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Research Article

Does Organizational Culture Influence IT-Business Alignment and Business Performance in Large Manufacturing Companies?

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Abstract.

This study examines and analyzes the influence of Organizational Culture on business alignment and business performance in large manufacturing companies. This study used a quantitative research method; data were collected using a questionnaire using SmartPLS 4. This study involved 47 large manufacturing companies as unit analysis with multistage sampling in sample selection, first by purposive sampling and second by the Slovin formula. The results of this study stated that organizational culture affects IT-business alignment significantly but has no effect on the business performance. The collaboration and formalization indicators effect on strengthening organizational culture on IT-business alignment. On the other side, the lack of creative and innovative culture in the organizational culture of manufacturing companies has an impact on failure in supporting business performance. The results of this study provide valuable insight for IT and business executives in developing the organizational culture of large manufacturing companies that is suitable to cope with IT implementation strategically namely IT-business alignment in supporting business performance successfully.

Keywords: organizational culture, IT-business alignment, business performance

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1. Introduction

The purpose of implementing IT in general is to achieve maximum benefits, which are not only in the form of operational efficiency and effectiveness to always be able to win the competition with its competitors, but also to support business performance [1-4]. One of the strategic efforts to support and achieve business performance is to align business strategy or IT-Business Alignment. IT-Business Alignment is a process that combines technological (IT) aspects and non-technological aspects (i.e. business aspects) in its application in business organizations [5]. The research results of Luftman et al. [6], stated that IT-Business Alignment is the harmonization of IT strategy and business strategy. Meanwhile Henderson & Venkatraman [7], emphasis on alignment

at the planning (i.e. formulation) level and at the implementation (i.e. operational) level. Strategic Alignment is the alignment of IT and business, in providing solutions, which are the result of collaboration between the two. Strategic Alignment is also specifically known as IT-Business Alignment [8]. Furthermore, IT-Business Alignment is a dynamic collaboration and synchronization process that is carried out so that the vision, mission, overall strategic and tactical plans, and process of IT, support are supported by the vision, mission, plans, and process of business. In this research, the term IT-Business Alignment represents the same meaning as the term Strategic Alignment [9-10]. The evidence of IT-Business Alignment in supporting business performance can be seen in companies that are successful in IT-Business Alignment, which is shown by better business performance, so that IT can support the company's competitive advantage, compared to companies that do not [3,11]. Success in IT-Business Alignment is also an indication of success and the benefits derived from IT investments [7].

However, not all IT-Business Alignment runs smoothly, the mistake in choosing the right process in conducting IT-Business Alignment is one of the causes [7]. Even at a more detailed level, the relationship between IT-Business Alignment and the performance of the company to be addressed remains unrevealed [12,13]. As a strategy at the business level, IT-Business Alignment must be able to be broken down in the form of programs, project portfolios at the execution level, in order to facilitate and focus on providing benefits in the form of IT-Business Value. However, many problems and obstacles were encountered, not only in the planning aspect of the alignment but also in the execution aspect [7].

To acquire the right IT-Business Alignment strategy and the maximum Business Value is not just relying on the technology aspect. The failure of some enterprises in IT-Business Alignment initiative shows that the root cause is not only in technology, but in non-technology aspects like the ability of the business organizational culture to cope with the changes that come along with the IT implementation initiative [14]. Therefore business organizational culture must be managed properly [15,16]. Companies need to adapt and develop a new organizational culture, which in some cases has a ripple effect on organizational elements from business and IT domains [17]. However, in real conditions on the ground, the role of organizational culture has received less attention from IT and business executives, both in the IT-Business Alignment process and in the process of implementing the strategy resulting from the alignment [18,19]. Other facts show that not all manufacturing companies can develop a suitable and appropriate organizational culture to cope with the dynamic problems of IT implementation. IT implementation is characterized by adaptive and innovative technology and is often

disruptive at a certain level. Many companies fail in IT implementation [18], cause of unable to adjust the organizational culture, especially to work culture. Some of the causes of this failure include the lack of attention from the company management in developing an adaptive and innovative organizational culture in dealing with changes that come with the implementation of IT. This has made IT-Business Alignment the primary concern of business leaders for several years [20,21]. Problems in IT-Business Alignment related to the unclear exact model in its application, also make IT-Business Alignment one of the main concerns and priorities of CIOs [20].

The previous studies have provided several solutions related to the problem of organizational culture towards IT-Business Alignment. The result of research by Al-Ali et al., [22] suggests that the appropriate organizational culture supports IT implementation. According to Al-Ali et al., [22], the hierarchical culture influences planned and emergent changes in IT implementation to support business performance. Other research from Onyango [23] also stated that organizational beliefs and values affect organizational culture to support IT implementation for organizational performance. Another research by Karahanna & Watson [24] explains that combining IT culture with the business culture can support IT-Business Alignment. Organizational culture also strongly supports IT and business alignment processes [15,16]. Organizational cultures such as open-minded, creative, innovative and collaborative cultures are indispensable among business executives and IT executives [14]. The characteristics of organizational culture also reciprocally provide a strong influence on achieving the IT-Business Alignment maturity level of a business organization [25]. The role of organizational culture also shows a strong influence on the IT-Business Alignment process [26-29]. Organizational culture has a very critical role [26-27]. However, in real conditions on the ground, the role of organizational culture has received less attention from IT and business executives, both in the IT-Business Alignment process and in the process of implementing the strategy resulting from the alignment [18,19].

However, the alternative solutions proposed by each above, it still has drawbacks because these studies cannot provide a comprehensive answer especially in solving the problem of what kind organizational culture and its development mechanism to support IT-Business Alignment and Business Performance effectively. Another drawback is that it does not have a better IT-Business Alignment model and mechanisms to support business performance efficiently. The development of an adaptive and innovative or collaborative organizational culture should be able to overcome obstacles and to build the IT-Business Alignment model. A good IT-Business Alignment model, which is in line with the conditions faced by the company, will make a high contribution to achieving

business performance. Beside The importance of the role of organizational culture, especially in strategic level of IT-Business strategic alignment to achieve business performance is a driver of this research. The results of this study are useful for IT and Business executives, and other professional in manufacturing companies. In addition, the results of this research provide economic benefits for large manufacturing companies to growth and opportunities to provide social benefits for the environment.

2. Material and Methods

2.1. Organizational culture

Organizational culture is a system of shared meaning shared by the member of an organization, which distinguishes an organization from others [30]. The Organizational culture has a significant role in supporting the implementation of IT to gain IT-Business benefits [26-29]. In IT implementation, especially in its mechanism, the shared meaning system referred to by Robbins & Judge [30], can be seen in communication procedures, belief systems use, and stakeholder behavior. For organizations that utilize IT to improve their performance, the business culture needs to align with the IT culture (IT Subculture), where speed, simplification (i.e. Business Process Reengineering), and producing timely information (real-time) are characteristics of IT culture. In the implementation of IT, the organizational culture factor occupies a critical position because it brings together two types of culture, namely the existing organization culture and the IT culture that comes along with the IT implementation, which is sometimes inconsistent. The role of organizational culture formation from these two streams as one of the critical factors in IT implementation in increasing business competitiveness. Therefore aligning business culture and IT culture becomes a must process in IT implementation and can be done through organizational change management [15,31,32].

