ISSN No:-2456 –2165

Performance Measurement Analysis of XYZ Company Based on Risk with AHP and OMAX Concept Approach

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Abstract — The growth of construction business is quite rapid due to stimulation by the government. The growth was supported by public and private sector investment in infrastructure and residential construction projects, leading to an increase in demand for the construction industry. It causing competition in the construction market is getting tighter as more and more new competitors enter. This forces every construction company to improve its performance through cost efficiency and improve internal business process control to provide excellent product and excellent service to win business competition. XYZ company as one of concrete product producers has been striving to always improve company performance. Its performance measurements are adopted on the balance scorecard system. However, due to limited resources, not all KPIs can be followed up for performance improvement. In the evaluation of current performance measurement, KPI selection priorities that need to be improved are still based on management intuition. This study aims to examine the combination of existing performance measurement methods with AHP and OMAX methods for the efficiency and effectiveness of enterprise performance measurement system. By identifying the risks associated with the established KPIs using ISO 9001: 2015 as guidelines, management can determine the risk priorities based on their impact on the achievement of corporate objectives by weighting based on the Analytical Hierarchy Process (AHP) method. KPI is then compiled using OMAX method according to its priority and measured company achievement score against each KPI. The results of the analysis show that the overall performance of the company reaches 70% of the target set. There are 2 main KPIs that need to be improved its performance because they are still below the standard, they are KPI meet the needs of raw materials, parts and supporting materials with a score of 3 and receivable turnover with a score of 3. Performance increase for both KPI will affect to improve performance for another KPI which also has a score of 3, namely account debt turnover.

Keywords—Risk Management; Performance Measurement; AHP; OMAX; Traffic Light System.

I. INTRODUCTION

XYZ Company, one of construction company in Surabaya, had increased revenue and net profit by 7.51% and 21.23% during 2016 compared with the year 2015. This shows that the company's performance during 2016 is very good. However, although the performance of the company has increased, there are still several problems that occur each year, there were the rising prices of raw and auxiliary materials so that companies often have difficulty in meeting the budget financing in accordance with the company's budget plan (RKAP). This resulted in an increase in BSP production cost up to 50% of the value in RKAP. In addition, in 2016 it was noted that during the period of the project, the number of customer complaints related to the timeliness in the delivery of its products on average is 75% of the number of shipments each week. In terms of the percentage of accounts receivable also increased by 14% which affecting the company's cash inflow and potentially disrupt the production cycle as well as not achieving the planned production capacity. These problems have disrupted the company's internal performance which, if not controlled, can have an impact on long-term company performance. Therefore, in conducting a performance measurement, company needs to consider events that are potentially a risk in achieving company goals and determine control measures that minimize the occurrence of those risks. Improved internal performance of the company is expected to provide business stability in the company for the long term to survive in an tight competitive market competition. However, due to resource constraints, the company can not follow up the performance improvement measures of all Key Performance Indicator (KPI) simultaneously so that management must be able to choose KPI which has a big influence on the achievement of corporate goals. The company itself has a performance measurement system that adopts Balance Scorecard method, but up to now the performance measurement is more focused on KPIs representing the financial aspect. This research aim to integrate ISO 9001:2015to existing company's KPI so it can improve company's performance and using resources efficiently.

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II. METHOD

In this research, the effort made to reorder KPI in performance measurement according to priority is to identify the risks from each KPI that can hamper the achievement of KPI related. Methods that used in this research are:

A. ISO 9001: 2015

Risk identification start from business activity in each department. The process of identifying risk events using ISO 9001: 2015 as a guideline.

B. Risk Management

Risk management is a formal process that allows identification, assessment, planning and risk management. According to Darmawi, (2005, p11), the benefits of risk management given to the company can be divided into 5 (five) main categories: (a) preventing the company from failure; (b) supporting the increase in profit directly; (c) providing profit indirectly; (d) giving composure to managers by protecting business from the risk which is a non-material property for the company; and (e) helping to improve the public image indirectly.

In order to make identifying risk easier for the organization then the risk should be classified first. Frame (2003) divided business risk into 5 major components, they are:

1. Market Risk, related to maintaining a company's product in the market or maintaining and increasing its market share. Price competition, consumer policy changes, products cycle in the market and others.
2. Financial Risk, related to incapability of issuers of stocks and bonds meet the obligation to pay dividends or interest or interest as well as loan principal.
3. Risk of Regulation, related to the impact of regulatory products issued by the government to the business field that is involved by the company.
4. Project Risk that arise in a project due to improper planning with implementation in the field such as reverse project schedules or even threatened not completed on time, experiencing cost swelling or inability to achieve the desired specifications that cause rejection by customers.
5. Operational Risk is arising from malfunctioning of the prevailing internal system, human error, or system failure. The most common source of operational risks compared to other risks is sourced from operational and service activities, accounting, information technology systems, management information systems or human resource management systems.

