



# BUSINESS OWNER'S PERSPECTIVE ON STRATEGIC EXECUTION, TECHNOLOGICAL TRANSFORMATION, COMPETITIVENESS POTENTIAL, AND SERVICES LEVEL ON THE IMPLEMENTATION OF STRATEGIC IT ALIGNMENT

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## Abstract

**Purpose of the study:** This research aimed to determine the perspectives of business owners regarding strategic-execution, technological-transformation, competitiveness-potential, and service-level to the implementation of IT-strategic alignment in SME of Creative Industries Group in Palembang City.

**Methodology:** Research design is causal research and uses primary data type, in the form of questionnaires and some are carried out also by direct interviews.

**Main Findings:** This research, it could be concluded that partially only the Strategic-Execution variable and Competitiveness-Potential variable which affected the implementation of Strategic-IT Alignment. While the Strategic-Execution, Technological-Transformation, Competitiveness-Potential, and Service-Level had a significant effect simultaneously on the implementation of Strategic-IT Alignment.

**Applications of this study:** The population for this research is SMEs in Palembang City which is registered in the Ministry of Cooperatives and SMEs.

**Novelty/Originality of this study:** The results of the research support the first hypothesis that the Strategic-Execution variable has a positive and significant effect on the implementation of Strategic-IT Alignment.

**Keywords:** *Strategic-Execution, Technological-Transformation, Competitiveness-Potential, Service-Level, Strategic-IT Alignment.*

## INTRODUCTION

Companies often improve, adapt changes, and continue to improve the company's strategy for a certain period of time in order to achieve their goals. The strategy is a planned action or maneuver from the management of the company in order to retain customers, survive amid competition, expand and seize new market share, increase the number of customers, launch new products, and so forth. Companies really need to know the weaknesses, strengths, opportunities, and threats which they have so that they can make effective and efficient strategies in utilizing company resources so that they can at least survive amid business competition (Humphreys, 2007). Business and information systems that are not in line or aligned will cause the utilization of information systems to be not optimal in supporting business. This indicates that companies must seriously align business strategies and Information Technology (Kannabiran & Dharmalingam, 2012). The Alignment of information systems with the business objectives and strategies are things that have long been a concern, but it is difficult to do because basically business strategies and goals are always dynamic. The alignment of Information Technology strategy - business strategy or what is known as strategic alignment is the implementations of Information Technology applications that are carried out correctly, on time, and in harmony with the business strategy, the objectives and needs of the company (Luftman, Papp, & Brier, 1999).

The strategic alignment is seen as a requirement for company to realize benefits which can be obtained from Information Technology infrastructure investment in the company, providing significant benefits in enhancing the success or performance of the company (Hussin, King, & Cragg, 2002; Schaltegger & Synnestvedt, 2002; Simpson, Padmore, & Newman, 2012) and it is able to develop excellence sustainable competitive company (Dehning & Stratopoulos, 2003; Johannessen & Olsen, 2003; Johnson & Sirikit, 2002; Rechenthin, 2004). Companies that succeed in integrating technology with the strategies and objectives of the business will certainly gain a significant revenue increase.

The information system has become an important enabler for the strategy and objectives of the business in mass customization, improved the quality of products and services, competitive differentiation, business process automation, and so forth. The strategic alignment which is carried out by the companies can improve efficiency, create barriers for new entrants in established market share, increase relationships with consumers and suppliers, create innovative products/services, new business solutions, and so on. Failure from this alignment can increase costs and lost opportunities.

One of the current government policies is to advance the industrial sector, including the creative industry in accordance with the Presidential Instruction No. 6 of 2009 concerning the Development of Creative Economy (Rahmi, 2018; Sari, 2014). Therefore, the strategic alignment challenge should also be carried out by SME actors including the creative

industry group. The rise of the creative industry began in 2012, where the industry grew significantly in a better direction. This is stated from the increasing of employment, the increase of businesspeople managerial capabilities, the increasing of partnerships between businesses, the increasing of information technology/information systems role, etc. especially an increase in the contribution of Gross Domestic Product (GDP) which of course has a significant impact on economic development. The alignment of Information Technology strategies - business strategies for SMEs is not as easy as turning the palm but requires a gradual process. Success in implementing the strategic alignment will ease the SMEs to become large-scale businesses ([Ismail, 2016](#); [Kamil, 2015](#); [Purnomo, 2016](#); [Zuhdi, 2012](#)).

Research on the Alignment of SMEs has been carried out abroad by [Cragg, King, & Hussin \(2002\)](#) regarding "IT Alignments in Small Firms". The data comes from a survey of 256 small-scale manufacturing companies in the UK which stood for more than ten years. The research resulted that the important factors which influence the Information Technology alignment are: (1) Information Technology maturity, (2) the technical sophistication of Information Technology, and (3) the software knowledge of CEO. The personal involvement of the CEO in the planning and use of Personal Information Technology has little effect on the alignment of Information Technology. Pedraza, Guerrero, & Lavín, (2011) concerning the alignment of SME e-Business in Northeast Mexico. The research objectives include: identifying existing perspectives on Strategic Alignment in SMEs; to find out the perceptions of SME managers regarding the criteria determining the level of maturity of e-business alignment with business strategies, and identify the relationship between e-business alignment perspectives and criteria that promote alignment with business strategies. The results present relevant implications for the strategic management of private organizations. [Kearns & Lederer \(2001\)](#) in their research entitled "Strategic IT Alignment: A Model for Competitive Advantage". By using a random sample of 1,200 companies including all industries except government agencies, and non-profits, while sending surveys directly to CIO companies that have annual revenues of approximately \$75 million. By using a random sample of 1,200 companies including all industries except the government institutions and non-profit, surveys are sent directly to the CIO of the companies with annual revenues of at least \$ 75 million. The research results that both groups of subjects have an understanding of the role information systems plans with business plans (ISP-BP) in creating competitive advantages over the information systems investment they have. However, a lack of a shared understanding of reciprocal alignment (BP-ISP) might prevent the organization from obtaining these benefits. While other research is conducted by [Budi & Abijono \(2016\)](#) entitled Chief Information Officer (CIO) and its Role in Aligning The Business Strategies and Information Technology Strategies. The results of his research indicate that CIOs must master the business strategies as well as his mastery of Information Technology. CIOs have wider visibility related to business strategies and involved in making major decisions related to business with a strategic position in the executive ranks. This can facilitate the CIOs in aligning business strategies and Information Technology. Therefore, the research will answer the question of how the implementation of the strategic-IT alignment in special SMEs in the Creative Industry Group. The research which is conducted by [Sukarno, Wahyuningsih, & Liestyana \(2013\)](#) with the title The Support of Information Technology on the Business Processes of Small and Medium Enterprises (Studies in SMEs Industry in Bangunjiwo, Kasihan, Bantul). The results show that the support of Information Technology for each business process is lower than the level of importance which is carried out by SMEs businesses in Bangunjiwo. The previous research on the strategic alignment has been carried out on various objects but it has never been done on special objects such as creative industry groups, especially when the growth trend of creative industries in Indonesia continues to increase.