According to Cameron & Quinn [33], organizational culture has four characteristics such as of clan culture, adhocracy culture, market culture, and hierarchy culture. The characteristic of Clan culture is in the form of norms and behaviors that emphasize open communication, collaboration, and participation. This clan culture organization focuses on people, empowerment, and creating a friendly work environment. Adhocracy culture promotes flexibility and adaptability by emphasizing an informal pattern of relationships without the boundaries of bureaucratic rules and procedures. With these characteristics, an adhocracy culture provides enormous space to focus on creativity and innovation that lead to new ideas. Market culture drives by strong tenacity and competitive spirit

in achieving goals and success. The main characteristics of market culture indicate by organizational norms and behaviors that focus on results, with efforts to achieve productivity that try to exceed the initial target. A hierarchical culture has characteristics that focus on organizing and coordinating by formalizing work processes with Standard Operating Procedures to increase efficiency and consistency. Therefore, a hierarchical culture is more effective, when compared to other organizational cultures, in terms of stabilizing and controlling activities within the company. The main characteristics of the norms and behavior of organizations with a hierarchical culture indicate by emphasizing control, reliability, and adherence to rules and procedures. The hierarchical culture internally focused on its operations, always seeking alignment and applying high standards to the business operations.

Research by El-Mekawy et al. [25], states that organizational culture influences the achievement of IT-Business benefits. The IT implementation requires a culture that is an acculturation of the old culture (i.e. before the implementation of IT) and an adaptive and innovative IT culture as a new organizational culture. Therefore, the culture characterized by IT needs to build to support work patterns with an open mind and adaptive, encourage creativity and innovation, and promote collaboration. The overall organizational culture characterized by the IT culture mentioned above is in the characteristics of the clan, adhocracy and hierarchical. Meanwhile, market culture does not fit into IT culture [3,34].

2.2. IT-Business alignment

IT-Business Alignment has become a separate focus area for organizations that have leveraged IT. This alignment must not only be done at the strategic level but also to the functional level, where the IT-Business initiatives that have been planned are carried out in real life. Therefore, harmonization of IT-Business Alignment Luftman et al. [6] is not only at the planning level but also at the implementation level [7]. IT-Business Alignment in this research uses the Strategic Alignment Model (SAM) theory developed by Henderson & Venkatraman [7]. The SAM theory has two main focuses, namely firstly solving problems at the strategic level, and secondly completing preparations (plans) for the integration of business and IT resources at the operational level. The SAM theory creates a harmonious relationship between IT and business at the strategic planning level, namely by making plans that align strategy and function integration plans in both IT and business areas.

The final result of aligning IT strategy and business strategy is a complete company business strategy. In a complete business strategy, business goals can be supported by IT plans through their processes and activities, and on the other hand business executives make decisions to support all IT strategies and plans. These IT strategies and plans including all IT investments, IT projects, and initiatives are geared towards supporting business objectives. In other words, the results of IT-Business Alignment show the same priority from IT executives and business executives. Strategic Alignment is the alignment of IT and business, in providing solutions, which are the result of collaboration between the two. Strategic Alignment is also specifically known as IT-Business Alignment [35,36].

2.3. Business performance

Business performance is the operational achievement of the organization that is shown in the form of effectiveness and efficiency levels [37]. Business performance is a series of organizational effectiveness measures, including operational and financial results levels [38]. Business performance is the comparison of business performance expectations with the achieved realization of business performance within a certain period. The Business companies have good performance internally if the comparison gives a value greater than one. According to Kaplan & Norton [39], business performance measures by two aspects, namely non-financial and financial. Business performance needs to measure from these two aspects. Financial performance alone is not enough to explain the trends occurring in the organization, so it needs to complement operational measures, which are the drivers of financial performance [39]. Mollah et al. [40], states that business performance in the financial aspect is indicated by indicators of ROE (Return on Equity), and ROA (Return on Assets). ROA is the company's performance level in obtaining profit. ROE is a profitability ratio to assess a company's ability to generate profit from investments.

Meanwhile, non-financial aspects generally generated in the area of business operations such as productivity, market dominance, product quality [11,41], reputation [11], and employee capacity development or personnel development [41]. The same thing stated by Wu et al. [12], that business performance measurement can use Balance Scorecard indicators. In the implementation of IT, a measure of the success of company performance can be known through the IT-Business Value resulting from the implementation of IT, such as business process performance [42,43], business operational innovation [11]), and performance between business processes [42,45]. Related to IT-Business Value,

the statement of Kaplan & Norton [41] is also supported by research results of Tallon et al., [46] stated that financial and economic measures failed to accurately assess the outcomes (benefits) of a complete IT project. This study takes financial and non-financial performance measures to a more comprehensive perspective on business performance.

2.4. Population and sampling

The population of this research is 1693 large manufacturing companies in East Java, Indonesia [47]. The sample selection uses multistage sampling, namely first selecting manufacturing companies by purposive sampling with the criteria of having used IT-Business Strategy Master Plan and Enterprise Resources Planning as a form of implementing information systems, having an IT Department and an Organizational Change Management Unit, where the IT Department is directly under the CEO of the company. There are 155 companies selected in the first process. Secondly, based on probability random sampling using the Slovin formula, a sample calculation was carried out, which resulted in 105 companies. Respondents from each sample company varied from two to six respondents, representing IT executives and Business executives. With the unit of analysis in the form of a company, data collected from questionnaires were sent to respondents via email and then converted by making an average for all respondent data in each company as the unit analysis. The converted data is then processed statistically with SmartPLS 4.0.8.7. With the conduct during the period of Covid-19, this research can obtain the conditions for IT implementation on changes to the business environment.

2.5. Variable operational definitions

The operational definition for each research variable is as follows:

2.6. Research model

The research model is as follows Figure 1:

2.7. Research novelty

According to Cohen [53], the novelty of this research is the indicator to measure the IT-Business Alignment variable based on Strategic Alignment Model Theory [7] and the latest research related to IT-Business strategic alignment. The uses of IT-Business

Table 1: Independent Variable Organizational Culture (X_1).