In some implementation of risk management in the company, market risk, regulatory risk and project risk are also referred to as business risk.

According to Djohanputro (2008), there are 5 systematic steps that must be done, they are:

1. Risk Identification

Determines the possible risks of a business process and its impact on the organization, documenting the characteristics of each risk and differentiating between internal and external risks. The main sources of risk that potentially cause major conditions should also be recognized.

2. Risk Measurement

This stage assesses the extent of the impact of events (events or circumstances) can disrupt the achievement of organizational goals. The magnitude of the impact can be known from the inherent and residual risk, and can be analyzed in two perspective: likelihood (tendency or opportunity) and impact/consequence (the amount of realized risk). Thus, the magnitude of risk for any organizational activity is the multiplication of likelihood and consequence. Figure 1 shows the risk level matrix used to perform the assessment with likelihood and severity or consequences parameters.

Likelihood	Severity	Negligible (1)	Minor (2)	Moderate (3)	Major (4)	Extreme (5)
Rare (1)		Low (1x1)	Low (1x2)	Low (1x3)	Low (1x4)	Medium (1x5)
Unlikely (2)		Low (2x1)	Low (2x2)	Medium (2x3)	Medium (2x4)	High (2x5)
Possible (3)		Low (3x1)	Medium (3x2)	Medium (3x3)	High (3x4)	High (3x5)
Likely (4)		Low (4x1)	Medium (4x2)	High (4x3)	High (4x4)	Very High (4x5)
Almost Certain (5)		Medium (5x1)	High (5x2)	High (5x3)	Very High (5x4)	Very High (5x5)

Fig. 1. Risk level matrix (AS/NZ 4360 & NHS QIS)

3. Risk Mapping

Risk mapping is intended to establish risk priorities based on importance for the company. The existence of priority because the company has limitations in human resources and the amount of money so that companies need to set the right priority scale based on the impact that may arise.

4. Risk Management

There are several kinds of them are conventional risk management model, risk capital determination, organizational structure of management and others. While the management of risk according to The Committee of Sponsoring Organizations of the Treadway Commission (COSO, 2004), is divided into 4 actions, namely:

- Risk Avoidance

Not doing activities that cause or increase the occurrence of unwanted risks. If the company wants to do this it should consider the potential benefits and losses.

- Risk Reduction

Also called risk mitigation is an action taken to reduce the likelihood of risk occurrence or minimize the impact.

- Risk Sharing

Reducing the likelihood of occurrence of the risk or impact one may incur by dividing or transferring a portion of that risk

to another party. Generally this technique is done by purchasing insurance, establishing a transaction or value protection contract and handing the management of an activity to another party (outsourcing).

- Risk Acceptance

Although certain risks can be eliminated by either reducing or transferring them, some risks must remain accepted as an essential part of an activity.

5. Monitor and Control

Monitor and control is important because management needs to ensure that the implementation of risk management goes according to plan and the implementation of risk management is quite effective and also to monitor and control if the risk had develop or change.

C. Balance Scorecard (BSC)

Balanced scorecard (BSC) is a concept to measure whether the operational activities of a company on a smaller scale in line with the vision and strategy of the company in achieving its objectives. By not only focusing on financial results but also on human issues, the BSC helps provide a more comprehensive view of a company which in turn helps the organization to act on its long-term goals. BSC method has 4 perspectives to measure organizational performance as depicted in figure 2.