Based on the Indonesian statistical data, the role of technology in this matter is still a problem, especially for the business leaders in Indonesia. Entrepreneurs in Indonesia have not used a digital transformation strategy widely, only 27% of entrepreneurs who have a comprehensive strategy, 22% do not have yet, and 51% are still planning (International Conference on System Sciences & Databoks, 2017). It will be a dilemma in the development of micro-enterprises, especially the development of the creative economy, while the development of the creative economy continues to grow rapidly. Based on the survey results of the Creative Economy Agency (Bekraf) and the Central Statistics Agency (BPS), an increase in the amount of the Creative Economy GDP in 2014 amounted to Rp 784, 82 trillion to Rp 852, 24 trillion with a contribution of 7.38% to the national GDP in 2015. Growth will continue until it reaches 12% in 2019. On the other hand, the digital sector also shows significant changes, the internet users have reached 51.8% of the total population of Indonesia. Therefore, the government continues supporting the development and utilization of technology in the creative economy, with the issuance of Presidential Regulation No. 74 of 2017 on the Road Map of the Electronic Based National Trading System (Road Map E-Commerce) for 2017-2019 which takes effect on August 3, 2017 ( <https://ekon.go.id>, 2017). Based on the Statistical Data and the Results of the Creative Economic Survey Collaborating with the Creative Economy Agency and the Central Bureau of Statistics, the use of information technology Ekraf Enterprises which use computers is 64.24%, the Ekraf Businesses which have a website is 30.39% and the Ekraf Businesses which use the internet is 68.83 %. This phenomenon attractiveness of the creative industries growth in Indonesia is so important to know how far the strategic-IT alignment implementation with the early stage through the perspective of SME owners. Therefore, this research aims to determine the perspective of business owners who are also SMEs regarding the strategic-execution, technological-transformation, competitiveness-potential, and service-level on the implementation of Strategic-IT-alignment in SME Creative Industry Groups in Palembang.

## **THEORETICAL REVIEW**

### **Importance level of *Strategic-IT Alignment***

Strategic alignment has been discussed since the 1980s. This is a major concern of any organization/company in the 1990s to the present. Ideally, every company needs to map the implemented strategies so that the synergy can occur in maximizing the company profits. [Venkatraman, Henderson, & Oldach \(1993\)](#) stated that the alignment as an internal compatibility and integration function between business strategy and information technology strategy which is very important in order to increase the competitive advantage. The strategic alignment is measured by looking at the value of the item of business strategy with the value of the item of Information Technology strategy. The highest value for business strategy and Information Technology indicates the achievement of a high-level strategic alignment for the company and vice versa. The alignment of Business strategies and Information Systems/ Information Technology is not only a matter of achieving a competitive advantage but also important for the survival of the organization/company ([Gottschalk, 2002](#)).

[Bruce \(1998\)](#) states, “if the alignment is needed to facilitate business benefits to be optimal, so how we know when we get them? Therefore it is important to measure the impact of information technology on business results.

The results of research conducted on the strategic alignment with the company performance show the various results so it cannot be stated to be positively correlated. [Chan, Sabherwal, & Thatcher \(2006\)](#) stated that empirical research on the implications of performance as a result of this alignment is rare and fragmented. The same is also stated by [Brynjolfsson & Hitt \(1998\)](#) which states that the average return on Information Technology investment is very positive for a while, many variations among organizations, some have spent much money on Information Technology with little profit, while others spend an amount the same with remarkable success. Thus, testing the effect of the strategic alignment on the company performance is still very necessary.

Many previous analyses and studies discuss the relationship between Business and IT ([Chan & Huff, 1993](#); [Earl, 1993](#); [Luftman, 2004](#); [Luftman & Brier, 1999](#); [Venkatraman et al., 1993](#)) the role of partnerships that occur between IT and business management ([Venkatraman et al., 1993](#)), and the transformation of business strategies resulting from the IT competitive use ([Venkatraman et al., 1993](#)) and the impact of alignment on the organization performance ([Palmer & Markus, 1996](#); [Chan, Sabherwal, & Thatcher \(2006\)](#)). The company do not only change the scope of their business, but also its infrastructure as a result of IT innovations ([Cho & Mathiassen, 2007](#); [Cordella, 2012](#); [Mostafavi, Abraham, & Lee, 2012](#); [Rastogi & Rao, 2011](#); [Rinne, 2004, 2004](#); [Walsh & Linton, 2000](#)). Empirical studies of the alignment ([Broadbent & Weill, 1993](#); [Chan & Huff, 1993](#)). [Baets \(1996\)](#) examines one industry or company. However, the previous research has not looked thoroughly at how big the role of each important element of the strategic alignment is (especially strategy execution, technology transformation, competitive potential and service level) in assessing the successful implementation of IT strategy alignment in the scope of SMEs creative industry groups.

The rapid development of SMEs, especially the creative industry groups, one of its driving aspects is adopting Information Technology, including the use of e-commerce, broadband, cloud, social media, mobile platforms, and so on. Adoption or utilization of Information Technology by SMEs creative industry groups is inseparable from the company's strategic plan, how to synergize the business strategies with Information Technology strategies to achieve the business performance. The successful implementation of Information and Communication Technology (ICT) will bring the business to achieve a competitive advantage. Based on the data, SMEs which use ICT grow 46% faster than those who do not adopt ICTs ([MacGregor & Kartiwi, 2010](#)). Moreover, when referring to the Statistical data and the Results of Creative Economy Survey Collaborating with the Creative Economy Agency and the Central Bureau of Statistics, that the use of information technology on the Ekraf Enterprises which use computers are 64,24%, the Ekraf Enterprises which have websites are 30.39% and the Ekraf Enterprises which use internet is 68.83%. Therefore, Strategic-IT Alignment is not only needed in large companies, but also in all companies or business enterprises which adopt the Information Technology in their strategic plans in order to achieve the competitive advantage not only at the local level but also globally and sustainable competitive advantage.

### **The Concept of Strategic Alignment (Information Technology Strategy / Information System and Business Strategy)**

Alignment is an effort to adjust the Information Technology / Information System planning with business strategies so that the investment in technology can create a competitive advantage in the company. Strategic alignment means conformity between priorities and activities of Information Technology / Information System functions with the business units. Companies that are successful in implementing strategic alignment will even be able to create new business opportunities. In the alignment activity, it should also be ensured that the Information Technology / Information System is appropriate with the strategic needs of the company's business.

Therefore, the strategic alignment is not only the achievement of competitive advantage, but it is essential for the survival of the organization ([Gottschalk, 2002](#)). Four components that need to be considered in aligning business strategies and Information Technology, namely: clear direction, commitment, communication and integration between functions ([Weiss & Anderson Jr, 2004](#)). Figure 1. presents the process carried out towards the business strategies alignment and Information Technology.



**Figure 1:** Towards the Alignment of Business and Information Technology Strategies

In addition, six important things as a supporter and inhibitor in aligning the business strategies and Information Technology, as presented in table 1.

**Table 1:** Supporter and inhibitor of strategic alignment

Support	Inhibitor
Senior executives support the Information Technology	Information technology/business does not have a close relationship
Information Technology is involved in developing strategies	Information Technology is not prioritized properly
Information Technology understands the business	Information Technology Fails to fulfill its commitment
Partnership Business - Information Technology	Information Technology does not understand the business
Information Technology projects are prioritized well	Senior Executives do not support Information Technology
Information Technology shows leadership	Information Technology Management portrays leadership

**Source:** (Luftman, Papp, & Brier, 1999)

Table 1 show that the support of the Senior Executive Information Technology is a supporting factor and also an obstacle in the strategic alignment. In this regard, the role of the CIO is very important for the success of strategic alignment. The executive is also responsible for minimizing various inhibiting factors of strategic alignment and maximizing the supporting factors. According to Hamzah & Ismail (2007) strategic alignment is a concept which is developed and obtained from co-variation at particular times, including:

- The attribute of importance level of business strategy, namely the choice between the partnership and/or strategic alliance. The Partnership is an effort of the part of the organization/organization to complement each other, with the aim to develop and grow the parts of the organization/organization simultaneously. The strategic alliance is an effort carried out by several parts of the organization/organization to obtain optimal resources and funds related to activities conducted by the organization/organization.
- The attribute of importance level of strategy / Information Technology which consists of the role and strategic tasks of Information Technology / Information Systems, systematic competence Information Technology / Information Systems, the selection of Information Technology / Information Systems architecture, and the selection process of Information Technology / Information Systems.