No.	Indicator	Declaration Item	Symbol	Source
1.	Creative and Innovative ($X_{1.1}$)	The company has an organizational culture that is adaptive to changes.	$X_{1.1.1}$	[15,24-34];
		The company has an organizational culture that encourages employee creativity.	$X_{1.1.2}$	
		The company has an organizational culture that supports employee innovation.	$X_{1.1.3}$	
2.	Collaboration ($X_{1.2}$)	The company has a culture of collaboration in implementing tasks.	$X_{1.2.1}$	
		The company has participative culture in carrying out tasks for all employees.	$X_{1.2.2}$	
		The company has a teamwork culture in carrying out tasks.	$X_{1.2.3}$	
3.	Open-Minded ($X_{1.3}$)	The company has a culture that is open to any opinions or new ideas.	$X_{1.3.1}$	
		The company has a culture that respects the opinion of each team member.	$X_{1.3.2}$	
		The company has a culture of building shared commitment within the team.	$X_{1.3.3}$	
4.	Formalization ($X_{1.4}$)	The company has an integrated work culture between one unit and another.	$X_{1.4.1}$	
		The company has a systematic and well-structured work culture outlined in standard procedures.	$X_{1.4.2}$	
		The company has an effective and efficient work culture in carrying out its work.	$X_{1.4.3}$	

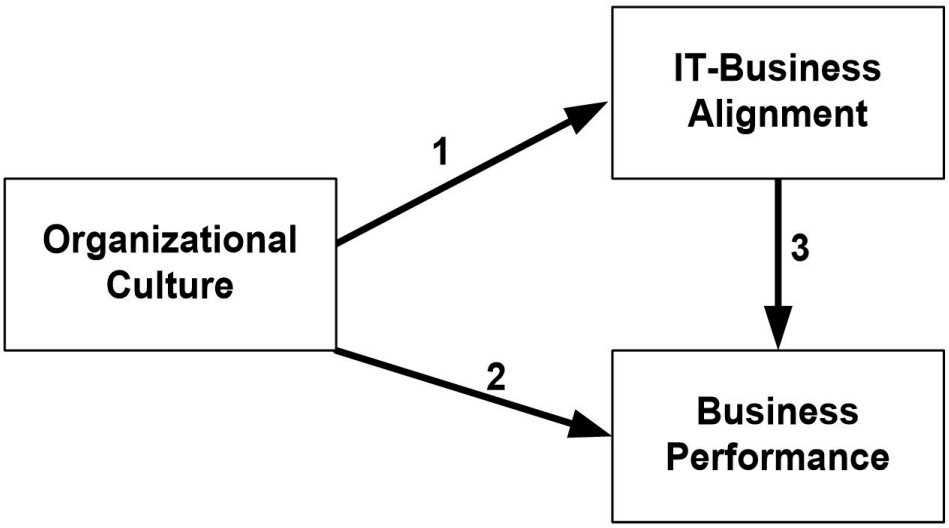

Figure 1: Research Model. Source: Author's own work.

Alignment indicators are new and different from previous research. A strategy must have close connectivity with the execution mechanism. The indicators used in the IT-Business

Table 2: Dependent Variable IT-Business Alignment (Y_1).

No.	Indicator	Declaration Item	Symbol	Source
1	IT-Business Understanding ($Y_{1.1}$)	IT executives and business executives exchange knowledge about their respective domains	$Y_{1.1.1}$	[6, 7, 10, 12, 25, 35, 36, 46, 50-53]
		IT executives understand business strategy, related to IT opportunities to support business strategy	$Y_{1.1.2}$	
		Business Executives understand IT strategy in relation to the consequences of changes in IT implementation. (eg on IT processes, work culture, organizational structure, and funding).	$Y_{1.1.3}$	
2	IT-Business Strategic Priorities Integration ($Y_{1.2}$)	The resulting IT-Business alignment strategy is a aligned strategy from both domains (IT and Business).	$Y_{1.2.1}$	
		The resulting IT-Business alignment strategy contains programs with mutually agreed priorities.	$Y_{1.2.2}$	
		The priorities listed in the Business-IT alignment strategy contain a joint implementation plan.	$Y_{1.2.3}$	
3	Business Operational and IT Governance Process Integration ($Y_{1.3}$)	Business operations that show the process of integration between IT Governance and Business processes.	$Y_{1.3.1}$	
		The integration process is carried out by combining business objectives and IT governance.	$Y_{1.3.2}$	
		Business operations are carried out with new procedures, which are a combination of IT governance and business procedures (eg new SOPs).	$Y_{1.3.3}$	
4	IT-Business Partnership ($Y_{1.4}$)	Business and IT Domains create a Business-IT alignment strategy together.	$Y_{1.4.1}$	
		Business and IT domains support each other in the implementation of the Business-IT alignment strategy.	$Y_{1.4.2}$	
		Business Domain and IT carry out supervision, evaluation and improvement of alignment together .	$Y_{1.4.3}$	

Source: Secondary Data Processed, 2023

Alignment cover both of these things. Several previous studies did not fully cover the IT strategy and execution aspects. So, with different indicators from previous research, the IT-Business Alignment in this research can fully reveal the close connectivity of

TABLE 3: Dependent Variable Business Performance (Y_2).

No.	Indicator	Declaration Item	Symbol	Source
1.	Customer Satisfaction Delivery ($Y_{2.1}$)	Consumers are satisfied with the ease of access to the information provided.	$Y_{2.1.1}$	[2, 11, 37-46, 52]
		Consumers are satisfied with the speed of information services provided.	$Y_{2.1.2}$	
		Consumers are satisfied with the quality of the information provided.	$Y_{2.1.3}$	
2.	Business Operational Performance ($Y_{2.2}$)	The effectiveness and efficiency of operations increase in each department.	$Y_{2.2.1}$	
		The effectiveness and efficiency of operations increase between departments.	$Y_{2.2.2}$	
		The overall effectiveness and efficiency of operations increase at the company's business level.	$Y_{2.2.3}$	
3.	Employee Performance ($Y_{2.3}$)	The effectiveness and efficiency of workings increase at the employee.	$Y_{2.3.1}$	
		The quality of working results increases for the employee.	$Y_{2.3.2}$	
		The ability of employees to create new work patterns that are more effective and efficient increases business operations.	$Y_{2.3.3}$	
4.	Financial Performance ($Y_{2.4}$)	The IT implementation increases the Return On Equity.	$Y_{2.4.1}$	
		The IT implementation increases the Return On Assets.	$Y_{2.4.2}$	

Source: Secondary Data Processed, 2023

strategy and its execution's aspects of the company's IT-Business strategy alignment in supporting business performance.

2.8. Research hypothesis

The theory supporting the hypothesis in this research uses the organizational culture theory of Cameron & Quinn [33], to test the relationship between Organizational Culture and IT-Business Alignment. Organizational culture with clan culture has the characteristics of open communication, collaboration, and participation [33]. A culture of collaboration is very important in supporting the process of aligning IT strategy and business strategy. The importance of a culture of collaboration is also stated by the research results of Aladwani [15], Sikdar & Payyazhi [16], which generally state that a culture of collaboration from the characteristics of Clan culture [33], is very important in

facilitating the IT-Business Alignment process. In IT-Business Alignment, organizational culture such as open-minded, creative, innovative, and collaborative culture is very necessary between business executives and IT executives [14].

