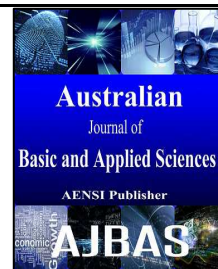




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Case Studies in Research: Analysis on Performance Model Using Balanced Score Card, Strategic Objective and Sustainable Competitive Advantage Synergized with SEM

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ABSTRACT

Balanced scorecard (BSC) is the best and effective method of performance assessment. It could provide an integrated view of organization performance as a whole to develop a knowledge-based system of intellectual BSC for operational planning strategy based on its perspective. This paper purpose is to know the influence of balanced scorecard variable that is synergized with structural equation modeling (SEM) as a mean of future strategic planning to becomes a virtual necessity in business. This research uses primary data with a large sample to meet the maximum likelihood estimation by using seven-point semantic scale. This research model is a combination of one and two step models. The next step is to test the measurement model, structural equation modeling and modification models. The test results indicate that model has multi colinearities. Therefore, model is converted into one step model. The test results after being modified into model of goodness of fit indices shows a good score. All BSC variables have direct significant influence, including the perspective of strategic goals and sustainable competitive advantage. The implication of simulation model of goodness of fit-modification results DF = 277, Chi-square = 316 680, P = 0.051, CMIN / DF = 1,143, GFI = 0.819, AGFI = 0.770, CFI = 0.972, TLI = 0.967 and RMSEA = 0.038 the cut off value is good, there are only two marginals.

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INTRODUCTION

Encouraging signs of Indonesia's future of which Indonesia is coming out of its financial crisis are due to its unique performance of small and medium enterprises (SMEs) that support the Indonesian economy. The monetary crisis in 1997-1998 made a number of foreign observers predict that Indonesia would be scattered such the Balkan countries in Europe, which after years was repeatedly hit by economic crisis. However, Indonesia is stronger that it did not take long to be able to crawl up and come out of crisis. Indonesia is slowly but surely putting back together its economic ruins. The lower level of economy at that time, such as the traditional market, minimarket and even supermarkets were still running well. The SMEs were still running well because they did not use bank loans. Instead, they were running their business based on their capabilities. Those were affected directly by financial crisis are the big enterprises whose capital came from bank loans. SMEs in running their production processes were not related to bank. This process could not be allowed to happen because SMEs could not capture the greater

opportunity, and if this had been let to happen, Indonesia would have not been able to come out of crisis for a long time. Eventually, Government of Indonesia issued a policy that major enterprises shall survive by providing them with liquidity aid from Bank of Indonesia. This was to bridge SMEs and national economy to be able to exist more.

This strategy made the economy react positively. This effective decision included combining four perspective steps of BSC that focused on a system with different behaviors (Lipe and Salterio, 2000) Malina and selto, 2001, Dess and Shaw 2001, Ittner *et al*, 2003. The advantage of BSC is due to balance between financial and non-financial variables, move his problems focus on financial variables, customer and business process / internal focus on future of learning and growth variables Banker, *et al* 2004. A research in SMEs using BSC method has been done by (Chen *et al*, 2011, Wu, 2012, Sangjae *et al*, 2013). The year of 2004 was a crucial moment, which the election in Indonesia that ran peacefully became the energy to drive the wheels of economy to move faster. The achievement of Indonesian leaders within a decade was able to maintain high level of economic

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growth in range of 4-6%. It is only China and India that could reach that level. However, in terms of stability of economic growth, Indonesia is number one in world wide. Indonesian leaders in decade of 2004-2014 were the pioneers of stability post the economic crisis, and Indonesian leaders in decade of 2014-2019 are expected to be able to maintain and improve the programs to become more positive, realistic, accountable, and credible.

BSC has been used to measure the performance which is useful and effective in a wide range of businesses (Amado *et al*, 2012, Epstein *et al*, 1998, Wu *et al* 2009) the implementation of BSC at institutional level that is collaborating in an effort to develop a measurement framework on performance at Food Research Institute (FRI) (Yawson *et al*, 2006). is applied in measurement of organization performance system. Withanachchi *et al*, 2007. BSCs is applied in evaluating the organization development program that is performed at public hospital for tertiary care. Jorge Gomes *et al*, 2013 organization change. Moreo *et al*, 2009 suggested that BSC can be applied by managers, leaders, owner, stake holders in measuring the environmental effect and company finance in order to conserve the quality of environment Smandek *et al*, 2010 applied and developed BSC system for IP management in order to optimize the increase in licensing revenue, cut costs and increase motivation. Homburg *et al*, 2012. BSC is applied in performance management marketing to demonstrate comprehensive relationship between marketing performance measurement system and performance of company as a condition of marketing alignment and knowledge-based market. Taylor and Baines, 2012, BSC is applied to evaluate the management of higher performance in terms of formation, monitoring, and evaluation of strategies and policies, as well as the problem of motivation.