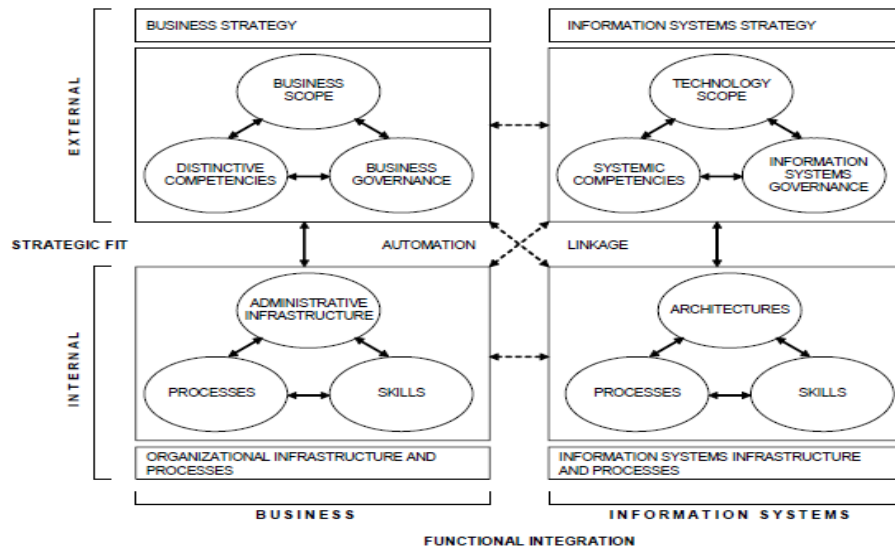
The existing strategic alignment methods cannot necessarily be applied to all companies. Baina, Ansias, Petit, & Castiaux (2008) require at least four things that need to be considered when implementing the strategy alignment, such as clear direction, commitment, communication, and integration between functions.

**Strategic Alignment model of Henderson and Venkatraman (1990)**

Henderson & Venkatraman (1990) state that the inability of companies to realize the value of information technology investments is partly due to the lack of harmony between business strategies and the organization of Information Technology / Information Systems. Alignment is the extent to which the plan of the Information Technology / Information System reflects a business plan. So, Strategic Alignment is a process that must always be dynamic. An application that can provide a sustainable competitive advantage has not been available yet. The advantage will be obtained through the company's ability to exploit the functions of the Information Technology / Information Systems continuously. Strategic alignment is built on the appropriate strategic and functional integration between the need to integrate Business Strategy and Information Technology / Information Systems Strategy. If a company project is carried out in accordance with business objectives, both are said to be aligned (Lederer & Hannu, 1996).

Henderson & Venkatraman (1990) have conducted research on a Strategic Alignment Model which is used as a basis for assessing the alignment of Information Technology / Information Systems strategies to business strategies. Strategic Alignment Model (SAM) with four domains/quadrants can be divided into two, namely the internal domain/infrastructure domain and external domain/strategy domain (Henderson & Venkatraman, 1994). Strategic alignment perspectives related to the use of company/organization Information Technology/Information System,

namely: 1. strategy implementation, 2. technological transformation, 3. competitive potential, and 4. service level. The first and second perspectives assume that the business strategy is the driving factor. Whereas the third and fourth perspectives assume the Information Technology/Information System strategy is a driving factor. Perspective is based on the assumption of the different relationships between business strategy (business scope, distinctive competencies, business governance), organizational infrastructure (administrative structure, processes, skills), IT-strategy (technology scope, systemic competencies, IT-governance), and IT- infrastructure (architecture, processes, skills). The SAM version model (Henderson & Venkatraman, 1994) is presented in Figure 1.



**Figure 2:** Strategic Alignment Model (SAM) model of Henderson & Venkatraman, 1994

The role of top management and the management of Information Technology / Information Systems in the company/organization, and how the process of transformation is presented in Table 2.

**Table 2:** Alignment Perspectives in IT / IS Implementation

No	Alignment perspective	Driver	Role of top management	Role of IT management	Transformation process	Performance criteria
1	Strategy execution	Business strategy	Strategy formulator	Strategy implementator	Business strategy → Organizational infrastructure → IT infrastructure	Cost/service center
2	Technology transformation	Business strategy	Technology visionary	Technology architect	Business strategy → IT strategy → IT infrastructure	Technology leadership
3	Competitive potential	IT strategy	Business visionary	Catalyst	IT strategy → Business strategy → Organizational infrastructure	Business leadership
4	Service level	IT strategy	Prioritizer	Executive leadership	IT strategy → IT infrastructure → Organizational infrastructure	Customer satisfaction

Source: Henderson & Venkatraman, 1994

The alignment of Information Technology and business strategies provides four perspectives as proposed by Henderson & Venkatraman, (1994) and (Luftman, 2004):

- The strategic implementation perspective (Strategy Execution) is characterized by the fact that the business strategies define the business design and business lines, and management of Information Technology infrastructure. In other words, managers designing business strategies and the managers of Information Technology are only responsible for practicing these technology infrastructure products and services to support the business strategies as defined by the government. The measurement criteria can include the financial gain, the efficiency of the process, or even both.
- Technology potential perspective (Technology Transformation), unlike before, presents the development of Information Technology strategies as a response to business strategies. The role of the Information Technology Manager starts to get the interests of the company, as well as understanding the technology infrastructure in the company as an investment center. The measurement criteria which can be used are technological leadership and the availability of new services for the customers.

- Perspective of Competitive Potential refers to the idea that the role which is played by information technology in a company has become a key factor in the management of the business strategy because it is considered as a strategic source that allows the exploitation of the resource capacity sequentially to have an impact on the new products and services (business scope, as stated in the mission and vision statement) and even regarding the quality of the business strategy (special quality). Based on this perspective, the adaptation of business strategy through the ability to emerge technology platforms is possible; the measurement criteria is a competitive advantage, the increasing of revenue, and the increasing of customer relationships.
- Service level perspective refers to realizing world-class information technology service organizations. The special role of the top management is in the assignment of resources in companies and technology markets that must be prioritized, while the role of the executive leader is responsible for the technological infrastructure. Its main task is to ensure that internal technology services succeed in accordance with the operational requirements of top management. Performance criteria for measuring this dimension are customer satisfaction.

### **The Relationship of Strategy Execution with Strategic-IT Alignment Implementation**

The research entitled Evaluation of the Strategy Execution Implementation in the MSME Empowerment in Bank Indonesia, by [Pasaribu \(2015\)](#). His research aims to see the importance of the SMEs empowerment role on the economy, it is necessary to evaluate the translation process and the strategy execution, and analysis of the factors which cause the strategy execution process for the MSME task is not in accordance with the concept of Strategy and Performance Execution (SPEx2). The SPEx2 concept directs the organization in order for the resources which have been spent in the formulation of the strategy are not useless because the strategy can be executed. This research is conducted through a case study approach with qualitative methods and descriptive analysis which can describe the state of the research object. Based on the SPEx2 concept, in general, Bank Indonesia has implemented the five stages of the process to achieve the strategy execution, namely strategy formulation, strategy mapping, organizational alignment, operational execution, and monitoring and re-alignment. However, several factors which cause the strategy execution process for empowerment tasks are not in accordance with the SPEx2 concept, the need for external stakeholders, especially related to the information provision about MSME empowerment activities which are not accommodated, the preparation of the IKU and unfocused strategy initiative, and targeted strategic objectives, for the support on the empowerment of MSMEs are less 0.77% of the target, It is due to the dissemination of study results which have not been optimal, the socialization of work programs is still carried out partially, and the work programs which are integrated with other ministries/institutions that have a function to empower MSMEs are not optimal.

### **The Relationship of Technology Transformation with The Strategic-IT Alignment Implementation**

The technology transformation perspective on the process of evaluating the implementation of organizational strategies that are selected through the right IT strategy and expressed through the right IT infrastructure and processes. Therefore, the better the process of technological transformation in the company, the strategic implementation of IT alignment will gradually reach the ultimate stage or the maximum stage, the changes in the company are shown by the responsiveness of the company to face the external and internal elements influence. It will change the company from a previously known form through the process of repeatedly doubling or multiplying. [Sihotang \(2017\)](#) on the assessment of the Strategic Alignment Model (SAM) and the mapping of the COBIT 4.1 framework at PT. XYZ. The analysis shows that the business strategies and IT strategies at PT. XYZ has been aligned and is in the perspective of technological transformation. This means that the business strategy which acts as a determinant of the IT strategy and IT infrastructure will be directly affected if IT strategy changed.