The results of research by El-Mekawy et al. [25] that using CVF (Competing Values Framework) indicators from Cameron & Quinn [33], namely, clan culture, adhocracy, market, and hierarchy, stated that organizational culture influences IT-Business Alignment. The research of El-Mekawy et al. [25], it can be said that it is convergent or in line with the target hypothesis to be tested in this dissertation research, namely using organizational culture variables with indicators from the same theory. The results of this study state that organizational culture influences companies in building their IT-Business Alignment maturity. The results in the first case study stage stated that the clan culture was very prominent (had the highest score of 38.33%), where the company's internal conditions were mostly assisted by external IT consultants in managing its IT. This requires that every business manager focus on their respective fields in supporting and responding to the strategy developed by the IT consultant. Also in this first case study, the adhocracy organizational culture shows the second rank of hierarchical culture and market culture, related to the condition of managers to work in teams with their colleagues in handling every problem. Therefore a culture of adhocracy appears to play a role in building trust, openness and participation among managers. However, the results of the research in the second case study show a different organizational culture, when company conditions demand IT to focus more on supporting and encouraging business expansion. The results of this second case study show that hierarchical culture and market culture dominate rather than clan culture and adhocracy culture in implementing organizational culture, especially those related to culture in the IT-Business Alignment process.

Research by Amar & Fimel [48], states that organizational culture is needed as a stimulator in Strategic Alignment or IT-Business Alignment. The right clan organizational culture, which is based on the values of transparency, cooperation, and partnership, is the driving force for IS Strategic Alignment. Karahanna & Watson [24], confirmed that, organizational culture which is the alignment of IT culture (IT subculture) with the organization's business culture provides a supporting role in the alignment of IT-Business strategy. Chan & Reich [3] states that the social dimensions of the organization that influence the IT-Business Alignment are organizational culture, shared knowledge, and previous experience in implementing IT. This can be seen from the influence of behavior and communication by IT executives in business planning (business strategy). Based on the description above, the research hypothesis is as follows:

H1: Organizational Culture has a significant positive effect on IT-Business Alignment.

Research Mian et al. [34] states that clan culture, adhocracy show a significant influence on human resource development, while hierarchy and market culture have no effect on human resource development. On the other hand, only market culture, clan, and adhocracy have an effect on financial performance, while hierarchical culture has no effect on financial performance. Joseph & Kibera [49] in his research on organizational culture and business performance, stated that organizational culture greatly influences business performance. The results of this study state that market culture, adhocracy and hierarchy show a significant effect on market performance, while clan culture has no effect on market performance. On the other hand, only market culture has an effect on the debt/equity ratio, while clan, adhocracy, and hierarchy have no effect on the debt/equity ratio. Another study conducted by Karahanna & Watson [24], states that IT executive leadership in organizational culture is able to adjust IT culture (IT subculture) with the organization's business culture, in order to provide IT-Value to business performance.

According to Cameron & Quinn [33], organizational culture with hierarchy characteristic focuses on organizing and coordinating, by formalizing the work process with SOP (Standard Operating Procedure), in order to increase efficiency and consistency. Therefore, hierarchical culture is very effective when compared with other organizational cultures, in terms of stabilizing and controlling activities within the company. The main characteristics of the norms and behavior of organizations with a hierarchical culture are the emphasis on control, reliability, and adherence to rules and procedures. A hierarchical culture is internally focused on its operations, always seeking integration and applying high standards to the organization's operations. This pattern provides opportunities to increase employee performance, while also increasing company performance. Based on the description above, the research hypothesis is as follows:

H2: Organizational Culture has a significant positive effect on Business Performance.

Based on theoretical basis Strategic Alignment Model (SAM) theory [7], clearly the aim of this theory is to build organizational capabilities in utilizing IT to support business performance. This is done by not only carrying out alignment at the strategic level, but also alignment at the operational level, and strong connectivity between strategic plans and tactical plans at the operational level. SAM theory encourages companies to solve problems at the strategic level, as well as complete preparations (plans) for integration of business and IT resources at the operational planning level. In this way, the harmonization created between IT and business at both strategic and operational levels can fully support business performance.

Chan et al. [11] in his research entitled Antecedents and Outcomes of Strategic IS Alignment: An Empirical Investigation, states that Strategic IS Alignment (IT-Business Alignment) has a significant effect on business performance. Chan et al. [11] used Strategic IS Alignment with planning sophistication indicators (with items IT involvement in strategy development and organizational integration) and shared domain knowledge (with items IT understanding business and CEO commitment to IT). The research, which was conducted at 226 insurance companies, banks, manufacturers in Canada and the United States, involved 113 of them were manufacturing companies. Each company is represented by respondents at the level of CEO, CIO or Senior Vice President. The results of the study state that planning sophistication has a direct effect on business performance, while shared domain knowledge has an indirect effect by mediating planning sophistication on business performance.

Research by Yayla & Hu [52], related to the impact of IT-Business Strategic Alignment on company performance states that IT-Business Alignment has an effect on company performance. The study, which used a survey sent via e-mail to 440 business organizations in Turkey, was responded to by 177 business organizations, of which 169 were considered valid for further analysis, with 55 of the 169 business organizations being of the manufacturing type. Research that uses indicators of fit between business and IT strategies for Strategic Alignment (IT-Business Alignment) variables, states that Strategic Alignment has a significant effect on company performance. In general also gave results stating that, IT-Business Alignment has a strong correlation in supporting Business Performance. Based on the description above, the research hypothesis is as follows:

H3: IT-Business Alignment has a significant positive effect on Business Performance.

2.9. Measurement with a Likert Scale

In this research, to measure the questionnaires' answers, we use the measurement scale as follows:

Table 4: Measurement Scale.

No.	Response Categories	Weighted Score
1	Strongly Agree	5
2	Agree	4
3	Neutral	3
4	Disagree	2
5	Strongly Disagree	1

Source: [55]

2.10. Research instrument test

In this research, 30 samples of company data received at the beginning were tested before use. The results of testing this instrument show that the reliability with Cronbach's Alpha values above 0.7, and validity of each variable, meeting the criteria with all correlation coefficient values above 0.7 have met the prerequisites for the further research process [55].

3. Results and Discussion

3.1. Results

According to the total sample size, 105 questionnaires were distributed with target respondents ranging from two to six respondents for each company. However, only 135 respondents returned, representing 53 companies. After manual checking, only 120 respondents with complete answers were accepted as valid data. Because the unit of analysis for this research is an organization, the answers of the 120 respondents were then grouped based on the company they represented. The score of respondents' answer items in each group of companies was then added up and divided by the number of respondents in that company, to obtain an average score for each company as the unit of analysis. This average score calculation is carried out for each item in the questionnaire to obtain an average scores for the items for each company. From this process, 47 companies were obtained with an average score for each item, which was used for descriptive statistics on each research variable including the indicators. The average item score data from the 47 companies was also used for inferential statistical processes using PLS software [56]. The returned questionnaires indicate a 45% of response rate for this study. According to Daikeler et al. [57] the response rate for email surveys is 12%. Referred to Shih et al. [58], is 11%, therefore email survey for this study is accepted. Based on the questionnaire data collected, the characteristics of respondents and samples in this study are as follows.

