to achieve sustainable competitive advantage which can be attained through value creation.

Competitive advantage occurs when an organization is proficient in creating value for its customers more than the cost of generating that benefit. In addition, value is the price that customers willingly pay to buy a certain product or service, and the superior value is generated when customers are provided a product which meets their expectations as compared to its competitors, and they are willing to pay a higher price for it. The argument given by Porter illustrates the common SWOT framework which outlines the

strengths, weaknesses, opportunities, and threats to evaluate the organization's competitive advantage. Competitive advantage is accomplished when the organization can use its internal strengths to avail the existing opportunities present in its surrounding environment, and at the same time coping with internal weaknesses and external threats. However, a firm's resource-based view (RBV) provides an alternative approach and suggests that organizations should focus on their superior resources to be able to achieve sustainable competitive advantage (Jogaratnam, 2017). According to Hsieh and Wu (2016), competitive advantage can be described as 'the ownership of valuable resources that helps the organization to continue their operations in cheaper or improved manner as compared to its competitors. By sustainable competitive advantage, authors mean that an organization's competitive advantage should be hard enough to replicate by the competitors and should have no substitute (Jogaratnam, 2017). Furthermore, Chukwuemeka and Onuoha (2018) claimed that sustainable competitive advantage is maintained when organizational competencies have strong causal ambiguity, which can be challenging for the competitors to understand or identify such kind of competencies and replicate them. One such example is Starbucks which has successfully sustained its competitive advantage because of its unique branding competencies and store atmosphere which make it nearly impossible for the competitors to imitate (Schanz & Lille, 2017). Scholars generally describe competitive advantage in terms of organizational resources and attributes that enable firms to have better marketplace as compared to other organizations working in the same marketplace. Competitive advantage is also defined as the new ability of an organization to create greater value in comparison to its competitors. It is also defined as 'the extent to which the organization meets the product market demand and at the same time, maintains and increases its profits under free market condition (Liu & Atuahene, 2018). Since competitive advantage is a static concept, it has a limited scope due to post-rationalization. Thus, it fails to explain how competitive advantage of an organization can be sustained under dynamic business environment.

## 3. HYPOTHESIS DEVELOPMENT

With the passage of time, usage of IT within organizations has evolved. For a long time, IT was considered as a cost center (Mukerji, 2020). Now, it is viewed as a key enabler that helps the organization to accomplish competitive advantage. It is also viewed as a strategic tool that empowers an organization to efficiently administer its intelligence. Therefore, strategic choices to deploy IT and business strategy alignment are the most prominent matters of concern that remain on the top of the list of IT issues in contemporary businesses (Williams, Torres, & Carte, 2018). The alignment of business strategy with IT is considered to be a significant milestone especially in view of the fact that IT is now a vital part of business and is used to restructure industries, merge companies, facilitate competition globally, and provide leverage to special competencies of business (Kamariotou et al., 2018).

Nowadays, businesses are faced with a continuously increasing domestic and global competition. Therefore, it is obligatory for the organizations to understand how to create competitive advantage. Several researchers argued that competitiveness can only be achieved if the organization successfully aligns the business with the firm's IT (Adaileh, 2017; Weerasinghe et al., 2018). According to Mitić, Nikolić, and Jankov (2017), alignment is a firm-level issue which affects the overall performance of an organization. Furthermore, Islam, Furuoka, and Idris (2020) also identify strategic alignment as one of the main characteristics of competitive advantage. Due to this reason, business executives remain concerned about the strategic alignment. Moreover, integrating IT to perform business functions offer organizations a strategic advantage which is viewed as the starting point to achieving competitive advantage. According to Chukwuemeka and Onuoha (2018), an organization's IT investments can be increased to synchronize it with the organizational plans and strategies, which results in the achievement of competitive advantage and increased profitability. Williams et al. (2018) claim that strategic alignment enhances the performance of the organization and enables it to gain more competitive edge in the industry. In addition, the competitive position and performance of the organization can also be enhanced by the successful usage of IT (Dobner, Weeger, & Gewald, 2017). However, concrete evidence regarding the relationship between the competitive advantage and this alignment is quite rare within the existing body of literature.