### **The Relationship of Competitive Potential with Strategic-IT Alignment Implementation**

A potential competitive perspective allows the adaptation of organizational strategies due to ongoing IT strategy implementation. New IT competencies and functionalities can influence the organizational strategy. In other words, the better the potential competitive level formed with the increasing of new IT capabilities in the company, the better the strategic implementation of IT alignment. The research of [Hidayanto, Ahmadin, & Jiwanggi \(2010\)](#) regarding the level of information technology support at the Directorate of Communication and Information Technology Transformation, General Directorate of Taxes, shows that the level of IT support at the directorate in the perspective of organizational contribution reaches 49%, user orientation perspective reaches 66.3 %, the perspective of organization improvement reaches 68.3%, and the perspective of future orientation reaches 25.6%. It shows the level of competence and functionality which affect the organization.

### **The Relationship between Service Level and Strategic-IT Alignment Implementation**

Information systems or technologies will be a demand for the organization's service and the service will be further enhanced by the high use and the mastery of information systems/technologies. The services which are supported by information systems/technology will reach the services from the sub-unit level to the whole organization. Research of [Noor, Bahar, & Fara \(2016\)](#) shows that information technology has a positive and significant effect on service quality, differentiation strategies have a positive and significant effect on competitive advantage, service quality has a positive and significant effect on competitive advantage. Information technology and differentiation strategies can affect the

service quality and the quality of service itself will affect the competitive advantage of hospitals. Thus, it can be stated that the better service level will show the better Strategic-IT Alignment implementation and vice versa, the Strategic-IT Alignment implementation will also provide good results in increasing the service level of the company/organization.

Also related to the implementation of the Strategic Alignment method (Henderson & Venkatraman, 1992) there are some fundamental questions before aligning the Information Technology / Information Systems and businesses, namely: What domains should be aligned with the domain of Information Technology / Information Systems? How to run the stages to align these domains? Is it important for companies/organizations to identify the environment? Is the temporal dimension integrated? In order to answer these fundamental questions, the organization should structure the framework of the alignment of Information Technology / Information Systems of a business which includes four elements, namely: involvement domain, alignment phase, identification, environment, and determination of the temporal dimension. If the company/organization has defined each answer of the fundamental questions, the company/organization then begins to determine what approach and alignment model will be used and how to evaluate each approach.

Elements of business alignment and Information Technology / Information Systems are presented in Table 3.

**Table 3:** Elements of Business Alignment and Information Technology / Information Systems

<i>Element</i>	<i>Attribute</i>	<i>Values</i>
Involved Domain	Involved Domain	- Business strategy - Organizational Infrastructure and Process - Information Technology strategy - Infrastructure and Information technology process
Alignment Sequence	Domain Classification	- Anchor - Pivot - Affected
	Type of relationship	- Suitability strategy - Functional integration
	Natural Alignment	- Planned - Appear
Environment Sequence	Perspective Scanning	- Actor - Utilization - Matter
Temporal Dimension	Temporal Dimension	- The past - Like + the next step - Become

**Source:** (Avila, Goepp, & Kiefer, 2009)

Based on the four elements listed in Table 3., The alignment between the domains involved is needed. The involvement domain element states the domains which will be involved in the company's strategic alignment process. These domains include business strategies, infrastructure and organizational processes, Information Technology Strategies, and Information Technology infrastructure and processes. The four domain is the primary domain proposed by Henderson and Venkatraman (1990) in the business alignment model of Information Technology.

The alignment stage elements describe the stages and alignment direction between the domains involved. Attributes contained in this element is the domain classification (anchor, pivot, and impacted, the type of relationship (strategic fit and functional integration), and the nature of the alignment (planned or impromptu). Environmental identification elements include actions to find information about the event and its relationship with the external environment. The results of this identification will assist the executives in planning the company's actions in the future. Attributes of this element are actors, uses, and issues. Temporal dimension elements show the readiness of Information Technology infrastructure in anticipating the changes in the evolution of the external environment and the changes in organizational strategy. Attributes of this element are passed, future, and present.

In order to assist organizations in deciding the perspective which can be adopted in a particular condition, Luftman, Lewis, & Oldach (1993) propose a model to identify the strengths and weaknesses in the strategic alignment model which are described as: (1) the domain which becomes a major force (anchor). It shows a centralized pattern on systems/information technology. (2) the domain which becomes a weak point (pivot). This is a formation pattern of the Information Technology / Information System which is decentralized on each subsystem. (3) the domain which is affected is a change caused by the anchor in finding a solution for the pivot. It shows the relationship between domains and pivots bridged by how big the anchor is. Kefi and Kalika, 2005 describe the strategic alignment perspective as (1) Business execution: at this level, strategic alignment is determined and decided in accordance with the existing businesses in the organization, (2) Competitive potential: the strategic alignment is an effort to increase the competition potential of an organization against another organization. The competition potential in the form of competition superiority associated with the implementation of systems/information technology in an organization. (3) IT-potential:

The organizations in running their business is supported by the potential of Information Technology. The greater the potential of Information Technology in the organization, the more the organization's performance will increase and, (4) Service level: in the service, an organization can be improved with information systems/technology. Services that are supported by Information Technology / Information Systems will reach the services from the sub-unit level to the organization/company as a whole.

Therefore, creative industry groups SMEs can be assessed based on four perspectives on the alignment of Information Technology and business strategies as proposed by (Henderson & Venkatraman, 1993) and (Luftman, 2000), the justification of the model which is used in SMEs is not carried out.

## RESEARCH METHOD

### Research Design

Research design is causal research. According to Sugiyono (2012), a causal relationship is a cause and effect relationship.

### Types and Data Sources

This research uses primary data type, in the form of questionnaires and some are carried out also by direct interviews.

### Population and Sample

The population in this research is the owner of Palembang city, which amounted to 124 people.

The population for this research is SMEs in Palembang City which is registered in the Ministry of Cooperatives and SMEs. The reason for the population in this research is limited in Palembang City is because considering the development of SMEs in Palembang City contributes as much as 14% of the total growth of national micro businesses. Based on the purposive sampling technique, SMEs have also participated in a minimum of two pieces of training held by the Creative Economy Agency (Bekraf) which is a non-ministerial government agency responsible for a creative economy with sixteen subsectors, resulting in 104 SME owners. who are also SMEs? This is because in order to make it easier to directly get a perspective on the extent of Strategic-IT Alignment implementation in their business and the constraints faced.

### Analysis of Structural Equation Modelling (SEM)

This research uses Structural Equation Modeling (SEM) Analysis, which is operated through the Lisrel Program. SEM using PLS only allows the relationship model between recursive variables (Sarah) only. Another reason is the errors in each observation are not neglected but still analyzed, so SEM is more accurate in analyzing the questionnaire data which is involving perception. All latent variables are related to one another based on substance theory. As for structural equations, built on the guidelines:

$$\boxed{\text{Endogenous variable} = \text{Exogenous variable} + \text{Endogenous variable} + \text{Error}}$$

One of the goals of Path Analysis is to determine whether the model is fit or not. According to Hulland, et al in (Ferdinand, A., 2005), several suitability indexes and "cut-off values" are used to test whether a model is accepted or rejected, namely:

**Table 5:** The Goodness of Fit Index

<i>The goodness of Fit Index</i>	<i>Cut-of Value</i>
$\chi^2$ Chi-square	Small expected
<i>Significance Probability</i>	$\geq 0.05$
RMSEA	$\leq 0.08$
GFI	0 – 1
AGFI	$\geq 0.90$
CMIN/DF	$\geq 3.00$
TLI	$\geq 0.95$
CFI	0 – 1

### Research Hypothesis

The hypothesis which is built in this study is as follows:

H<sub>1</sub>: Strategic-Execution has a positive effect on the implementation of Strategic-IT Alignment.