3.2. Description of respondents and samples

Based on the questionnaire data collected, the characteristics of respondents and samples in this study are as follows.

Table 5: Respondent by Position.

No.	Position	Number of Respondent	Percentage (%)
1	CEO/CFO/CMO/COO/CHRO/VP	2	2%
2	CIO/VP IT/GM IT/IT-Head	4	3%
3	Manager of Production	45	37%
4	Manager of Sales and Marketing	16	13%
5	Manager of IT	43	36%
6	Manager of Human Resources	3	3%
7	Manager of Accounting and Finance	7	6%
Total		120	100%

Source: Secondary Data Processed, 2023

Table 6: Respondents by Age.

No.	Age of Respondent	Number of Respondent	Percentage (%)
1	43 – 44	19	16%
2	45 – 46	13	11%
3	47 – 48	12	10%
4	49 - 50	24	20%
5	51 – 52	36	30%
6	53 – 54	15	12%
7	55 – 56	1	1%
Total		120	100%

Source: Secondary Data Processed, 2023

The majority of the respondents are managers (Table 5), with the highest percentage being managers of production (37%), followed by managers of IT (36%) and managers of sales and marketing (13%). CEOs, CFOs, CMOs, COOs, CHROs, and VPs account for a smaller percentage (2%). Most of the respondents in this study, namely 63% were IT executives and business executives aged 49 years and over, while those aged under 49 years were 37% (Table 6). As shown in Table 6, the largest of samples comes from the food and beverage industry (26 out of 47), followed by pharmaceuticals (5) and metal products (7). The indicators with the highest mean score of Organizational culture (Table 7) are Collaboration ($X_{1.2}$) and Formalization ($X_{1.4}$), with a score of 4.68, and the lowest is Creative and Innovative ($X_{1.1}$), with a score of 4.45. For IT-Business Alignment (Table 8), the highest indicator score is IT-Business Partnership ($Y_{1.4}$), with a score of 4.83, and the lowest is the Business Operational and IT Governance Process Integration ($Y_{1.3}$), with a score of 4.45. Related to Business Performance (Table 9), Financial Performance

($Y_{2.4}$) is the highest with a score of 4.83, and Employee Performance ($Y_{2.3}$) is the lowest with a score of 4.38.

TABLE 7: Sample by Industry.

No.	Type of Industry	Number of Sample	Number of Respondent
1	Food and Beverage	26	60
2	Tobacco	1	5
3	Pharmaceutical	5	19
4	Textile	1	2
5	Leather Processing	1	3
6	Paper	1	4
7	Metal Product	7	15
8	Footwear	1	2
9	Chemical	2	4
10	Base Metal	2	6
Total		47	120

Source: Secondary Data Processed, 2023

TABLE 8: Mean Score of Indicator-Organizational Culture (X_1).

No.	Indicator	Mean Score
1	Creative and Innovative ($X_{1.1}$)	4.45
	$X_{1.1.1}$	4.36
	$X_{1.1.2}$	4.77
	$X_{1.1.3}$	4.23
2	Collaboration ($X_{1.2}$)	4.68
	$X_{1.2.1}$	4.64
	$X_{1.2.2}$	4.77
	$X_{1.2.3}$	4.64
3	Open Minded ($X_{1.3}$)	4.51
	$X_{1.3.1}$	4.38
	$X_{1.3.2}$	4.79
	$X_{1.3.3}$	4.36
4	Formalization ($X_{1.4}$)	4.68
	$X_{1.4.1}$	4.68
	$X_{1.4.2}$	4.74
	$X_{1.4.3}$	4.62
Variable Score		4.58

Source: Secondary Data Processed, 2023

Table 9: Mean Score of IT-Business Alignment (Y1).

No.	Indicator	Mean Score
1	IT-Business Understanding ($Y_{1.1}$)	4.67
	$Y_{1.1.1}$	4.66
	$Y_{1.1.2}$	4.70
	$Y_{1.1.3}$	4.62
2	IT-Business Strategic Priorities Integration ($Y_{1.2}$)	4.82
	$Y_{1.2.1}$	4.77
	$Y_{1.2.2}$	4.94
	$Y_{1.2.3}$	4.74
3	Business Operational and IT Governance Process Integration ($Y_{1.3}$)	4.45
	$Y_{1.3.1}$	4.62
	$Y_{1.3.2}$	4.17
	$Y_{1.3.3}$	4.57
4	IT-Business Partnership ($Y_{1.4}$)	4.83
	$Y_{1.4.1}$	4.77
	$Y_{1.4.2}$	4.89
	$Y_{1.4.3}$	4.83
Variable Score		4.69

Source: Secondary Data Processed, 2023

Table 10: Mean Score of Indicator Business Performance (Y2).

No.	Indicator	Mean Score
1	Customer Satisfaction Delivery ($Y_{2.1}$)	4.62
	$Y_{2.1.1}$	4.45
	$Y_{2.1.2}$	4.70
	$Y_{2.1.3}$	4.72
2	Business Operational Performance ($Y_{2.2}$)	4.57
	$Y_{2.2.1}$	4.40
	$Y_{2.2.2}$	4.57
	$Y_{2.2.3}$	4.72
3	Employee Performance ($Y_{2.3}$)	4.38
	$Y_{2.3.1}$	4.23
	$Y_{2.3.2}$	4.53
	$Y_{2.3.3}$	4.36
4	Financial Performance ($Y_{2.4}$)	4.82
	$Y_{2.4.1}$	4.83
	$Y_{2.4.2}$	4.81
Variable Score		4.60

Source: Secondary Data Processed, 2023

3.3. Outer model statistical test results

The results of the validity and reliability test can determine the model fit of a research model [59]. Based on the outer test result, the validity and reliability of the research model met the criteria [55], and according to Garson [59], this research model can be

declared fit. According to Kock, [60] the other criterion for measurement of model fit is on testing the Collinearity VIF from the inner model (Table 15).

3.4. Validity test results

3.4.1. Convergent Validity

TABLE 11: Results of Cross-Loading Organizational Culture Variable (X_1).