BSC framework allows managers to look back into past and into future (Banker *et al.*, 2004), Ing-Long Wu *et al*, 2012. to seek a balance between financial and non-financial. More than two decades after the publication of first BSC (Kaplan and Norton, 1992), which is in 18th year with responses from more than 11,000 executives, survey shows that BSC management tool remains to be one of most popular management as performance measurement tool. In 19th year, Rigby and Bilodeau (2011) illustrated the popularity of BSC for practitioners as the remaining most popular management tool. In 20th year Zahirul Hoque (2014). The findings of this paper review are presented in three parts. First, review article is categorized by topic, research setting, theory, research methods, and primary data analysis techniques. Secondly, contribution of field research and studies. Third, discuss the knowledge gaps in research with existing BSC, causing consideration on several ideas for future research, and given the length of analysis

period (20 years) can support multiple testing hypothesis related to future. In third part, synergizing BSC with Partial least squares (PLS) by using limited / small data, which is by examining the causal relationship among the four categories of BSC. This paper synergizes BSC with Structural Equation Modeling (SEM) by using large data to support (Baggio and Sainaghi, 2011). Previous research suggested that performance of customer and finance is causally related to each other Nielsen *et al*, 2012. Gonzalez-Padron *et al*, 2010 confirms that performance of customer's affects on financial performance, learners and growth facilitate the internal business processes. BSC has been applied in various contexts, empirical studies on application of BSC for specific IT services using primary data, such as Saas Sangjae *et al*, 2013. Ing-Long Wu *et al*, 2012, Zahirul 2014, also uses primary data, which are still limited, there is dearth of comprehensive performance management system applications by SMEs (Altaf *et al* 2010, Arbuckle, 2013). Sangjae Lee *et al*, 2013 discusses the causal relationship among the four measurements of BSC is the main focus of BSC is synergized with PLS. Generally, previous researches used secondary data. In order to have more vary results, researcher uses primary data, with simultaneous cause and effect concept by synergizing BSC method and SEM. This is because each performance measurement shall be element in a cause and effect relationship. The advantage is that it could be an input for score planning of goodness of fit in current and future time in order to escalate the organization's performance system which will lead to better service to customers, employees, owners, and stake holders (Kaplan *et al*, 1996b). The current researcher did not find the method used by previous researcher in order to synergize the two methods. The researcher focuses on SEM tool that is started by doing dissertation research, and then followed by writing dozens of national and accridated journals. Other than that, researcher produces books of reference focusing on SEM tool consisting of three titles, they are one step approach model, two step approach model, and third title once became best seller book in Indonesia with title of "Panduan dan Aplikasi SEM" (Guidance and Application of SEM) which is discussing about two step approach model becomes one step approach. The results of research are compiled into book of reference.

Kaplan & Norton, 1996 created BSC method with concept of cause and effect relationship that researcher would have the mindset that BSC could be synergized with SEM. Before writing this paper Zahirul Hoque, 2014, Sangjae Lee *et al*, 2013, with title of "Using Balanced scorecards for the evaluation of "Software-as-a-service", researcher synergized BSC with PLS by using the four variables as initiated by Kaplan & Norton. After studying many journals, BSC is applied as strategic target perspective. Due to BSC advantage, researchers comprehend the five

variables. This research's objective is to find out the goodness of fit model and result of synergizing two methods in terms of evaluating BSC strategy and competitive advantage continuously by using indicators those are comprehensive, balanced, and measurable.

This research is done at center of small enterprises in Sidoarjo regency at sandal industry, and in Pasuruan regency at furniture industry.

1. Theoretical dan background:

2.1. Center of Small Enterprises and Small Enterprises:

The center is a small area that has certain characters where inside it exist production process and it is a more specific area for economic activity commodity that has been formed naturally and supported by facilities in order to develop the products or services. It consists of micro, small, and middle level entrepreneurs. There is physical union of functions in center land, geography, infrastructure, institutionals, human resources that have potentials in developing the economy activity under the market influence of a product with higher selling point and competitiveness. Based on Decree of Minister of Cooperatives Small and Medium Enterprises No: 32 / Kep / M.KUKM / IV / 2002 on Center's Growth and Development Guidelines, Center is defined as a center of activities in a certain area / location, where existing businesses use similar raw materials / facilities, producing similar products, and have the potential to be developed as cluster. Some existing characters in small enterprises are: management is done based on traditional skill, business and organization patterns still require guidance on entrepreneurship, and it requires assistance in procurement as well as marketing. Craft village in general is the village which is in early stages of business development which soughts / seeks small craft industry as a superior product and is directed at understanding the level of business and profit-oriented enterprises that is capable of contributing to creation of jobs and revenue to village.