H<sub>2</sub>: Technological-Transformation has a positive effect on the implementation of Strategic-IT Alignment.

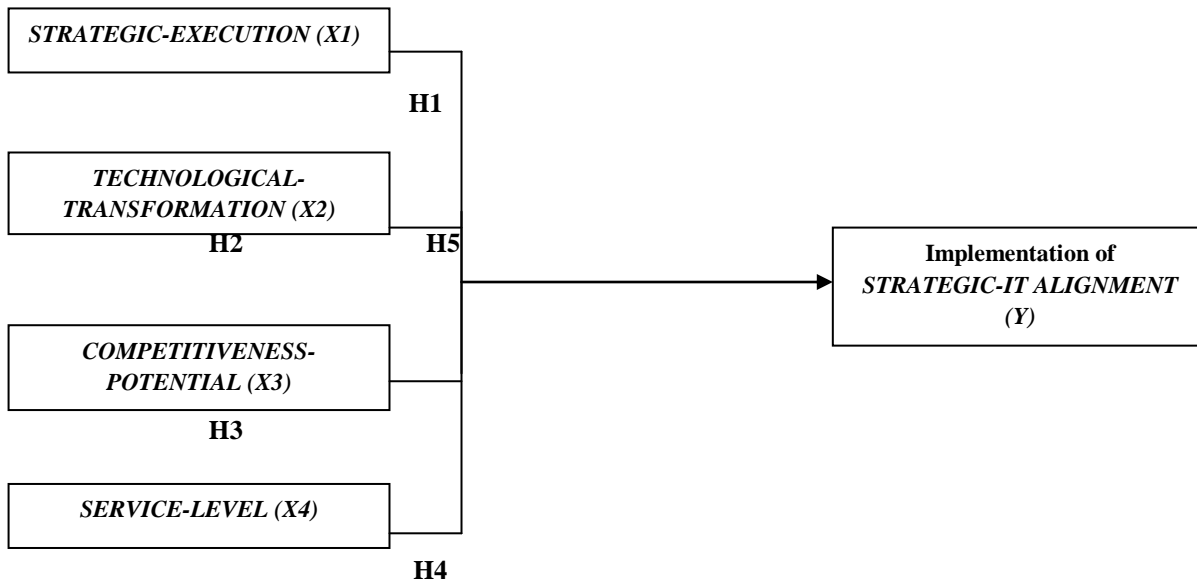


H<sub>3</sub>: Competitiveness-Potential has a positive effect on the implementation of Strategic-IT Alignment.

H<sub>4</sub>: Service-Level has a positive effect on the implementation of Strategic-IT Alignment.

H<sub>5</sub>: Strategic-Execution, Technological-Transformation, Competitiveness-Potential, dan Service-Level has a positive effect on the implementation of Strategic-IT Alignment.

The research framework based on the hypotheses which are built is presented in Figure 3. below:



**Figure 3:** Framework of Research

## RESULT AND DISCUSSION

### Description of Respondents

The description of respondents characteristics of SMEs owners based on gender, age, level of education, duration of business and business group is presented in Table 8:

**Table 6:** Characteristics of Respondents

Information	Characteristics	Total	Percentage
Gender	Male	46	44,23
	Female	58	55,77
Age	< 30 year	63	60,58
	30-40 year	35	33,65
	>40 year	6	5,77
Level of Education	SMP	8	7,69
	SMA	34	32,69
	D3/S1	57	54,81
	S2	5	4,81
Duration of business	< 3 year	16	15,38
	3-5 year	41	39,42
	>5 year	47	45,19
Business Group	Craft	16	15,38
	publishing and printing	17	16,35
	computer and software services	15	14,42
	Advertising, Video, and photography	22	21,15
	Fashion	21	20,19
	art items	9	8,65
	performing Arts	4	3,85

**Source:** Data Processing Results, 2017

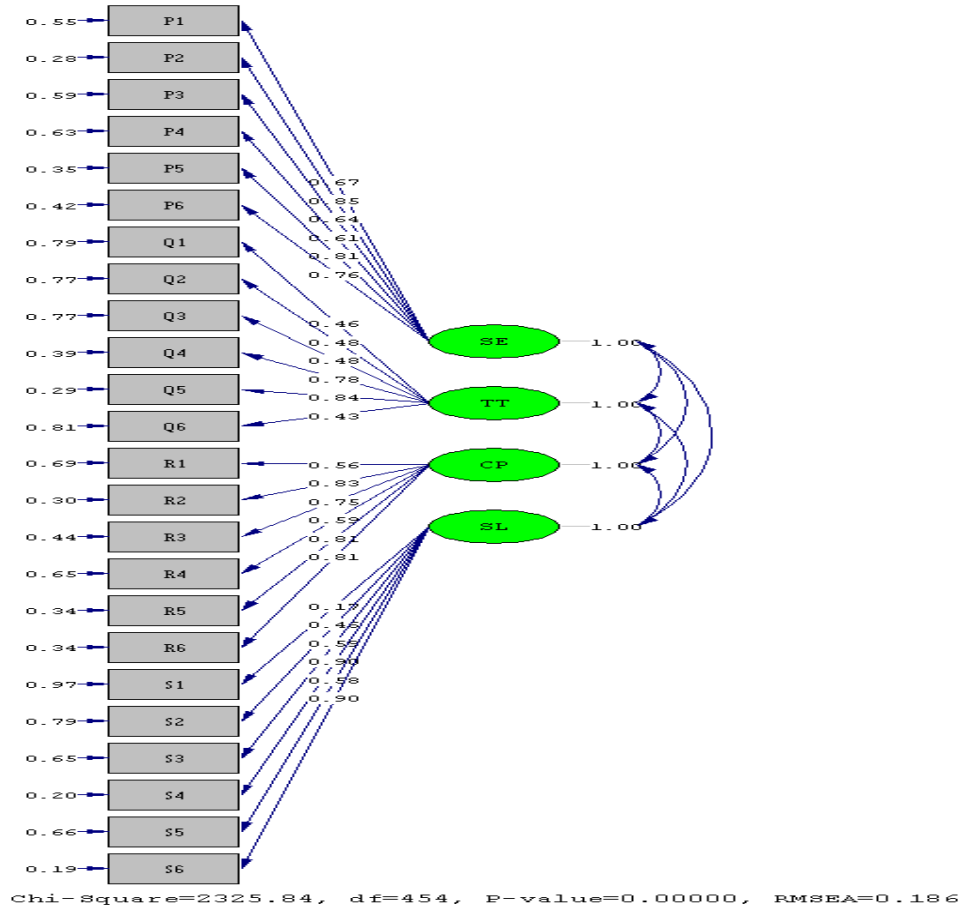
Based on Table 6. Sample respondents in this research are predominantly women, the ages are less than 30 years, the education level is predominantly D3 / S1, the business duration is more than 5 years, and the dominant business group is from fashion.

Table 7. below presents the recapitulation of respondents' answers to question items in the Strategic-Execution variable.