No.	Indicator/Item	X_{11}	X_{12}	X_{13}	X_{14}
1	Creative and Innovative ($X_{1.1}$) : $X_{1.1.1}$	**0.750**	0.153	-0.162	0.086
	$X_{1.1.2}$	**0.797**	0.258	0.284	0.200
	$X_{1.1.3}$	**0.798**	0.213	0.083	0.181
2	Collaboration ($X_{1.2}$): $X_{1.2.1}$	0.342	**0.781**	0.264	0.663
	$X_{1.2.2}$	0.228	**0.743**	0.427	0.686
	$X_{1.2.3}$	0.098	**0.832**	0.266	0.718
3	Open-Minded ($X_{1.3}$): $X_{1.3.1}$	-0.059	0.107	**0.786**	0.075
	$X_{1.3.2}$	0.218	0.456	**0.812**	0.363
	$X_{1.3.3}$	0.145	0.296	**0.788**	0.194
4	Formalization ($X_{1.4}$): $X_{1.4.1}$	0.319	0.606	0.121	**0.756**
	$X_{1.4.2}$	0.135	0.671	0.363	**0.807**
	$X_{1.4.3}$	0.080	0.784	0.217	**0.792**

Source: Primary Data Processed, 2023

TABLE 12: Results of Cross-Loading IT-Business Alignment Variable (Y_1).

No.	Indicator/Item	Y_{11}	Y_{12}	Y_{13}	Y_{14}
1	IT-Business Understanding ($Y_{1.1}$): $Y_{1.1.1}$	**0.827**	0.374	0.461	0.273
	$Y_{1.1.2}$	**0.768**	0.489	0.514	0.519
	$Y_{1.1.3}$	**0.756**	0.358	0.342	0.339
2	IT-Business Strategic Priorities Integration ($Y_{1.2}$): $Y_{1.2.1}$	0.504	**0.799**	0.484	0.670
	$Y_{1.2.2}$	0.239	**0.807**	0.349	0.615
	$Y_{1.2.3}$	0.490	**0.777**	0.297	0.572
3	Business Operational and IT Governance Process Integration ($Y_{1.3}$): $Y_{1.3.1}$	0.413	0.285	**0.787**	0.212
	$Y_{1.3.2}$	0.400	0.313	**0.765**	0.367
	$Y_{1.3.3}$	0.509	0.499	**0.799**	0.403
4	IT-Business Partnership ($Y_{1.4}$): $Y_{1.4.1}$	0.343	0.482	0.307	**0.776**
	$Y_{1.4.2}$	0.438	0.767	0.467	**0.830**
	$Y_{1.4.3}$	0.369	0.552	0.197	**0.742**

Source: Primary Data Processed, 2023

TABLE 13: Result of Cross-Loading Business Performance Variable (Y2).

No.	Indicator/Item	Y_{21}	Y_{22}	Y_{23}	Y_{24}
1	Customer Satisfaction Delivery ($Y_{2.1}$): $Y_{2.1.1}$	**0.794**	0.609	0.410	0.231
	$Y_{2.1.2}$	**0.842**	0.522	0.557	0.035
	$Y_{2.1.3}$	**0.765**	0.587	0.300	0.232
2	Business Operational Performance ($Y_{2.2}$): $Y_{2.2.1}$	0.640	**0.771**	0.377	0.312
	$Y_{2.2.2}$	0.357	**0.732**	0.061	0.382
	$Y_{2.2.3}$	0.617	**0.813**	0.374	0.188
3	Employee Performance ($Y_{2.3}$): $Y_{2.3.1}$	0.459	0.340	**0.789**	0.298
	$Y_{2.3.2}$	0.484	0.169	**0.766**	0.010
	$Y_{2.3.3}$	0.142	0.304	**0.598**	0.072
4	Financial Performance ($Y_{2.4}$): $Y_{2.4.1}$	0.091	0.277	0.095	**0.791**
	$Y_{2.4.2}$	0.238	0.342	0.225	**0.899**

Source: Primary Data Processed, 2023

3.4.2. Discriminant Validity

TABLE 14: Discriminant Validity (Fornell-Larcker).

No.	Variable	X_1	Y_1	Y_2
1	Organizational Culture (X_1)	**0.582**	-	-
2	IT-Business Alignment (Y_1)	0.630	**0.637**	-
3	Business Performance (Y_2)	0.324	0.498	**0.596**

Source: Primary Data Processed, 2023

3.5. Reliability testing results

The result of the reliability testing in this study (Table 15) shows that all variables have met the reliability value criteria above 0.6 [55]. Thus the instrument used in this study can measure consistently.

TABLE 15: Reliability Testing Results .

Variable	Composite Relia.Coefs.	Cronbach's Alpha	Description
Organizational Culture (X_1)	0.846	0.801	Reliable
IT-Business Alignment (Y_1)	0.871	0.864	Reliable
Business Performance (Y_2)	0.829	0.806	Reliable

Source: Primary Data Processed, 2023

3.6. Inner model statistical test results

The result of the inner model statistical test from this study is as follows Figure 2.:

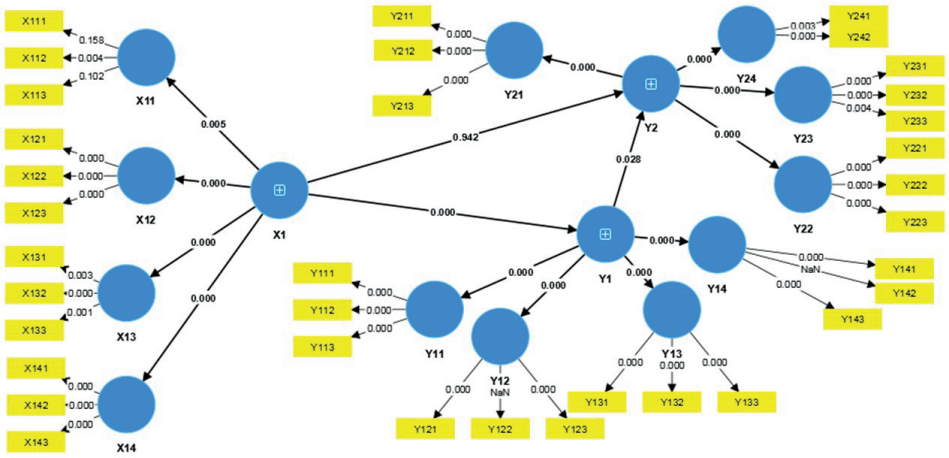

Figure 2: Inner Model Results with SmartPLS 4. Source: Author's own work.

Description:

X_1: Organizational Culture

Y_1: IT-Business Alignment

Y_2: Business Performance

3.7. VIF collinearity

There are two opinions on determining the quality of the structural model based on the VIF value. First, according to Hair et al., [61], the structural model is acceptable if the VIF value is <5. Second, according to Kock [60] the Goodness of the fit model is accepted if the VIF value is <=5. The results of the collinearity test from SmartPLS 4 are shown in Table 16 below.

TABLE 16: Collinearity VIF Value.

No.	Variable	X_1	Y_1	Y_2
1.	Organizational Culture (X_1)	-	1.000	1.658
2.	IT-Business Alignment (Y_1)	-	-	1.658
3.	Business Performance (Y_2)	-	-	-

Source: Primary Data Processed, 2023

3.8. Coefficient of determination (R^2)

TABLE 17: Coefficient of determination.