Thus, in a dynamic business environment, organizations need to develop an understanding of how to strategically handle IT to remain competitive, as it is has been recognized as a significant success factor for the businesses to achieve its goals (MacLean & Titah, 2018). Furthermore, scholars argue that in order to successfully achieve effective organizational performance, strategic IT usage plays a significant role which contributes in the business value creation, and this role is wildly known and accepted among scholars (Iamratanakul, 2018; MacLean & Titah, 2018).

IT managerial resource can be defined as the involvement level of the IT and business executives in the selection of vendors, management and negotiation of contract, and IT project designing and implementation. According to Luftman, Lyytinen, and Zvi (2017), the success of IT means that there exists an effective relationship between IS managers and business managers, which is one of the key contributors for achieving efficient relationship with the vendors. Furthermore, during the decision-making process, competent and efficient IT experts are usually consulted (Järlström et al., 2018). They are likely to have more information regarding the current and newly available opportunities and also have practical experience of not only working in the current market but also with the newly developed market. Shoja and Marakas (2019) conduct a research in which they analyze IT managerial knowledge about an organization's business strategies and processes, and to what extent IT is perceived as a competitive tool among the line management. The results indicate that managerial IT knowledge is found to positively determine the IT resource usage.

Successful IT history develops an appreciative perspective among the top management and thus makes it more reliable (Järlström et al., 2018; Wikhamn, 2019). Moreover, it also makes it essential for the business managers to get involved in the planning process (López & Paz, 2017). Reliable and efficient services and the top management trust in the IT department are two success factors which allow the successful alignment of business plans with the IS plans (Lara & Lillo; López & Paz, 2017). The commitment towards the strategic IT usage increases with the top management's support, which allows proper resource allocation for developing and planning IT applications. However, if the IS management lack credibility, the top management does not communicate their problems and requirements, and refrains from sharing their objectives, plans and goals.

H1: IT Implementation Success (ITIS) has a significant impact on sustainable competitive advantages (SCAD).

H2: IT Managerial Resource has a significant impact on sustainable competitive advantages (SCAD).

H3: Strategic alignment (STRA) has a significant impact on IT Implementation Success (ITIS).

H4: Strategic alignment (STRA) has a significant impact on IT Managerial Resource (ITMR).

H5: Strategic alignment (STRA) has a significant impact on sustainable competitive advantages (SCAD).

H6: IT Implementation Success (ITIS) has a mediating impact between strategic alignment (STRA) and sustainable competitive advantages (SCAD).

H7: IT Managerial Resource (ITMR) has a mediating impact between STRA and sustainable competitive advantages (SCAD).

# 4. METHODOLOGY

For the given research, this study chose a survey-based technique for data collection. In this process, 315 questionnaires are obtained from 400 distributed questionnaires. At the stage of data sorting, 8 questionnaires are dropped due to missing values. Therefore, 307 useable questionnaires are obtained resulting from the survey conducted for this research, indicating a 76.75% response rate. The collected data is then statistically analyzed by employing the Partial Least Structural Equation Modelling (PLS-SEM). Although, this technique is not a global criterion for goodness-of-fit. Therefore, a set of criteria has been put forward by Richter, Cepeda, and Roldán (2016) for assessing the partial model structures. These criteria can be systematically applied in two-steps, which include i) the outer model assessment, and ii) the inner model assessment.

#### 5. RESULTS

The two-step process begins by focusing on the assessment of the measurement model. A systematic PLS evaluation involves the variables' reliability and validity estimation using criteria associated to reflective and formative measurement model. The estimation of the inner path model makes sense when the validity and reliability of the observed latent variables is deemed sufficient for further analysis.