**Confirmatory Factor Analysis or CFA**

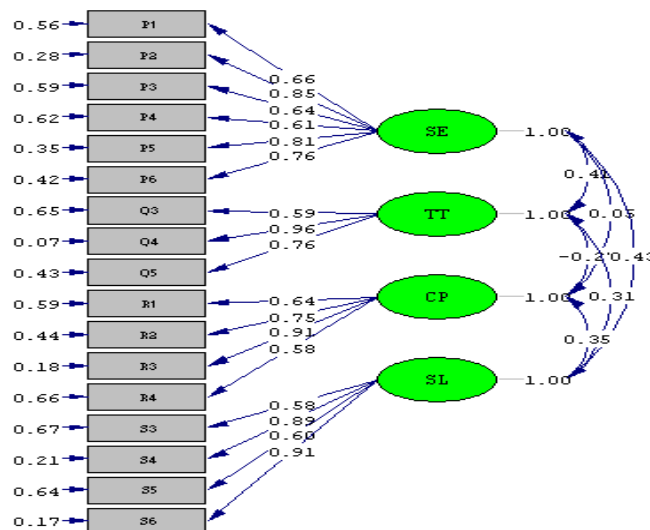
**a). CFA Exogenous Construction**

Exogenous Construction CFA model can be seen in Figure 4. below:



**Figure 4:** Model 1 CFA Exogenous Constructs

Based on Figure 4, it can be seen that the CFA Model\_1 Constructs Exogenous, loading factor loading value is still less than 0.5, namely Q1, Q2, Q3 and Q6 on the Technological\_Transformation variables (TT), and the S1 and S2 indicators on the Service\_Level (SL) variable, the indicators have not been valid and must be removed in subsequent analysis in order to obtain Model\_2 CFA Exogenous construct as follows:



**Figure 5:** Model\_2 CFA Exogenous Construction

Figure 5. indicates that Model\_2 of CFA Exogenous Construction does not have loading factor value which is less than 0.5 so that all indicators on the Exogenous variable have shown valid. The results of reliability calculation with the Construct Reliability (CR) from the CFA Exogenous variable analysis are presented in Table 5.

**Table 7:** Indicator Validity Test Results and Construct Reliability of Exogenous Variable

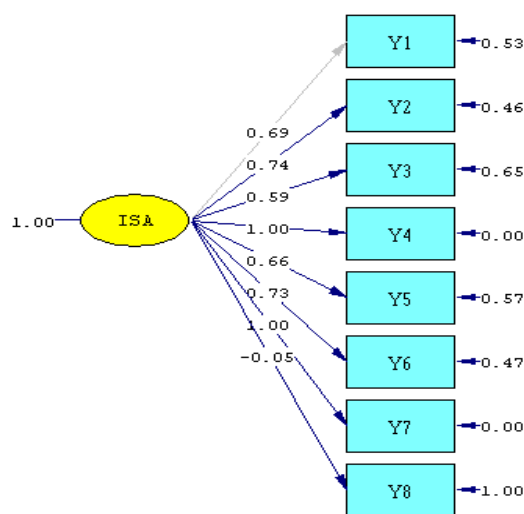
Dimension	Indicator	$\lambda$	Error = $1-\lambda^2$	$CR = \frac{(\sum \lambda)^2}{(\sum \lambda)^2 + \sum \text{Error}}$
Strategic Execution (SE)	P1	0,66	0,56	<b>0.869</b>
	P2	0,85	0,28	
	P3	0,64	0,59	
	P4	0,61	0,62	
	P5	0,81	0,35	
	P6	0,76	0,42	
Technological Transformation (TT)	Q3	0,59	0,65	<b>0.823</b>
	Q4	0,96	0,07	
	Q5	0,76	0,43	
Competitive Potential (CP)	R1	0,64	0,59	<b>0.816</b>
	R2	0,75	0,44	
	R3	0,91	0,18	
	R4	0,58	0,66	
Service Level (SL)	S3	0,58	0,67	<b>0.840</b>
	S4	0,89	0,21	
	S5	0,60	0,64	
	S6	0,91	0,17	

Source: Data Processing Results, 2017

Table 7. shows that the CR value of all exogenous constructs is above 0.7. so that all dimensions and research variables have good reliability and validity.

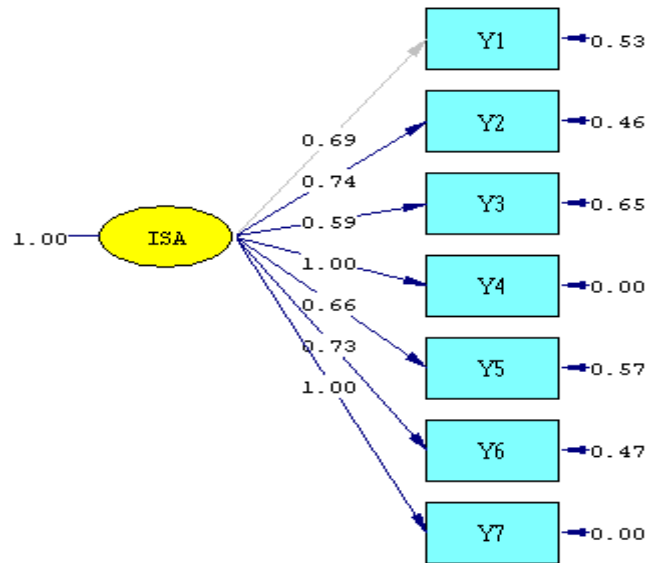
**b). CFA Endogen Construction**

The analysis of the endogenous construct confirmatory factor is shown in Figure 6. below:



**Figure 6:** Model\_1 CFA Endogenous construct

Figure 6. Shows that in Model\_1 CFA the Endogenous construct still has a loading factor value of less than 0.5, which is Y8 in the ISA variable, which means that these indicators are not valid and must be excluded in the subsequent analysis so that it is obtained the Model\_2 CFA Endogenous Construct as follows :



**Figure 7:** Model\_2 CFA Endogenous construct

Figure 7. shows that in the CFA Model 2, the Endogenous construct does not have a loading factor value  $< 0.5$ , so all indicators in the Endogen variable are valid. The results of reliability calculation with CR from CFA Analysis of endogenous variables are presented in Table 8.

**Table 8:** Results of Indicators Validity Test and Reliability of Endogenous Variable Constructs

Dimension	Indicators	$\lambda$	Error = $1-\lambda^2$	$CR = \frac{(\sum \lambda)^2}{(\sum \lambda)^2 + \sum Error}$
ISA	Y1	0,69	0,53	<b>0,916</b>
	Y2	0,74	0,46	
	Y3	0,59	0,65	
	Y4	1,00	0,00	
	Y5	0,66	0,57	
	Y6	0,73	0,47	
	Y7	1,00	0,00	

**Source:** Data Processing Results, 2017

Figure 7. and Table 8. indicate that in Model\_2 CFA Endogen Construct there are no loading factor values which are less than 0.5, thus indicating all indicators on the endogenous variables are valid. While the CR value shows all exogenous constructs are above 0.7. Thus it can be concluded that all dimensions and variables in the research have good reliability.

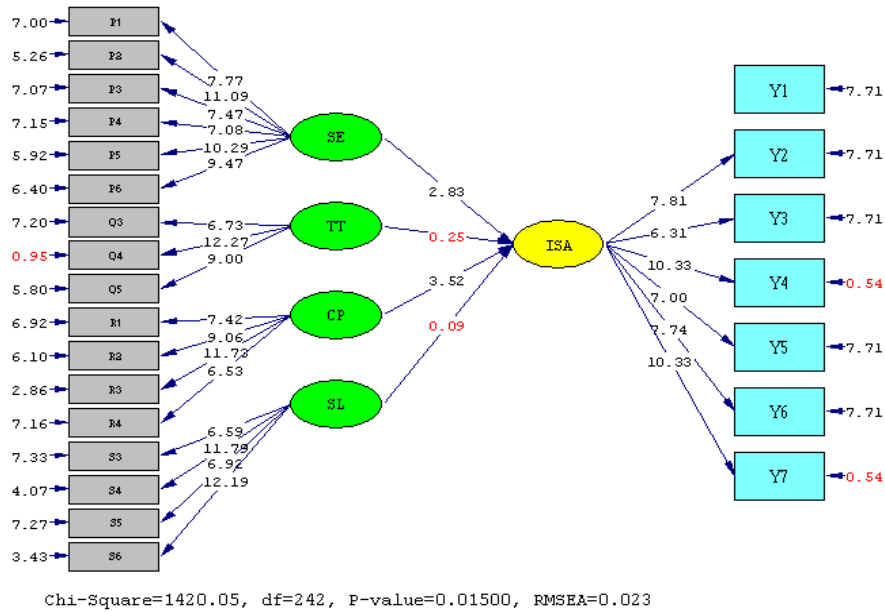
#### Analysis of Structural Equation Modelling (SEM)