No.	Variable	R Square
1	IT-Business Alignment (Y_1)	0.397
2	Business Performance (Y_2)	0.248

Source: Primary Data Processed, 2023

3.9. Predictive relevance (Q^2)

Predictive relevance is a test conducted to show how well the observed values generates by the model [62]. The value of the relevance of this prediction indicates by the Q-square or Q^2 value [61]. According to Chin, (1998), the Q-square value > 0 indicates the research model has predictive relevance, but the Q-square value ≤ 0 indicates the research model has no or less predictive relevance. The value of Q2 can be determined using the value of the coefficient of R2 between variables with the following formula [61]:

Q^2 Value = 1 – (1– R12) (1 – R22) (1 – Rn2).

Thus the Q-Square value of this research model can be calculated as follows:

Q^2 Value = 1 – (1 – R2 Y1) (1 – R2 Y2)

Q^2 Value = 1 – (1 – 0.397) x (1 – 0.248)

= 0.5465

Based on the Q^2 value of 0.5465, the structural model of research can explain 54.65% of the diversity in the data used in this study. The remaining diversities of 45.35% in the data used in this study can explain by the other factors outside the model studied (i.e organizational change management [15].

3.10. Hypothesis testing results

Testing the hypothesis in this study using the results of the inner-model process carried out by SmartPLS 4, with the results as shown in Table 17. Hypothesis testing was calculated by comparing the t-statistic value (T Statistic-O/STDEV column) or t-count with the t-table value for a total sample of 47, namely 2.014 (two-tailed) with a significance level (α) of 5%. The test criteria are as follows:

1. If t-count > t-table, then the hypothesis is accepted.

2. If t-count < t-table, then the hypothesis is rejected.

Table 18: Research Hypothesis Testing Results.

No.	Influence Between Variables	Original Sample (O)	Std. Deviation (STDEV)	T-Statistics(O/STDEV)	P-Value	Description
1	H1: X_1Y_1	0.630	0.108	5.816	0.000	Significant
2	H2: X_1Y_2	0.016	0.221	0.073	0.942	Insignificant
3	H3: Y_1Y_2	0.488	0.222	2.196	0.028	Significant

Source: Primary Data Processed, 2023

Based on the results of hypothesis testing, it can explain that:

a. H1: The organizational culture influences IT-Business Alignment significantly with a p-Value of 0.000 (<0.05), with a positive correlation coefficient of 0.630.

b. H2: Organizational Culture does not affect on Business Performance.

c. H3: IT-Business Alignment influences Business Performance significantly with a p-Value of 0.028 (<0.05), with a positive correlation coefficient of 0.488.

3.11. Discussion

The organizational culture shows a significant and positive effect on IT-Business Alignment with a correlation coefficient of 0.630 and a p-value of 0.000. The results of this study support the Organizational Culture Theory from Cameron & Quinn [33]. The results also support the research of El-Mekawy et al. [25], that state organizational culture influences IT-Business alignment, support research by Amar & Fimel [48], that state Organizational culture is a stimulator in Strategic Alignment or IT-Business Alignment, supported research by Karahanna & Watson [24], that Organizational culture which is the alignment of IT culture (IT subculture) with the organization's business culture, provides a supporting role in the alignment of IT-Business strategy.

The significant influence of organizational culture on IT-Business Alignment (H1), when seen from the results of the descriptive analysis, is due to the collaboration ($X_{1.2}$) and formalization ($X_{1.4}$) indicators that play a significant role in supporting organizational culture in IT implementation, especially in supporting the IT-Business Alignment process with a mean score value of 4.68. In more details, it can be explained based on the descriptive data for each item on the collaboration indicator and formalization indicator as follows:

1. The organizational culture of manufacturing companies has been able to form a participative culture in carrying out tasks for all employees, as shown by the high score of item $X_{1.2.2}$ (score 4.77) on the collaboration indicator. With this participative culture,

collaborative culture can support the IT-Business Alignment process. The culture of collaboration supported by the active participation of all employees and internal stakeholders involved in aligning IT strategy and business strategy provides the opportunity to build a successful strategy in the form of the best match.

2. The culture of implementing work processes with an orderly work system and structure from manufacturing companies also contributes to the success of organizational culture in supporting IT-Business Alignment, as shown by the high score of item $X_{1.4.2}$ (score 4.74) on the formalization indicator. The formalization culture that implemented in the form of SOPs (standard operating procedures), the process of aligning IT strategy and business strategy can run more regularly and effectively.

The insignificant effect of the organizational culture on Business performance (H2) is shown by the T-Statistic 0.073 (<2.014). The results of this study do not support the Organizational culture Theory Organizational Culture Theory from Cameron & Quinn [33]. The results do not support the research of Mian et al., (2008), state that Organizational culture influences financial performance. The results also do not support the research of Joseph & Kibera, (2019) state that organizational culture have influences on business performance, and do not support another study conducted by Karahanna & Watson [24], state that Organizational culture is able to adjust IT culture (IT subculture) with the organization's business culture, in order to provide IT-Value to business performance.

This insignificance based on respondent demographic data can be caused by the age of respondents with IT executive and business executive positions, most of whom are aged 49 years and over, amounting to 63% (Table 5.2). With this number being 63%, manufacturing companies experience significant obstacles in making adjustments or changes to organizational culture, along with the IT culture (IT subculture) that comes along with IT implementation, especially at the level of implementing IT-business strategies to support business performance. On the other hand, this insignificance is determined by the low indicator score on the Organizational culture, namely the Creative and Innovative indicator ($X_{1.1}$) with a score of 4.45 and Open Minded indicator ($X_{1.3}$) with a score of 4.51. Based on the results of the descriptive analysis of the low item scores belonging to the Creative and Innovative indicator and Open Minded indicator, this insignificant can explain as follows:

1. The inability of manufacturing companies to develop an adaptive to culture changes, especially for stakeholders involved in IT implementation that reflected in IT strategy to support business performance, which will be synergized or aligned with business strategy, as shown by the low score of item $X_{1.1.1}$ (score 4.36) on the Creative and Innovative indicator. The lack of understanding aspects of change and knowledge

in responding to change makes manufacturing companies fail to build a culture of adaptation to the characteristics of IT-based changes.

2. The failure of manufacturing companies to build an organizational culture that encourages employee innovation, as shown by the low score of item $X_{1.1.3}$ (score 4.23) on the Creative and Innovative indicator. The ability of employees to innovate is one of the cultures of commitment in aligning strategies at the strategic level.

3. Although the organizational culture for encouraging employee creativity ($X_{1.1.2}$) has high score above 4.50, namely with a score of 4.77. However, this creativity has not been able to be converted into innovation culture. The results of this research directly explain the importance of the mechanism for converting employee creativity into innovation culture. The creativity culture and innovation must become supported to the overall organizational culture of the company.

4. The failure of manufacturing companies to build an organizational culture that open to any opinions or new ideas, as shown by the low score of item $X_{1.3.1}$ (score 4.38) on the open-minded indicator. The failure to be open to new ideas and opinions within the team makes manufacturing companies fail to build an open-minded environment, thus closing the opportunity for each team member to convey ideas to support business performance.