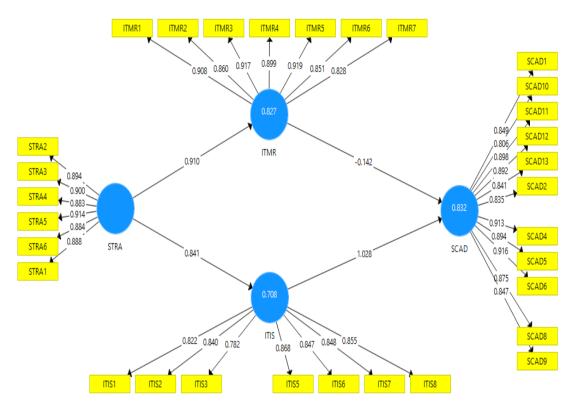


Figure 1: Measurement Model

Usually, internal consistency reliability is the primary criterion that needs to be checked. Cronbach alpha is the criterion which has traditionally been used by researchers to check the internal consistency of a given data-set, as it provides a reliability estimate in terms of the inter-correlations between the indicators (Hair, Hult, & Ringle, 2016). In the Cronbach alpha criterion, all indicators are assumed to be equally reliable; however, in PLS analysis, indicators are prioritized based on their reliability. Applying Composite reliability measure to check the internal consistency reliability is appropriate, since Cronbach alpha severely underestimates the latent variables' internal consistency reliability (Hair et al., 2016; Henseler, Hubona, & Ray, 2016; Ong & Puteh, 2017). In composite reliability criterion, each indicator is assumed to have unique loading, and is interpreted like the Cronbach alpha coefficient.

**Table 1: Outer Loadings** 

	IT IS	ITMR	SCAD	STRA
ITIS1	0.822			
ITIS2	0.840			
ITIS3	0.782			
ITIS5	0.868			
ITIS6	0.847			
ITIS7	0.848			
ITIS8	0.855			
ITMR1		0.908		
ITMR2		0.860		
ITMR3		0.917		
ITMR4		0.899		
ITMR5		0.919		
ITMR6		0.851		
ITMR7		0.828		
SCAD1			0.849	
SCAD10			0.806	
SCAD11			0.898	
SCAD12			0.892	
SCAD13			0.841	
SCAD2			0.835	
SCAD4			0.913	
SCAD5			0.894	
SCAD6			0.916	
SCAD8			0.875	
SCAD9			0.847	
STRA2				0.894
STRA3				0.900
STRA4				0.883
STRA5				0.914
STRA6				0.884
STRA1				0.888

The value of ICR for both Cronbach alpha coefficient and composite reliability coefficient is expected to be above 0.70 during the initial phase, and is considered satisfactory if it is equal to or above 0.80 at the advanced stage of research, whereas, indicators are said to be less reliable if this value lies below 0.60 (Naala, Nordin, & Omar, 2017).

**Table 2: Reliability** 

	Cronbach's Alpha	rho_A	CR	(AVE)
IT IS	0.929	0.929	0.943	0.701
ITMR	0.953	0.954	0.961	0.781
SCAD	0.968	0.969	0.972	0.757
STRA	0.950	0.950	0.960	0.799

In case of validity, there are two subtypes which are usually observed, namely, the discriminant and convergent validity. The convergent validity implies that all the indicators for a particular construct are representing one and the same construct, and that can be confirmed by checking their unidimensionality. According to Shuhaiber (2018), the criterion used for measuring the convergent validity is the average variance extracted (AVE). The minimum acceptable range of AVE is 0.5 for the convergent validity to be sufficient, which implies that on average, more than half of the indicators' variance is explained by the latent variable (Akter, Fosso Wamba, & Dewan, 2017; Hair, Matthews, Matthews, & Sarstedt, 2017). On the other hand, discriminant validity is a concept which shows that there must be a sufficient difference among two conceptually different concepts, i.e., the set of indicators should not be uni-dimensional in nature.

To measure discriminant validity in PLS path modelling, two measures have been put forward, namely, the Fornell-Larcker criterion and the cross loadings criterion. The former postulates that more variance is shared between a latent variable and its own indicators, as compared to any other latent variable (Basheer, Hafeez, Hassan, & Haroon, 2018; Shuhaiber, 2018). From a statistical point of view, it is recommended that for each latent variable, the AVE must exhibit greater value than the highest squared correlation between a certain latent variable with any other latent variable. Whereas, the latter criterion is relatively liberal in comparison to the former one, as each indicator loading is expected to have greater value in comparison to its cross-loadings (Richter et al., 2016).