2.2 Balanced Scorecard (BSC):

According to Johnson and Kaplan (1987), need for better performance measurement system, BSC is a flexible performance measurement method that can be used for the performance of enterprise or institution which consists of four perspectives: financial, customer, internal business processes, learning and growth (Kaplan & Norton 1996). BSC can define long-term strategic objectives of each perspective (outcomes) and mechanisms to achieve these objectives (performance driver). This approach combines long-term strategic objectives due to impact of short-term events. The four processes translate the vision, mission and strategy of company in determining the size of performance. The organization's vision is outlined in goals and

objectives. (Kaplan and Norton, 1996). The objective is then explained in strategic objectives along with measurement of its achievement. The manager is able to make better decisions by using four perspectives of BSC (Lipe dan Salterio, 2000). The empirical research of BSC combines different steps: financial and operational, qualitative and quantitative (Dess dan Shaw, 2001); Ittner *et al.*, 1998). Sangjae at, al, 2013 the paper synergizes BSC with PLS by using data from 101 companies to examine the causal relationship between the four categories of BSC. Zahirul Hoque (2014) the report of paper synergizes BSC with partial least squares (PLS) using limited primary data to examine the causal relationship between the four categories of BSC, Tobia, 1999 posited that PLS is useful in screening out negligible factors affecting the dependent variable. This research synergizes BSC with SEM to examine the causal relationship between the four categories of BSC, perspective of strategic objectives, and advantage of balanced scorecard, because a strategy is the hypothetical representation of cause and effect regarding the capability of an organization to correspond to market changes to achieve a goal, such a strategic causal relationship can form a set of causes and effects.

Research model:

The research framework can be seen in image.1 and model in images. 2, furthermore, provides the theoretical background of BSC, which leads to development of hypothesis. Sim and Koh, 2001 verified the causal relationship between several indicators of individual performance among the four categories of BSC through relationships and regression analysis. Hypothesis relating to four perspectives, against the perspective of strategic goals and sustainable competitive advantage, ultimately the main themes discussed, conclusions, managerial implications are taken as a step. The research uses big data with 100 respondents those are obtained from associations and crafters of shoes and sandal in Wedoro, also furniture in Pasuruan, Indonesia.

Wu, 2012 using a multiple criteria analysis tool to determine causal relationships between main performance indicators for each BSC perspective to create strategy maps that is visualized in a logical link to improve performance. BSC is able to represent and provide strategies through hypothesis for each business, rather than offering a simple combination of financial and non-financial indicators that is sorted by individual categories. BSC organizational strategy is represented by connected performance via a causal relationship because BSC is able to look to future / long term, researcher added one variable of sustainable competitive advantage as the ultimate goal, because the strategy is a hypothetical representation of cause and effect on organization's ability to conform with changes in

market to achieve a goal, such as strategic causal relationship that can form a set of cause and effect. Results (lagging indicators), are focused on each business strategy, precisely connected to causes of performance (leading indicators), which allows all of indicators in each category of BSC related to financial goals. The measurement process of BSC model for measuring the performance of a person / an organization in a balanced manner from two perspectives, namely financial and non-financial for long-term process of each perspective (outcomes) and mechanisms to achieve these objectives (performance drivers). Related to finance means that improvement strategies such as quality escalation, fulfillment of customer satisfaction, or innovation undertaken should result in increased revenue. The description above can be concluded that research uses secondary and primary data. In order to give different colour in world of publication, researcher tried the application of BSC research using primary data, and tool used is synergized BSC and SEM.

BSC concept evolved in line with implementation of concept. BSC consists of two words, namely: balanced and scorecard. Score card is a card that is used to record a person's performance score results. Score card can also be used to plan scores to be realized by a person in future. The score to be realized in future is compared with actual performance results. Balanced words are intended to stating that one's performance is measured in balanced from two aspects, financial and non-financial, short-term and long-term, internal and external. The measurement results of BSC model will become information of business existence undertaken at current time. The model presented can be used as a basic model of measurement models for the coming year to evaluate the performance of respective personnel, input of short term event to achieve long-term strategies in accordance with vision. Mehrdad Nazari Asliatal, 2013 .Gomes *et al*, 2013 through the changes in organization, objective and size of BSC derive from four perspectives: financial, customer, business process and Internal learning and growth. Arijit Bhattacharyaatal, 2014, a causal relationship involves organizational commitment, traditional financial measures. Ratnasingam at.al, 2014, small enterprises as strategic management systems are lack of either financial capital, technical, or managerial skills. The four perspectives provide the framework for the BSC (Kaplan and Norton, 1992). BSC considers intangible assets (finance) and three intangible assets and intellectual capital (customer, internal business process, and learning and growth). BSC emphasizes that financial and nonfinancial measures shall be part of information system for employees at all levels of organization. Effective decision making requires the accountability of all staff. Front-line employees shall understand financial consequences and their decisions and actions. Senior executives shall