5. The inability of manufacturing companies to develop a culture of building shared commitment within the team, especially for all team members to support business performance, as shown by the low score of item $X_{1.3.3}$ (score 4.36) on the Open Minded indicators. The lack of sharing commitment within the team makes manufacturing companies fail to build an open-minded environment, so each team member fails to reach a consensus and agreement regarding strategies to support and improve business performance.

To overcome the condition that organizational culture has no effect on Business Performance, IT and Business executives must focus on the lowest indicator on Organizational culture, namely creative and innovative indicators and Open-Minded indicator. The rapid and dynamic development of IT is very influential in changing Organizational culture to cope with business performance achievement. Therefore, the Organizational culture must be adaptive to change in IT implementation to make the company achieve their business performance measurements and to stay competitive with its competitors.

The IT-Business Alignment shows a significant and positive effect on Business Performance with a correlation coefficient of 0.488 and a p-value of 0.028. These results support the SAM (Strategic Alignment Model) Theory from Henderson & Venkatraman [7]. The results also support the research of Chan et al. [11] state that IT-Business

Alignment has a significant effect on business performance, support research by Yayla & Hu [52], state that IT-Business Alignment has effects on company performance, and several other studies conducted also gave results stating that, IT-Business Alignment has a strong correlation in supporting Business Performance.

The significant influence of IT-Business Alignment on Business Performance (H3), when seen from the results of the descriptive analysis, is due to the IT-Business Partnership ($Y_{1.4}$) indicator in supporting IT-Business Alignment process. In more details, can be explained from the convergence value of each item on the IT-Business Partnership indicator as follows:

1. The Business and IT executives succeeded in establishing a pattern of cooperation in creating an aligned IT-Business strategy. This collaborative process is shown by the high score of item $Y_{1.4.1}$ (Business and IT Domains create a Business-IT alignment strategy together), with a score of 4.77. The success of the IT-Business Alignment process is highly dependent on the harmonization of cooperation between IT domain and the Business domain [35]. As a strategy that transforms business operations, the IT-Business strategy needs support, cooperation and high attention from both business and IT executives. With this pattern of cooperation in building the IT-Business strategy, IT-Business partnership can be developed more effective.

2. The success of IT and business executives along with all staff in the execution of the IT-Business strategy. This success is shown by the high score of item $Y_{1.4.2}$ (Business and IT domains support each other in the implementation of the Business-IT alignment strategy), with a score of 4.89. With the team work and hand in hand the IT-Business strategy implementation is really supports the achievement of successful IT-Business Alignment.

3. The success of IT and business executives in carrying out supervision, joint evaluation of the IT-Business Alignment implementation process, and planning quality improvement based on the evaluation findings. It is shown by the high score of item $Y_{1.4.3}$ (Business Domain and IT carry out supervision, evaluation and improvement of alignment together) with a score of 4.83.

3.12. Suggestions

3.12.1. Suggestions for Further Research

1. Further research by exploring the conversion of creative culture into innovative culture can be done, which in this research is an item that weakens the creative and innovative indicators in the organizational culture variable. Revealing the conversion mechanism

for transition from a creative culture that arises in employees to an innovative culture will directly affect business performance. This disclosure is an opportunity for advanced research development which is very useful not only for academic researchers, but also for large manufacturing companies in managing the execution of their IT-Business alignment strategy, so that they can have a real influence in significantly improving business performance.

2. According to Al-Ali et al., [22], Organizational culture has a significant effect on organizational change management, and according to Sadeghi [63] , Organizational change management supports increased business performance. By paying attention to these two studies, further research by exploring the relationship between organizational culture, organizational change management, IT-Business Alignment, and Business performance may provide different results from this research.

3.12.2. Suggestions for Business Executives and IT Executives

Based on the insignificant influence of Organizational Culture on Business Performance. IT and business executives must focus more on collaboration in developing an adaptive and innovative organizational culture to support creative and innovative culture to achieve business performance.

With the strong influence of Organizational Culture on IT-Business Alignment, business executives and IT executives must review the collaboration and formalization process to get a lesson learned. These lessons learned can become a reference in building an organizational culture that can directly improve business performance.

3.12.3. Suggestions for Manufacturing Company

By paying attention to the influence of the dominant Organizational Culture variable on the relationship between variables, manufacturing companies must build and prepare organizational culture development plans, processes, and approaches, especially to support business performance in IT implementation.

4. Conclusions

We attempt to describe and analyze the relationship between organizational culture, IT-Business Alignment, and Business Performance to answer the problem of this research,

namely what kind of organizational culture is suitable to support the IT-Business Alignment process and business performance, and what kind of IT-Business Alignment model can support business performance?

To answer this question, we determined indicators measuring organizational culture, namely Creative and Innovative, Collaboration, Open-Minded, and Formalization. IT-Business Alignment is measured by four indicators, namely IT-Business Understanding, IT-Business Strategic Priorities Integration, Business Operational and IT Governance Process Integration, and IT-Business Partnership. Meanwhile, business performance is measured using Customer Satisfaction Delivery, Business Operational Performance, Employee Performance and Financial Performance indicators.

The results of this research show that a high culture of collaboration and a culture of formalization in organizational culture have a positive and significant influence in supporting and improving the IT-Business Alignment process. Meanwhile, the results of research on the relationship between organizational culture and business performance turned out to have no effect, due to the low level of creative and innovative culture in the organizational culture of large manufacturing companies. Thus, the results of this research answer the problem of this research, namely what organizational culture is suitable to support IT-Business Alignment? Thus, the culture of collaboration and the culture of formalization are more suitable to be developed as an organizational culture that can improve processes and achieve high IT-Business Alignment results. Meanwhile, the creative and innovative culture that hinders the influence of organizational culture on improving business performance must be reviewed and re-planned to be developed to a higher level, so that it can provide support for achieving the business performance desired by manufacturing companies.

On the other hand processes and approaches in the form of IT-Business Partnerships in the IT-Business Alignment, through this research, it is proven to be able to improve business performance positively and significantly. The strong role of the IT-Business Partnership also answers the problem of this research, regarding what kind of IT-Business Alignment model is appropriate in supporting Business Performance? In this way, IT executives and business executives in large manufacturing companies can make the IT-Business Partnership a focus and an IT-Business Alignment element model that can be developed to provide support for business performance.

5. Limitations

The limitations of this study are as follows. First, most of the manufacturing companies on their Website, and other secondary literature do not include data regarding the organizational structure of the IT department and very rarely have information on the type of ERP used by the company. So the research had to be extended to 5 months from 4 months as planned to ensure the availability of both data. Secondly, this study collected the data only in East Java. Therefore, it is difficult to generalize the comprehensive influence of organizational culture on IT-Business Alignment and Business Performance at the country level.

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