Table 3: Validity

	ITIS	ITMR	SCAD	STRA
IT IS	0.888			
ITMR	0.838	0.884		
SCAD	0.809	0.719	0.870	
STRA	0.841	0.610	0.695	0.894

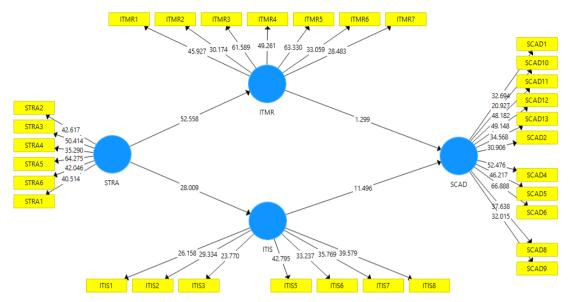


Figure 2: Structural Model

**Table 4: Direct Relationships** 

	(O)	(M)	(STDEV)	( O/STDEV )	P Values
ITIS -> SCAD	1.028	1.015	0.089	11.496	0.000
ITMR -> SCAD	-0.142	-0.127	0.109	1.299	0.097
STRA -> ITIS	0.841	0.844	0.030	28.009	0.000
STRA -> ITMR	0.910	0.910	0.017	52.558	0.000
STRA -> SCAD	0.736	0.740	0.055	13.324	0.000

For the PLS structural model, the author can interpret the individual path coefficients as the standardized beta coefficients of OLS regression. While for the statistical inference of path coefficients, the resampling technique must be used, such as the bootstrapping procedure (Henseler et al., 2016; Naala et al., 2017; Ong & Puteh, 2017). This procedure enables the statistical testing of  $H_0$  (null hypothesis) against the  $H_1$  (alternative hypothesis).

The analysis of mediating effects is another key evaluation criteria for checking the presence of indirect and direct relationships of a particular construct's predecessors (Basheer, Siam, Awn, & Hassan, 2019; Henseler et al., 2016; Naala et al., 2017). Thus, it is recommended that practitioners and researchers should primarily assess the direct effects of their hypothesized path model using PLS path modelling, and then assess the additional effects, such as, mediating, and moderating effects.

Table 5: Mediation

	(O)	(M)	(STDEV)	( O/STDEV )	P Values
STRA -> ITIS -> SCAD	0.865	0.856	0.071	12.124	0.000
STRA -> ITMR -> SCAD	0.129	-0.116	0.100	1.290	0.099

IF the outer model estimation exhibits reliable and valid estimates, it is possible to successfully evaluate the inner path model. In this regard, the coefficient of determination (R<sup>2</sup>) for the endogenous latent variables is the essential criterion. R<sup>2</sup> values are described by Richter et al. (2016) as substantial, weak and moderate, for the following values i.e. 0.67, 0.19 and 0.33, respectively. Thus, R-squared is said to be moderate if only a few exogenous latent variables explain the endogenous latent variable of the inner path model structures.

Table 6: R-Square

	R Square
IT IS	0.708
ITMR	0.827
SCAD	0.832

The effect size can be evaluated for each of the effects that occur in the path model using Ong and Puteh (2017)  $f^2$ . This  $f^2$  value for effect size shows the increase in  $R^2$  in relation to the percentage of unexplained variance of endogenous latent variable. The  $f^2$  values are described by Ong and Puteh (2017) as small, large and medium, for the values 0.02, 0.35 and 0.15, respectively.

Assessing the model's predictive ability is another structural model assessment criterion. In this regard, the Stone-Geisser's Q<sup>2</sup> (Hair et al., 2016; Hair et al., 2017; Richter et al., 2016) is a predominant measure to predict the model's predictive capability with the help of the blindfolding method (Zahra, Hameed, Fiaz, & Basheer, 2019). According to this criterion, the research model must well-predict the indicators of the endogenous latent variable.