understand drivers of long-term financial success (Kaplan and Norton, 1996a). Organizational goals and metrics should be more than just a sporadic collection of financial and non-financial performance measures. They shall come from a topdown process that is driven by mission and strategy of company or of business unit (Kaplan and Norton, 1996b). In short, four perspectives enable organizations to gain a comprehensive view of performance measurement. Action of financial perspective indicates whether a company strategy, implementation and execution contribute to an bottom-line increase. Financial goals are usually associated with profitability. Customer's perspective provides a way for managers to identify customer segments and markets in which business units would compete and measure the performance of business unit. In internal business perspective, executives identify the critical internal processes in which the organization shall excel. This process enables the business to provide value proposition and meet the expectations of stakeholders for financial returns. Perspective covers innovation and very good operation. Finally learning and growth identify that organization infrastructure shall develop to create long-term improvement. Business era is now unlikely to be able to meet their long term targets both for customer and internal process when only using the existing capabilities. To close the gap of business, it is necessary to invest in retraining employees, improving information technology and systems, and aligning more qualified organizational procedures and routines. The deciding factor for the customer's performance, in turn, internal business processes, and learning and growth (Chen *et al*, 2011). Gonzalez-Padron *et al*, 2010 confirms that performance of customer's affects the financial performance. Learning and growth facilitate the internal business processes, from the formation of target variable BSC superior strategy, this fact leads to hypothesis.

Excellency of Balanced Scorecard:

Reference of approach to BSC Excellence (Chen *et al*, 2011, Wynder *et al*, 2013), strategic planning system is able to produce the next strategic plan that has the following characteristics: comprehensive, balanced and measurable. Comprehensive indicator; this is because SMEs are strong in structured workplace modifications which causes the price to be competitive. The second indicator is balanced; SMEs are majority run by families that requires balance between work and family that causes loyalty. The third is measurable indicator; SMEs apply on time delivery which is very good because they are related to Cash flow. Referral approach (Geuser *et al*, 2009, Kaplan *et al*, 1992).

Target Strategy Formulation of Four Perspectives of BSC:

BSC method provides a comprehensive framework for outlining a vision into strategic goals.

Comprehensive strategic objectives can be formulated since BSC method (Kaplan and Norton, 1996) uses four perspectives: financial, customer, internal business processes, learning and growth. Summary descriptions of four perspectives are as follows: Financial perspective provide financial goals need to be achieved by organization in realizing its vision. Customer perspective provides a description of targetted market segments and customers as well as their demands will be served by organization in an effort to achieve the financial strategic objective. Internal business process perspective provides an overview process shall be built to serve customers, and Learning and Growth perspective is a booster to build the competence of personnel, infrastructure of information systems necessary and working environment atmosphere. Refference of approach (Grigoroudis *et al*, 2012, Huang, 2009, Merhdad *et al*, 2012, Mendes *et al*, 2012, Ratnasingam, 2014).

Financial Perspective:

In BSC, a financial perspective remains a concern, because financial measures is an overview of economic consequences caused by decisions and actions of a stable economic actions. Financial performance measurement indicates whether the planning, implementation and execution of strategy provide a fundamental improvement, either in form of gross operating income, return on investments or economic value added.

Measures used in financial perspective are two indicators, revenue growth and reduced cost. These two indicators will have an impact on growth of Return on Investment (ROI). Refference of approach (Behn *et al*, 1999, Bhattacharya *et al*, 2014, Grigoroudis *et al*, 2012, Huang, 2009, Tseng, 2010, Nielsen *et al*, 2012).

Customer Perspective:

Customer benchmark is divided into two groups: core measurement group (core group) and customer value proposition (supporting group). The core group consists of: market share, customer acqution, customer retention, customer satisfaction, and profitability. Supporting group is divided into three sub-groups: product attributes (price, quality, function), customer relations, image and reputation.

In this research, endogenous variable customer perspective is formed from two variables including core measurement group which increases customer confidence with three indicators of time, quality and cost value proposition and customer groups namely speed indicator of availability of service with two image models of product and On time delivery. Referral approach (Huang, 2009, Wu, 2012, Nielsen *et al*, 2012).

Internal Business Process Perspective:

Measure the efficiency and effectiveness of company in producing goods and services. This

perspective measures company against all activities conducted by managers and employees in meeting customer's satisfaction as well as stakeholders. Each company has a specific set of processes that serve to create value for customers Kaplan *et al* (1996).

Internal business processes is formed from two variable formations below.

1. Improving the quality of customer service process with five indicators: Innovation Process, Process Operations, After Sale Service Process, Ease of Payment Process and Satisfaction of market segments through product or service.