**Table 9:** Goodness Of Fit Index

No	Goodness Of Fit Index	Values	Information
1.	Chi-Square Probability	1431,27 0,015	Marginal Fit
2.	RMSEA	0,023	Good Fit
3.	NFI	0,89	Marginal Fit
4.	NNFI	0,97	Good Fit
5.	CFI	0,93	Good Fit
6.	IFI	0,93	Good Fit
7.	RMR	0,054	Good Fit
8.	GFI	0,93	Good Fit
9.	AGFI	0,82	Marginal Fit

**Source:** Data Processing Results, 2017

The estimation results of a full SEM analysis model based on t-value are shown in Figure 8:

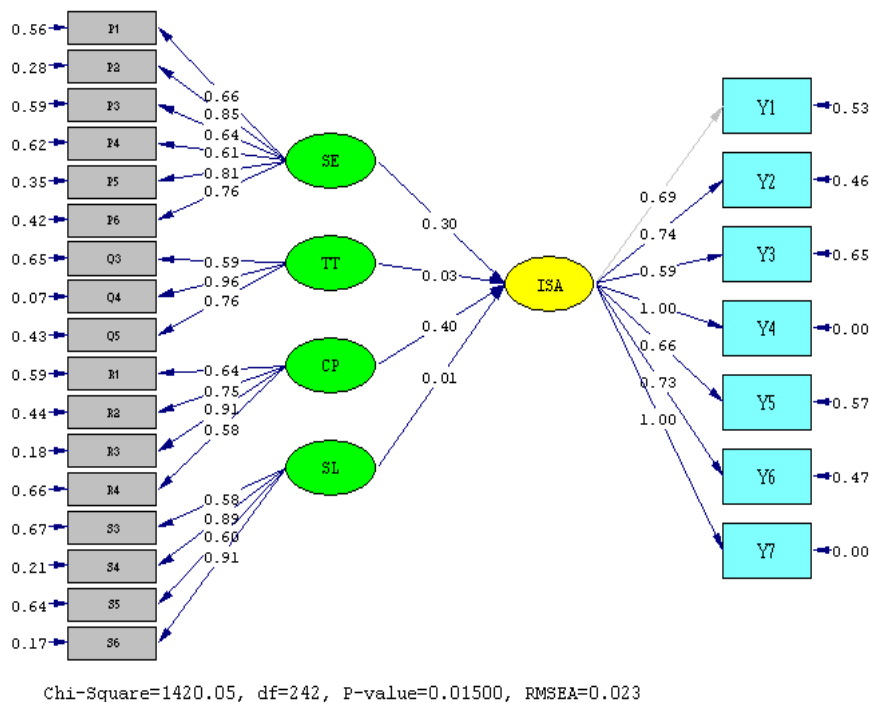


**Figure 8:** Full Model Estimation Results based on t-value

Figure 8. shows that there are two parameters in the Full Model which have an insignificant effect on ISA (t-count values smaller than 1.96), namely TT and SL variables and there are two variables that have a significant effect on ISA, namely SE and CP variables at the level of 0.05%.

## DISCUSSION

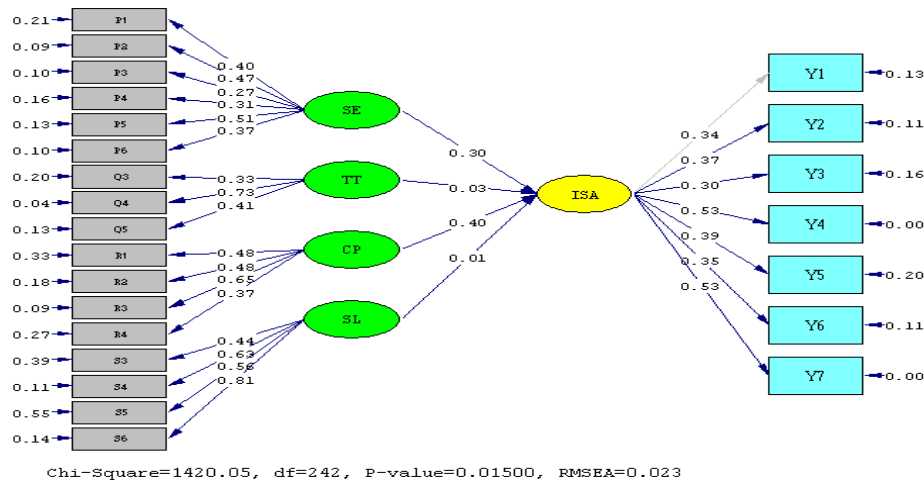
Estimation results for SEM full model analysis based on loading standards are shown in Figure 9:



**Figure 9:** Estimation Results of Full Model based on Standard Loading

**Structural Equations :**  $ISA = 0,30SE + 0,03TT + 0,40CP + 0,01SL$

Based on the structural model, it can be explained that ISA is influenced by SE, TT, CP, and SL. This means that the better the SE, TT, CP, and SL then the ISA will increase. The magnitude of the effect of SE on ISA is 0.30, TT against ISA is 0.03, CP against ISA is 0.40 while SL against ISA is 0.01. This shows that CP has a greater influence on ISA than SE, TT, and SL.



**Figure 10:** Results of the Full Estimation Model based on Estimates

The loading value states the relationship between the research variable and the indicator, so the best indicator on a variable is the one that has the largest loading value so that the relationship between the indicator and the research variable will be higher.

### Suitability Analysis of Structural Model

The conclusion results of the hypothesis testing are presented in Table 10.

**Table 10:** Conclusion of the Hypothesis Test

No.	Path	t-value	Estimasi	Keterangan
1	SE → ISA	2,83	0,30	H <sub>1</sub> :Has Positive and Significant Influence
2	TT → ISA	0,25	0,03	H <sub>2</sub> : Has Positive and insignificant Influence
3	CP → ISA	3,52	0,40	H <sub>3</sub> : Has Positive and Significant Influence
4	SL → ISA	0,09	0,01	H <sub>4</sub> : Has Positive and insignificant Influence

**Source:** Data Processing Results, 2017

This research aims to determine the perspective of business owners regarding the strategic-execution, technological-transformation, competitiveness-potential, and service-level on the Strategic-IT Alignment implementation of Creative Industry Groups SMEs in Palembang City.

Based on the results of hypothesis testing, then the discussion is as follows:

#### 1. Effect of Strategic-Execution on Strategic-IT Alignment implementation

The results of the research support the first hypothesis that the Strategic-Execution variable has a positive and significant effect on the implementation of Strategic-IT Alignment. This research can prove that the Strategic-Execution which conducted by the Creative Industry Groups SME owners in Palembang City has been able to support the implementation of Strategic-IT Alignment. The owners of Creative Industry Group SMEs in Palembang City can be said to have been able to compete with competitors because they have started to have and formulate the appropriate strategies, which are used as the main capital before moving to the next level. The results of this research do not support Pasaribu's research (2015), which stated that there were several factors (the stages of the process to achieve the strategy execution, namely the strategy formulation, strategy mapping, organizational alignment, operational execution, and monitoring and re-alignment) which had not been implemented optimally and caused the execution process of strategy to become inappropriate. While the results of this study indicate that SME owners who are also SME practitioners, from creative industry groups in Palembang have been able to develop strategies according to their business characteristics, and the IT department has also been able to project and implement IT and technology solutions, while the performance of information systems and the internet is judged based on financial criteria. This is because the creative industries have almost similar strategic characteristics, besides that the use and mastery of IT highly demand in competition.