The application of blindfolding procedure is possible if endogenous latent variables have operational reflective measurement model. If, for certain endogenous construct, this value turns out to be non-zero ( $Q^2 > 0$ ), then it indicates that the explanatory variables have some predictive relevance. Thus, like  $f^2$  evaluation, the  $Q^2$  measure also provides the relative impact of predictive relevance and 0.02, 0.35 and 0.15 are described as a latent variable's small, large, and medium predictive relevance.

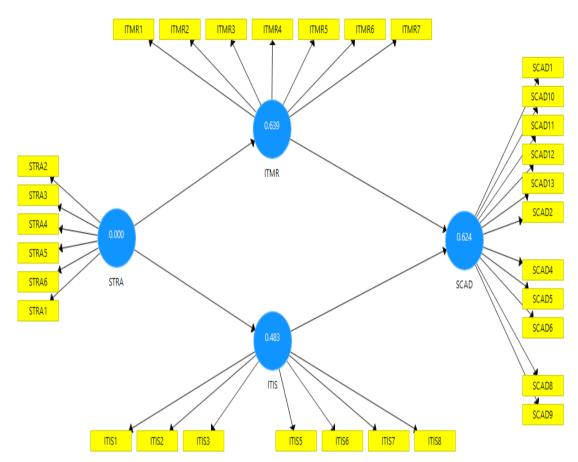


Figure 3: Blindfolding

Table 7: Q-Square

	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
IT IS	1519.000	785.599	0.483
ITMR	1519.000	547.979	0.639
SCAD	2387.000	897.373	0.624

## 6. CONCLUSION

As in other studies, this study also offers several implications for future research. The prime objectives of the researcher include, i) identifying the impact of IT – business strategic alignment on competitive advantage, ii) determining the influence of proposed antecedents on the strategic alignment, iii) determining whether sustainable competitive

advantage is directly influenced by the proposed antecedents, and iv) gauging the role of strategic alignment as a mediator between sustainable competitive advantage and proposed antecedents.

Insofar as the first objective is concerned, the present study discovers a significant impact of strategic alignment on the sustainable competitive advantage. In this context, the research findings of Mukerji (2020) indicate that sustainable competitive advantage and strategic alignment are significantly related in both interview studies and in survey (H1). It thus implies that adopting strategic alignment significantly improves the ability of organizations to improve their competitive position. In context of this research, a few IT managers emphasize that the Indonesian organizations' sustainable competitive advantage can be enhanced through strategic alignment.

Consistent with this study's second objective, i.e., this study presents empirical evidence of strategic IS alignment and its relationship with its antecedents. In this section, several hypotheses concerning the relationships among IT – business strategic alignment and several antecedents are discussed. Findings reveal the acceptance of five direct hypotheses, indicating that IT managerial resource, belief and values, service quality, IT implementation success and leadership have a direct and a significant impact on strategic alignment (Haseeb et al., 2019). However, one insignificant relationship is also identified i.e. insignificant impact of process and structure on the strategic alignment (Yang, 2017).

Besides, the survey results reveal that IT managerial resources significantly influences the strategic alignment (Haseeb et al., 2019). Thus, the findings suggest that the higher the level of strategic implementation by the IT managers, and the more the top management recognizes their IT capabilities and resources, the more will be the chances of achieving strategic alignment. Furthermore, the interviews also reveal another key finding i.e., the strategic alignment and knowledge-sharing among IT managers and business are related to each other. In fact, several interviewees share how instrumental they perceive IT - business shared knowledge is for the strategic alignment. They also shared some examples regarding their understanding of the organization's business environment (Yang, 2017), particularly in terms of aims, tasks, and roles. It explains how business managers understand and appreciate the work of IT department.

Hence, a significant positive association is found in this study i.e., among strategic alignment and IT implementation success, which supports the H7 hypothesis. Similar results are illustrated from the follow-up interviews, where there a linkage is found among the extent that management engages in strategic alignment and obtaining more knowledge on how to utilize IT.

In this study, the mediating role of strategic alignment is investigated between the sustainable competitive advantage and IT managerial resource. However, results discover a mediating role of strategic alignment in the relationship between sustainable competitive advantage and IT managerial resource (Haseeb et al., 2019). Thus, greater knowledge-sharing among top management and IT managers is likely to enhance an

Indonesian organizations' ability to offer product or service (Haseeb et al., 2019), which will consequently lead to the successful achievement of sustainable competitive advantage. Therefore, to enhance their product or service-providing capability, Indonesian organizations are required to prioritize knowledge-sharing to gain competitive advantage in the market.