2. The second formation variable is State of art technology with two indicators, namely high artistic sense of art workers' and quick response on art technology. These two indicators make the owners have promising value. Refference of approach (Bhattacharya *et al*, 2014, Huang, 2009, Johnson *et al*, 1987, Kaplan *et al*, 1992, Malina *et al*, 2001, Martinsons *et al* 1999, Mehrdad *et al*, 2013, Tseng, 2010, Narajo, 2009, Manteghi *et al*, 2011, Ratnasingam, 2014, Najjar *et al*, 2012).

Learning and Growth Perspective:

Measure the company's ability to develop and utilize human resources so that company's strategic objectives could be achieved for the present and future. (Kaplan and Norton, 1996) revealed that it is important for the company to pay attention to its employees, to monitor the welfare of employees and increase the knowledge of their employees, because with increased knowledge of employees would support the significant improvement of performance of employees in achieving the company's goals.

In this research, learning and growth perspective is formed from two exogenous variables: learning perspective and growth perspective.

1. Variable of Learning Perspective with six indicators of employee satisfaction, employee retention, labor productivity, Information System Capability, motivation, empowerment and alignment, and empowerment and alignment.

2. Growth Perspective with two indicators of increased organization growth and decreased organization growth. The four perspectives have a close relationship and affect, it also could not be separated in implementation. This is when the researcher use SEM tool so that world of publication have a different colors. Reference of approach (Bhattacharya *et al*, 2014, Chen *et al*, 2011, Grigoroudis *et al*, 2012, Huang, 2009, Manteghi *et al*, 2011).

Hypothesis:

There are ten hypothesizes in this research. In general how to hypothesize between one variable with another (see discussion of hypothesis testing).

4. Research method:

4.1. Variable Measurement:

Constructs / variables are measured through indicators, and most previous researchers were using secondary data. This research uses primary data, measurement indicators written in form of statements contained in questionnaire given to respondents using scoring system of strongly agree or strongly disagree with seven (7) points (symantic scale) tool used manage amos 22 (Arbuckle, 2013), same measurement is done Lee at.al, 2009. Latent variables and indicators of measurement used in research are shown in Table 1. The research model is a combined model of one and two step, recapitulation of questionnaire items are next run but there is a warning since there is no indication of multicolinearity, and after therapy it turns into one step model. The research variables consist of five steps, including learning and growth, internal business processes, customer performance, financial performance, strategic goals, and excellence balanced scorecard perspective. Steps are based on adaptation of previous researchers (Butler *et al*, 1997, Epstein *et al*, 1998, Harvey *et al*, 1999, Lipe *et al*, 2000, Martinsons *et al*, 1999, Mayo, 2000, Petty *et al*, 2000, Yawson *et al*, 2006) and so forth.

4.2 Data collection:

The questionnaire distributed to 110 entrepreneurs and craftsmen who are competent at association of shoes and sandals in Wedoro Sidoarjo aswell as furniture craftmen in Pasuruan Indonesia, but after re-checking, there are only 100 questionnaires that contain complete data. Therefore, number of samples used in this research is 100 samples. This number is adequate to meet the SEM assumption qualification processing (Waluyo, 2009). The next step is the selection of matrix input and estimation techniques on models built. Estimation cannot be done since there is multicollinearity.

Therefore, it is necessary to choose metrics inout by assuming variable formations. Internal Business Processes is to improve the quality of customer service process, State of art technology, enhance customer trust and speed of service. These four constructs cause multicollinearity. Indicators of four constructs are functioned as indicators of internal business process. It is also done on variable of customer. Performing invalid variable disposal is done on empowerment and alignment indocators, Financial and Comprehensive Perspective. In this process occur a new discovery of combined concept which is originally combination of one step and two step transform into one step concept. Steps are based on adaptation of previous researchers (Waluyo, 2009).

5. Discussion:

5.1 Assessment of Measurement Model:

The first step of SEM tool is to test the Measurement Model which its results can be concluded that dimensions used by researchers do not yet reflect the analyzed latent variables, but all indicators of value CR> t-table after discharge indicator (X1.6, Y4.4 and Y5.1), so it can be concluded that indicators were significantly the dimension of latent variable formed, (Waluyo, 2009). The second step is to test the structural model which its results can be concluded that dimensions used by researchers do not yet reflect the analyzed latent variables, as shown by test results of Goodness of Fit Indices which it has not shown a great value, the next step is to modify the model so that it turns to be good, this step is next to be reference in arranging business strategies and tactics, this model will be used as the basic capital and benchmark for the coming year measurement. The recapitulation of model modification can be seen on next page.