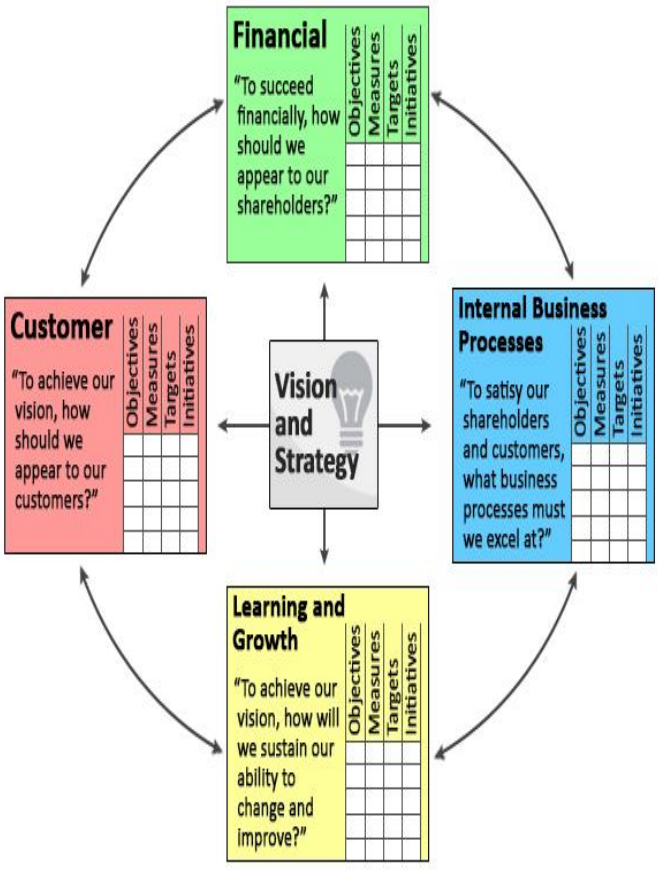

Fig. 2. Balance Scorecard (Kaplan & Norton, 1996)

(i) Financial Perspective

Measurement of financial performance is conducted by considering the stages of the business life cycle: growth, sustain and harvest. Each stage has a different target, so the emphasis of measurement is different too.

(ii) Customer Perspective

The customer perspective has two measurement groups, namely: customer core measurement and customer value prepositions. Customer core measurement has several components of measurement, namely market share, customer retention, customer acquisition, customer satisfaction and customer profitability. While customer value prepositions is an important concept in understanding the main drivers of customer core measurement. Attributes that make up the proportion of values are product / services attributes, customer relationship and image / reputation.

(iii) Internal Business Process Perspective

Internal business process analysis of the company is done by using value chain analysis. Here, management identifies the critical internal business processes that the company should favor. The scorecard in this perspective allows managers to know how well their business is running and whether their products and or services match customer specifications. This perspective should be carefully designed by those who are most familiar with the company's mission that may not be outside consultants. Kaplan and Norton share internal business processes into innovation, operations and after-sales services as shown in Figure 2.9.

(iv) Learning and Growth Perspective

The learning and growth process is derived from human resources factors, systems and organizational procedures. Included in this perspective are employee training and corporate culture related to individual and organizational improvement. In a knowledge worker organization, people are the primary resource. In many cases, learning and growth perspectives are the foundations of success for a knowledge worker organization with regard to system and organizational factors.

D. Analytical Hierarchy Process (AHP)

Analytical Hierarchy Process (AHP) method is used to obtain the weight of each risk that has been identified. The AHP method was chosen because it proved to be widely used in various fields (Toloie-Eshlaghy & Homayonfar, 2011). The AHP method was developed in the early 1970s by Thomas L. Saaty. This method is a multivariable decision-making tool that may consist of both subjective and objective factors. This method tries to optimize the factors of intuition, thought, experience, knowledge, emotion and feeling into a systematic process. According to Saaty (1993), basically AHP is developed by paying attention to the process of developing human opinion towards problems that immediately want to be solved. In addition, AHP also connects validity testing and consistency of human opinion. In general the steps to be taken in using AHP for troubleshooting are as follows:

- Arrange the problem into a hierarchy so that complex problems can be viewed from the detail and measurable side. Preparation of hierarchy that meets the needs must

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involve the experts in the field of decision making. The desired goal of the problem is placed at the highest level in the hierarchy.

- Preparation of priorities for each element of the problem at the hierarch level. This process will result in the element's weight/contribution to goal achievement, so that the elements with the highest weights have priority to be followed up. Priority is resulted from a pairwise comparison matrix between all elements at the same hierarchy level. Scale of Pairwise Comparative Assessment with AHP Method is shown in table 3.

The Fundamental Scale for Pairwise Comparisons		
Intensity of Importance	Definition	Explanation
1	Equal importance	Two elements contribute equally to the objective
3	Moderate importance	Experience and judgment slightly favor one element over another
5	Strong importance	Experience and judgment strongly favor one element over another
7	Very strong importance	One element is favored very strongly over another; its dominance is demonstrated in practice
9	Extreme importance	The evidence favoring one element over another is of the highest possible order of affirmation
Intensities of 2, 4, 6, and 8 can be used to express intermediate values. Intensities 1.1, 1.2, 1.3, etc. can be used for elements that are very close in importance.		