#### 7. CONTRIBUTION

In this study, various perspectives have been considered to measure IT – business strategic alignment, for instance, profile deviation, moderation, covariation, mediation, gestalt, and matching. IT strategy - business relationship presents a relatively more sensitive analysis of the desirable conditions and resources that are needed to deploy the IT potential. Moreover, the researchers (R. L. Lee, 2017; Sha et al., 2020) assume business-IT alignment to be a relationship in which IT strategy is derived from the business strategy. On the other hand, the case of how business strategy determines IT strategy has also been theorized by scholars in prior studies (MacLean & Titah, 2018).

#### 8. LIMITATIONS

One of the key contributions of this study is the proposed causal model, which has enriched the IT's strategic alignment research by incorporating an integrative approach, which involves sustainable competitive advantage, IT-business alignment antecedents, and strategic alignment as the mediator. In addition, another important contribution of this research is its contribution to the IS theory in terms of methodology. To this end, the structural equation modeling is used coupled with the AMOS approach for data analysis (Lee, Lee, & Park, 2017). In this study, the integration of SEM tests creates a strong foundation for the theory of strategic alignment. Summing up, the present study is expected to provide valuable insights into the experiences of managers in terms of strategic alignment, and the impact of this strategic alignment on sustainable development. Thus, on the basis of the obtained research findings (McAdam, Miller, & McSorley, 2019), it can be stated that the research model proposed in this study can be used in future research as a primary step to identify ways through which strategic alignment can be achieved, which would also facilitate firms in the maximization of their benefits.

The research findings support some of the research hypotheses, while rejecting the others; therefore, there is still a room for further research i.e., to develop a more comprehensive understanding about the nature of these relationships. The findings and obtained results are expected to improve the association among business managers and IT firms, which consequently facilitates the process of achieving sustainable competitive advantage.

## REFERENCES

- Adaileh, R. M. (2017). The Level of IT-business Strategic Alignment and Its Impact on Organizational Excellence: A Study of the Jordanian Mining Sector. *International Review of Management and Marketing*, 7(5), 85-92.
- Akter, S., Fosso Wamba, S., & Dewan, S. (2017). Why PLS-SEM is suitable for complex modelling? An empirical illustration in big data analytics quality. *Production Planning* & *Control*, 28(11-12), 1011-1021. https://doi.org/10.1080/09537287.2016.1267411
- Arnott, D., Lizama, F., & Song, Y. (2017). Patterns of business intelligence systems use in organizations. *Decision Support Systems*, 97, 58-68. https://doi.org/10.1016/j.dss.2017.03.005
- Basheer, Hafeez, M. H., Hassan, S. G., & Haroon, U. (2018). Exploring the Role of TQM and Supply Chain Practices for Firm Supply Performance in the Presence of Organizational Learning Capabilities: A Case of Textile Firms in Pakistan. *Paradigms*, 12(2), 172-178. http://dx.doi.org/10.5267/j.uscm.2018.9.001
- Basheer, Siam, M., Awn, A., & Hassan, S. (2019). Exploring the role of TQM and supply chain practices for firm supply performance in the presence of information technology capabilities and supply chain technology adoption: A case of textile firms in Pakistan. *Uncertain Supply Chain Management*, 7(2), 275-288. http://dx.doi.org/10.5267/j.uscm.2018.9.001
- Chukwuemeka, O. W., & Onuoha, B. (2018). Dynamic Capabilities and Competitive Advantage of Fast Foods Restaurants. *International Journal of Management Science and Business Administration*, 4(3), 7-14. http://dx.doi.org/10.18775/ijmsba.1849-5664-5419.2014.43.1001
- Dobner, T., Weeger, A., & Gewald, H. (2017). *How Do IT Capabilities enable IT Agility? A Qualitative Study of German Industry*. Paper presented at the Pacific Asia Conference on Information Systems (PACIS).
- Hair, Hult, G. T. M., & Ringle, C. (2016). A primer on partial least squares structural equation modeling (PLS-SEM): Sage publications.
- Hair, Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107-123. https://doi.org/10.1504/IJMDA.2017.087624
- Haseeb, M., Hussain, H. I., & Kot, S. (2019). Role of social and technological challenges in achieving a sustainable competitive advantage and sustainable business performance. *Sustainability*, 11(14), 3811. https://doi.org/10.3390/su11143811
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: updated guidelines. *Industrial Management & Data Systems*. https://doi.org/10.1108/IMDS-09-2015-0382
- Hsieh, C.-H., & Wu, Y.-C. (2016). *A New QFD Model for Strategic Resource Based Product Innovation*. Paper presented at the ISPIM Innovation Symposium.