Table 1: Variables and Indicators

Variable	Formed Variable	Indicator	Intervening Variable
Execellency of Balanced Scorecard (Y ₅)		Comprehensive(Y _{5.1}) Balanced (Y _{5.2}) Measurable (Y _{5.3})	<i>Strategic Objective</i> (Y ₄)
<i>Strategic Objective</i> (Y ₄)		Learning & Growth (Y _{4.1}), Business Process/ Internal (Y _{4.2}) <i>Customer</i> (Y _{4.3}) Finance (Y _{4.4})	Finance (Y ₃)
Finance (Y ₃)		Revenue Growth(Y _{3.1}) Reduced Cost (Y _{3.2})	Customer (Y ₂)
Customer (Y ₂)	Increasing Customer's Trust (Y _{2.1})	<i>Time</i> (Y _{2.1.1}), <i>Quality</i> (Y _{2.1.2}) <i>Cost</i> (Y _{2.1.3})	Business Process/ Internal (Y ₁)
	Speed of Service (Y _{2.2})	Availability of product images (Y _{2.2.1}) On time delivery (Y _{2.2.2}).	
Proses Bisnis/ Intern (Y ₁)	Increasing the quality of customer service process (Y _{1.1})	Inovation Process (Y _{1.1.1}) Operational Process (Y _{1.1.2}) After Sale Service Process (Y _{1.1.3}), Ease of Payment Process(Y _{1.1.4}) Satisfying maket segment through product or service (Y _{1.1.5}).	
	Stateof art technologi (Y _{1.2})	High level taste of art worker (Y _{1.2.1}) Fast Response on art technology (Y _{1.2.2})	
Learning (X ₁)		<i>employee satisfaction</i> (X _{1.1})	

		employee retention ($X_{1,2}$), employee productivity ($X_{1,3}$) Motivation $X_{1,4}$ Empowerment and Alignment ($X_{1,5}$) Empowerment and Alignment ($X_{1,6}$)	
Growth (X_2)		Organization Growth increases ($X_{2,1}$) Organization Growth decreases ($X_{2,2}$)	

Source : formulated primary data

Table 2: Goodness Of Fit, Result of Model Testing and Cut Off Value(modification)

Goodness of Fit Indices	Result of Model Testing	Cut – Off Value	Remark
X ² Chi Square	316.680	Small*	Good
Probabilitas	00.051	≥ 00.05	Good
CMIN/DF	10.143	≤ 20.00	Good
RMSEA	00.038	≤ 00.08	Good
GFI	00.819	≥ 00.90	Marginal
AGFI	00.770	≥ 00.90	Marginal
TLI	00.967	≥ 00.95	Good
CFI	00.972	≥ 00.95	Good

Source : formulated primary data

Table 3: Regression Weights: (Default model modification)

			Estimate	S.E.	C.R.	P	Standardized Regression Weights (λ)
y1	<---	x1	0.200	0.090	20.211	0.037	0.253
y1	<---	x2	0.092	0.080	10.148	0.042	0.280
y2	<---	y1	0.211	0.069	30.053	0.045	0.298
y3	<---	y2	0.047	0.097	0.484	0.049	0.352
y4	<---	y3	0.499	0.157	30.170	0.050	0.370
y5	<---	y4	0.275	0.075	30.650	***	0.330

Source: formulated primary data

Calculation of reliability of all constructs used by researchers are already reliable because the reliability of each construct is already ≥ 0.70 .

Evaluation of model is basically estimated by AMOS 22, (Arbuckle, 2013). A more complete evaluation can be done as follows: the sample size shall be 100, which means the assumption of sample has been met. Assumptions for normality and linearity can be done by observing the critical value of normality assessment results using 22 AMOS program. There is no score outside of ring $-2.58 \leq SR \leq 2.58$. Evaluation of outliers shows that value of z-score is between $-3 \leq z\text{-score} \leq 3$, so there is no univariate outliers. Evaluation of Multivariate Outliers indicates that there is no Multivariate Outliers. $X^2\text{Chiinv}(0.001; 26) = 54.052$. As on Mahalanobis, highest d-Squared score is 47.375. (<). Therefore, we can conclude that there is no Multivariate Outliers.

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5.2. Testing of research hypothesis:

Hypothesis Testing:

First Hypothesis (H-1):

Ho: The learning process does not significantly influence the internal business processes.

H1: The learning process significantly influences the internal business.

Test results of H1 hypothesis, accepted:

The learning process (X1) significantly influences internal business processes, with a regression coefficient of 0.253, probability value <0.05 (, 037) (see Table 3), it means that learning process increase by 1 unit in form of activities (employee satisfaction, employee retention, employee productivity, motivation and empowerment and alignment) which will improve internal business processes at 0.253. One thing to note is once employee's learning process and performance are positive, they must be maintained so that best workers that will not leave the organization / company, worker has to have a high artistic soul, this business line involves in arts (shoe and furniture industry) , Results of this test support

Second hypothesis (H-2):

Ho: The process of growth does not significantly affect on internal business processes.