#### 2. The Influence of Technological-Transformation on the Strategic-IT Alignment implementation

The results of the research support the second hypothesis that the Technological-Transformation variable has a positive and significant effect on the Strategic-IT Alignment implementation. The results of this research have not supported the results of Sihotang's research (2017) business strategy is the determinant of the IT strategy and IT infrastructure, it will be directly affected if IT strategy changed. The owners of Creative Industry Group SMEs in

Palembang City have not had the ability to change or upgrade the Information Technology owned which can support the implementation of business strategies to get optimal results due to the limited funds for Information Technology investments. However, the awareness of the owners of Creative Industry Group SMEs in Palembang City for the importance of Technological-Transformation has been better, it is shown through the use of digital marketing, electronic equipment, applications, and so forth.

### 3. The impact of Competitiveness-Potential on Strategic-IT Alignment implementation

The results of the research support the third hypothesis that the Competitiveness-Potential variable has a positive and significant effect on the Strategic-IT Alignment implementation. Competitiveness-Potential is an internal reinforcement in relation to the potential which comes from competitors, by doing this step, it can be an input from the company's business strategy process. The owners of Creative Industries Group SMEs in Palembang have begun trying to improve the ability of Information Technology which is used to influence new products and services, influence the competency strategy, government-business relationships, and so forth. As it is known that the products/services produced by the Creative Industry Group SMEs were born from the creative and innovative ideas from their human resources which initially had the advantage, just sharpen in order the advantage could compete with other products/services. Thus, the results of this research support the research results of (Hidayanto et al., 2010) that the level of competence and the functionality show the potential competitive levels which are formed by the increasing of new IT capabilities in the company affect the organization. Therefore, the better the potential competitive level, the better the strategic implementation of IT alignment will be.

### 4. Service-Level Influence on Strategic-IT Alignment implementation

The results of the research do not support the fourth hypothesis that the Service-Level variables have a positive and significant effect on the Strategic-IT Alignment implementation. The owners of Creative Industries Group SMEs in Palembang have not been able to build reliable business services to handle business strategy supported by reliable information technology. Besides the limited funds for the Information Technology investment (in terms of capital), the owners of Creative Industries Group SMEs have not had the ability to cover the entire rapid changes in customer demand or understand what is needed/desired by the customers. Research (Noor, Bahar, & Fara, 2016) results that information technology has a positive and significant effect on service quality, differentiation strategies have a positive and significant effect on competitive advantage, service quality has a positive and significant effect on competitive advantage shows that information technology has a positive and significant influence on service quality, differentiation strategies have a positive and significant influence on competitive advantage, service quality has a positive and significant influence on competitive advantage. Information technology and differentiation strategy can affect the quality of service and quality of the service itself will influence the competitive advantage of the hospital. Thus, it can be stated that the better service level will show the better Strategic-IT Alignment implementation and vice versa, the Strategic-IT Alignment implementation will also provide good results in increasing the service level of the company/organization.

### 5. Strategic-Execution, Technological-Transformation, Competitiveness-Potential, and Service-Level on the implementation of Strategic-IT Alignment. The results of the research support the fifth hypothesis that the variables of Strategic-Execution, Technological-Transformation, Competitiveness-Potential, and Service-Level have a significant effect simultaneously on the Strategic-IT Alignment implementation. In other words, the results of this research indicate that the owners of Creative Industry Group SMEs in Palembang City are ready to implement the Strategic-IT Alignment with the support of Strategic-Execution and Competitiveness-Potential and the Technological-Transformation and Service-Level need repair and improvement.

## CONCLUSION

This research is empirical research that aims to find out the perspective of the business owner regarding the strategic-execution, technological-transformation, competitiveness-potential, and service-level on the strategic implementation of IT-alignment in SME Creative Industry Group in Palembang City. The results of this study stated that part only the Strategic-Execution and Competitiveness-Potential variables which influence the implementation of Strategic-Alignment. While Strategic-Execution, Technological-Transformation, Competitiveness-Potential, and Service-Level have a significant effect simultaneously on the Strategic-IT Alignment implementation.

## SUGGESTION

Therefore, it needs an important role of parties related to the development of SMEs Creative Industry Group such as financial institutions especially banks which will greatly assist the acceleration of the Technological-Transformation process, for investors make the development of Creative Industry Group SMEs as opportunities for business cooperation, other authorities parties relating to guarantee of competitive advantage in the form of protection of Intellectual Property Rights from the results of Creative Industries Group SMEs, the enhancement of training and coaching activities of the Creative Economy Agency, Cooperative, MSMEs, Industry, and Trade Agency, joint responsibility among many related parties, and others so. Subsequent research is recommended to conduct more specific research on sectors included in the

creative economy industries category, include the other variables in the Luftman Model, Ward and Peppard Model, and so on.

### LIMITATION AND STUDY FORWARD

This research is limited to one case that occurred in the SME of Creative Industries Group in Palembang City. Due to the Business and information systems which are not in line or aligned will cause the utilization of information systems to be not optimal in supporting business. This indicates that companies must seriously align business strategies and Information Technology. The Alignment of information systems with the business objectives and strategies are things that have long been a concern, but it is difficult to do because basically business strategies and goals are always dynamic. The alignment of Information Technology strategy - business strategy or what is known as strategic alignment is the implementations of Information Technology applications that are carried out correctly, on time, and in harmony with the business strategy, the objectives and needs of the company. further research is needed on strategic execution, technological transformation, competitiveness potential, and services level on the implementation of strategic its alignment.

### IMPLICATION

This research will contribute to the knowledge of the concept of the perspective of the business owner regarding the strategic-execution, technological-transformation, competitiveness-potential, and service-level on the strategic implementation of IT-alignment in SME Creative Industry Group.

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**Table 4:** Definition of Research Variable Operational

Variable	Definition	Indicator	Scale
Strategic-Execution (SE)	Managers design the business strategies and Information Technology managers only responsible for practicing the technology infrastructure products and services to support business strategies	<ul style="list-style-type: none"> <li>- Business managers develop strategies based on business characteristics.</li> <li>- The Information Technology Manager projects and implements Information Technology solutions.</li> <li>- Technological performance such as information systems and the internet are assessed based on financial criteria.</li> </ul> Source: (Henderson & Venkatraman, 1993)	Ordinal
Technological-Transformation (TT)	Understand this technology infrastructure in the company as an investment center	<ul style="list-style-type: none"> <li>- Business managers feel technology solutions such as information systems and the Internet as business opportunities</li> <li>- Information Technology Managers succeed in providing solutions in the practical fields predicted by the organization.</li> <li>- Technologies such as information systems, Internet are judged by its technological leadership compared to other companies.</li> </ul> Source: (Henderson & Venkatraman, 1993)	Ordinal
Competitiveness-Potential (CP)	Information Technology has played a role in the company which is a key factor in the management of business strategies because it is considered as a strategic resource that enables the exploitation of resource capacity in a sequential manner	<ul style="list-style-type: none"> <li>- Business managers feel new business opportunities through the use of technologies such as information systems and the internet.</li> <li>- Information Technology Managers identify market trends to help businesses</li> <li>- Information Technology is assessed based on the quality of the solution.</li> </ul> Source: (Henderson & Venkatraman, 1993)	Ordinal
Service-Level (SL)	internal technology services are successful based on top management operational requirements that can create customer satisfaction.	<ul style="list-style-type: none"> <li>- Business managers prioritize the assignment of resources for Information Technology infrastructure.</li> </ul>	Ordinal



- Information Technology Managers develop Information Technology strategies that are not business strategies that aim to achieve the excellent quality of the services.
- Information Technology area is assessed based on the level of satisfaction of its users.

Source: ([Henderson & Venkatraman, 1993](#))

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Implementation of Strategic-IT Alignment (ISA)	Implementation of the strategy of IS / IT based on Business Strategy	<ul style="list-style-type: none"><li>- Business strategy;</li><li>- Business infrastructure;</li><li>- Information Technology Strategy; and Information Technology Infrastructure</li></ul> Source: ( <a href="#">J. Henderson &amp; Venkatraman, 1990</a> )	Ordinal
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