- Iamratanakul, S. (2018). A conceptual framework of implementing business strategy for the NPD process. *Review of Integrative Business and Economics Research*, 7(1), 116.
- Islam, M. N., Furuoka, F., & Idris, A. (2020). Employee championing behavior in the context of organizational change: a proposed framework for the business organizations in Bangladesh. *Journal of Asia Business Studies*. https://doi.org/10.1108/JABS-01-2019-0019
- Järlström, M., Saru, E., & Vanhala, S. (2018). Sustainable human resource management with salience of stakeholders: A top management perspective. *Journal of Business Ethics*, 152(3), 703-724. https://doi.org/10.1007/s10551-016-3310-8
- Jogaratnam, G. (2017). The effect of market orientation, entrepreneurial orientation and human capital on positional advantage: Evidence from the restaurant industry. *International Journal of Hospitality Management*, 60(1), 104-113. https://fardapaper.ir/mohavaha/uploads/2018/05/dx.doi.org/10.1016/j.ijhm.201 6.10.002
- Kamariotou, M., Kitsios, F., & Grigoroudis, E. (2018). Strategic decision making using multicriteria analysis: Information systems performance evaluation in Greek SMEs. Paper presented at the Proceedings of the 7th International Symposium and 29th National Conference on Operational Research.
- Lara, E. L. F., & Lillo, A. L. P. Efectividad del Proceso de Planificación Estratégica de Sistemas de Información: un Estudio Comparativo de Casos.
- Lee, Lee, K.-E., & Park, D.-J. (2017). Determinants of quality of life in patients with fibromyalgia: A structural equation modeling approach. *PloS one*, *12*(2), e0171186. https://doi.org/10.1371/journal.pone.0171186
- Lee, R. L. (2017). The Ambidextrous Pursuit of Strategic Information Technology Alignment and Organizational Agility in the Community Benefit Sector.
- Liu, W., & Atuahene, K. (2018). Enhancing product innovation performance in a dysfunctional competitive environment: The roles of competitive strategies and market-based assets. *Industrial Marketing Management*, 73, 7-20. https://doi.org/10.1016/j.indmarman.2018.01.006
- Loeser, F., Recker, J., & Brocke, J. v. (2017). How IT executives create organizational benefits by translating environmental strategies into Green IS initiatives. *Information Systems Journal*, 27(4), 503-553. https://doi.org/10.1111/isj.12136
- López, E., & Paz, A. I. (2017). *Ontology of Strategic Information Systems Planning*. Paper presented at the CONF-IRM.
- Luftman, J., Lyytinen, K., & Zvi, T. b. (2017). Enhancing the measurement of information technology (IT) business alignment and its influence on company performance. *Journal of Information Technology*, 32(1), 26-46. https://doi.org/10.1057%2Fjit.2015.23
- MacLean, D., & Titah, R. (2018). Conceptualizing IT Service Management as a Management Control System for Business-IT Alignment.