H1: The process of growth significantly affects on internal business processes.

Test results of H2 hypothesis, accepted:

The process of growth significantly influences the internal business processes with a regression coefficient of 0.280 with probability value <0.05 (0.042). See tabel.3, this means that process of growth increase by 1 unit, in form of growth-enhancing activities of organization and maintain organization not to decline, will improve the internal business processes at 0.280. The test results support the (Bhattacharya *et al*, 2014, Chen *et al*, 2011, Ogat *et al*, 2014, Tseng, 2010, Sangjae, 2013, Mohammadet *al*, 2011, Tayler, 2010).

Third Hypothesis (H-3):

Ho: Internal business processes does not significantly affect on quality elevation of customer service processes.

H1: Internal business processes significantly affects on quality elevation of customer service processes.

Hypothesis test results can not be proved because there is "Warning" in which there are indications of multicollinearity. Supported by (Waluyo, 2009).

Fourth Hypothesis (H-4):

Ho: Internal business processes does not significantly affect on state of art technology

H1: Internal business processes significantly affects on state of art technology.

Hypothesis test results can not be proved because there is "Warning" in which there are indications of multicollinearity. Supported by (Waluyo, 2009).

Fifth Hypothesis (H-5):

Ho: Internal business processes does not significantly affect on customer.

H1: Internal business processes (Y1) significantly affects on customer.

Test results of H1 hypothesis, accepted:

Internal business processes significantly influence the customer with a regression coefficient of 0.298, with probability value of <0.05 (0.045), (see Table 3), this means if internal business process increases by 1 unit in form of activities to improve the coordination of all existing indicators so that it is more synergized will increase the number of customers amounted to 0.298, resulting in products that are of high artistic quality. The test results support the (Chen *et al*, 2011, Wu, 2012, Mendes *et al*, 2012, Sangjae, 2013).

Sixth Hypothesis (H-6):

Ho: Customer does not significantly affect on customer trust increase.

H1: Customer significantly affects on customer trust increase.

Hypothesis test results can not be proved because there is "Warning" in which there are indications of multicollinearity. Supported by (Waluyo, 2009).

Seventh Hypothesis (H-7):

Ho: Customer does not significantly affect on service speed.

H1: Customer significantly affects on service speed.

Hypothesis test results can not be proved because there is "Warning" in which there are indications of multicollinearity. Supported by (Waluyo, 2009).

Eighth Hypothesis (H-8):

Ho: Customer does not significantly affect on finance.

H1: Customer significantly affects on finance.

Test results of H1 hypothesis, accepted:

Customers have a significant effect on financial with regression coefficient of 0.352, and probability value <0.05 (0,049) (see table 2). The score 0.352 means that if customer increases by 1 unit in form of negotiation activities that enhance customer trust with three indicators of on time according to order, quality standards are based on order and low cost to improve the speed of service to customers, this will increase in finance by 0.352, test results support the (Chen *et al*, 2011, Wu, 2012, Mendes *et al*, 2012, Sangjae, 2013).

Ninth Hypothesis(H-9):

Ho: Finanace does not significantly affect on strategic objective perspective.

H1: Finance significantly affects on strategic objective perspective.

Test results of H1 hypothesis, accepted:

Finance significantly affects on strategic objective perspective with a regression coefficient of 0.370 with probability value <0.05 (, 050) (see table 2). The score of 0.370 means that if finance increases by 1 unit in form of reduction of cost, revenue growth will increase the strategic objective of 0.370 by synergizing strategic objective perspective indicator. However, since financial perspective indicator is not significant, it is disposed. This is done because the majority of SMEs capital is independent capital. This is due to mindset of those affected by parental discourse that bank debt gives headache. The test results support the (Behn *et al*, 2010, Bhattacharya *et al*, 2014, Grigoroudiset *al*, 2012, Huang, 2009, Merdad *et al*, 2013, Mendes *et al*, 2012, Narajo-Gil *et al*, 2009, Sangjae, 2013)

Tenth Hypothesis (H-10):

Ho: Strategic objective perspective does not significantly affect on Sustainable competitive advantage

H1: Strategic objective perspective significantly affects on Sustainable competitive advantage

Test results of H1 hypothesis, accepted:

Strategic objective perspective significantly affects on sustainable competitive advantage with regression coefficient of 0.330, and probability value <0.05 (, 000) (see Table 3). The score 0.330 means that if strategic objective perspective increases by 1 unit in form of activities of coordination in increasing three indicators of learning and growth perspective, Internal Business Process Perspective, Customer Perspective will increase sustainable competitive advantage 0.330 by synergizing indicator of sustainable competitive advantage, but Comprehensive indicator is disposed because the BSC variable runs comprehensively and does not need any more emphasis. The test results support (Chen *et al*, 2011, Wynder *et al*, 2013)