- Mao, H., Liu, S., & Zhang, J. (2016). Information technology resource, knowledge management capability, and competitive advantage: The moderating role of resource commitment. *International journal of information management*, *36*(6), 1062-1074. https://doi.org/10.1016/j.ijinfomgt.2016.07.001
- McAdam, R., Miller, K., & McSorley, C. (2019). Towards a contingency theory perspective of quality management in enabling strategic alignment. *International Journal of Production Economics*, 207, 195-209. https://doi.org/10.1016/j.ijpe.2016.07.003
- Mitić, S., Nikolić, M., & Jankov, J. (2017). The impact of information technologies on communication satisfaction and organizational learning in companies in Serbia. *Computers in Human Behavior*, 76, 87-101. https://doi.org/10.1016/j.chb.2017.07.012
- Mukerji, M. (2020). Re-examining strategic and developmental implications of e-Choupal, India. *The Electronic Journal of Information Systems in Developing Countries*, 86(4), e12132. https://doi.org/10.1002/isd2.12132
- Naala, M., Nordin, N., & Omar, W. (2017). Innovation capability and firm performance relationship: A study of pls-structural equation modeling (Pls-Sem). *International Journal of Organization & Business Excellence*, 2(1), 39-50.
- Obeidat, B. Y., Hadidi, A., & Tarhini, A. (2017). Factors affecting strategy implementation. *Review of International Business and Strategy*. https://doi.org/10.1108/RIBS-10-2016-0065
- Ong, M. H. A., & Puteh, F. (2017). Quantitative Data Analysis: Choosing Between SPSS, PLS, and AMOS in Social Science Research. *International Interdisciplinary Journal of Scientific Research*, 3(1), 14-25.
- Richter, N. F., Cepeda, G., & Roldán, J. L. (2016). European management research using partial least squares structural equation modeling (PLS-SEM). *European Management Journal*, 34 (6), 589-597.
- Schanz, J., & Lille, C. (2017). Customer Experience Strategy Turned into Hands-On Actions Through a Design Approach. *Design Management Journal*, 12(1), 28-39. https://doi.org/10.1111/dmj.12037
- Sha, X., Chen, J. E., & Teoh, S. Y. (2020). The dynamics of IT-business strategic alignment: evidence from healthcare information systems implementation. *Information Technology & People*. https://doi.org/10.1108/ITP-08-2019-0414
- Shannak, R. O., & Obeidat, B. Y. (2016). Investigating a Causal Model of IT-Business Partnership and Competitive Advantage.
- Shoja, A., & Marakas, G. M. (2019). Security Failure in Electronic Health Record Systems: The Influence of Meaningful-use and IT Security Investment.
- Shuhaiber, A. (2018). The role of perceived control, enjoyment, cost, sustainability and trust on intention to use smart meters: An empirical study using SEM-PLS. Paper presented at the World Conference on Information Systems and Technologies. https://doi.org/10.1007/978-3-319-77712-2\_74

- Stead, J. G., & Stead, W. E. (2019). Why Porter Is Not Enough: Economic Foundations of Sustainable Strategic Management. In *Rethinking Strategic Management* (pp. 67-85): Springer. https://doi.org/10.1007/978-3-030-06014-5
- Warnaby, G., & Shi, C. (2018). Planning and Implementing Pop-up Activities: Strategic Objectives. In *Pop-up Retailing* (pp. 49-53): Springer. https://doi.org/10.1007/978-3-319-71374-8 6
- Weerasinghe, K., Scahill, S. L., & Taskin, N. (2018). Development of a Taxonomy to be used by Business-IT Alignment Researchers. *Development*, 6, 26-2018.
- Wikhamn, W. (2019). Innovation, sustainable HRM and customer satisfaction. International Journal of Hospitality Management, 76, 102-110. https://doi.org/10.1016/j.ijhm.2018.04.009
- Williams, J., Torres, H., & Carte, T. (2018). A review of the IS strategic alignment literature: A replication study.
- Yang, F. X. (2017). Effects of restaurant satisfaction and knowledge sharing motivation on eWOM intentions: the moderating role of technology acceptance factors. *Journal of Hospitality & Tourism Research*, 41(1), 93-127. https://doi.org/10.1177%2F1096348013515918
- Zahra, M., Hameed, W. U., Fiaz, M., & Basheer, M. F. (2019). Information Technology Capability a Tool to Expedite Higher Organizational Performance. *UCP Management Review (UCPMR)*, 3(1), 94-112.