4. Implication:

6.1 Implications for researchers:

The results of implications of model simulation, Goodness of Fit modifications $DF = 277$, Chi-square = 316 680, $P = 0.051$, $CMIN / DF = 1,143$, $GFI = 0.819$, $AGFI = 0.770$, $CFI = 0.972$, $TLI = 0.967$ and $RMSEA = 0.038$, all variables have significant and direct effect. BSC model synergized with SEM is a model of new discovery combined models between one step and two step. Because the process occurs multicollinearity eventually becomes the concept of one step that is supported by (Waluyo, 2009).

4.2. Implications for practitioners:

Work pattern of sandals and furniture industry before monetary crisis (1997-1998), there were not many players in industry who knew about banking. In running their businesses, they used their own capital added with down payment for each order of products (slippers and furniture). By having this unique method of work makes the industry still exist, but obtaining capital loan should also be considered to accelerate the process of growth when the outlook is promising, this mindset led to process of learning and growth significantly affects on internal business processes, customers, and finances.

Based on primary data, through the interview of mindset and small industry players' behaviour at a time of crisis in Indonesia they had made innovations as suggested in modified model, that's what keeps them exist. This experience is an important grip in running entrepreneurship so that Indonesia still exists and is always ready to face the economic crisis and this proves that stability of economic growth in Indonesia is number one in world in this era. In current era, universities are approaching through its lecturers in implementation of its three principles of higher education, namely one of which is teaching on how to easily get a bank loan and they also oversee the process to get it. This makes for SMEs to grow faster.

The basic model of measurement model of BSC is as a comparison measurement of BSC models in years to come, if the results of measurement model of BSC are better, then the SMEs more exist. Measurement model of BSC model has cause and effect relationships, through this cause and effect relationship model, a strategy can be easily animated as well as criticized at same time because every relationship and causality can be tested in detail. Kaplan and Norton (1996).

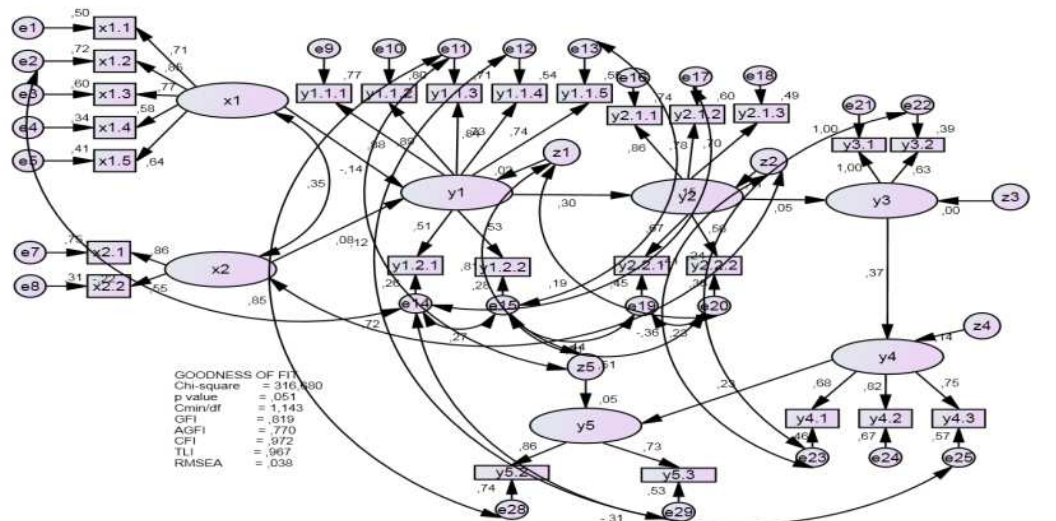


Fig. 2: Model Modification

Source: formulated primary data

Conclusion:

BSC model in this paper is improved, started with three-step measurement analysis and structural equation as well as model modification, method of field research studies are continued with simulation modeling, result is the good score of Goodness of Fit Indices, although there are two scores those are marginal. BSC variable has significant and direct effect that Learning Perspective significantly affects on internal business processes with regression coefficient of 0.253, Growth Perspective significantly affects on Internal Business Processes with regression coefficient of 0.280, next in continuous strating from internal business processes, customers with a regression coefficient of 0.298, Customer significantly affects on Finance with regression coefficient of 0.352, Financie significantly affects on strategic objectives perspective with regression coefficient 0.370 and strategic objectives Perspective significantly affects on sustainable competitive advantage with a regression coefficient of 0.330, integrated approach model results on good score of Goodness of Fit Indices after the model is modified.

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