Source: Saaty, 1986

Table 1. Scale of Pairwise Comparative Assessment with AHP Method

- Perform consistency testing of the inter element ratios obtained at each hierarchy level. The consistency assessment test is divided into 2, they are:

1) Consistency Testing of Pairwise Comparison Matrices

For example, A is five times more important than element B, then element B is 1/5 times important to A. Consistency like that does not always apply when there are many elements to be compared. For a set of elements it is not always logically consistent. A is seven times more important than D, B is five times more important than D and C is three times more important than B then it is easy to determine that C is 15/7 times more important than A. AHP assessment is based on experience and quantitative understanding and subjective, thus allowing for deviant judgments rather than logical consistency. In a consistently practical matrix λ_{max} = n, whereas in an inconsistent matrix CI (Consistency Index) must be calculated.

2) Tests of Normalization Matrix Consistency

Consistency is the basis for justification of intuition, sensing thoughts and feelings. AHP measures consistency by computing the consistency ratio. Consistency ratio (CR) should be less than 10%. If it is true than 10% means the assessment has been done randomly and needs to be improved. The weighting technique of each element is the matrix theory of eigenvalues and eigenvectors. If the maximum eigenvalue of a matrix has been obtained, then the eigenvector represents the weight of each matrix element. This obtained weight is the priority value of these elements against the above criteria.

$$\text{Index Consistency} = CI = (\lambda_{max}\text{-}n)/(n\text{-}1) \quad (1)$$

$$\text{Rasio Consistency} = CR = CI / RI \quad (2)$$

RI = *Index Random* (from the table 2)

Orde	1	2	3	4	5	6	7	8	9	10
RI	0.00	0.00	0.58	0.9	1.12	1.24	1.32	1.41	1.45	1.49

Source: Saaty, 1986

Table 2. Index Random

E. Objective Matrix (OMAX)

The AHP process resulted the priority order of KPI. This sequencing then is organized based on the weight of the risk and followed by scoring system by using Objective Matrix (OMAX) method that serves to assess the company's current performance for each selected KPI. OMAX is used to give the big picture of company performance and the importance of KPI that need to be improved first.

According to Christopher (2003, p2-9.8), Objective Matrix is a partial performance measurement system developed to monitor productivity in a company or in any part with productivity criteria that match the existence of that part. This model was created by prof. James L. Riggs, a productivity expert from the United States. This matrix derived from his efforts to qualify the Tender Loving Care in a hospital productivity study in 1975, a multidimensional scheme to include TLC in performance measurement.

Productivity measurements made using OMAX model measurements are, in essence, a blend of several measures of success or criteria of productivity that have been weighted according to the degree of importance of each measure or criterion within the firm. Thus, this model can be used to identify the factors that are very influential and which have little effect on the increase of productivity. In this research, this model is used to measure the performance of each KPI and to determine which KPI performance that should be improved first.

F. Traffic Light System

The end of the performance measurement process uses the traffic light system in determining which KPIs that require more attention from the management. Traffic light system is marking the KPI with color red, yellow and green according to the score of each KPI. Red is indicate poor performance, yellow for average performance and yellow for high performance.

III. CASE STUDY

A. A Brief History

XYZ company was originally a side business unit of a state-owned company. The business activities include ready-mixed concrete business unit, tile business unit, masonry concrete, and stone crusher business unit. On the journey, these business units showed a significant growth so the state-owned company gave these to its subsidiaries in the middle of 1988. The aim is to manage these business units more professional because the business scope of the state-owned companies are already quite large. In 1991, these business units were separated from the holding company and independently became XYZ company. Since 1994, this company had expanded its business by opening branch office in some areas, like Central Java, Bali, Nusa Tenggara Barat and South Sulawesi and had planned to open more branch office in order to support business growth. Beside open branch office, company had built plant in remote area following the project site. The company's strategy for market development based on region was chosen because company's job characteristics is following project throughout Indonesia.

B. Organization Management System

85,77% company's revenues came from ready-mixed concrete business units and more than 70% was the contribution of infrastructure projects. In general, infrastructure projects require ownership of ISO 9001, ISO 14001 and OHSAS 180001 certificates from their contractors. So getting certificates of ISO 9001, ISO 14001 and OHSAS 180001 is one of the company's strategy to survive in their market.

C. Process Business

The company's business process describes the characteristics of the business of a company. Knowing about business activity can assist management in determining and arrange the strategy. Figure 3 describe the business activity in XYZ company.

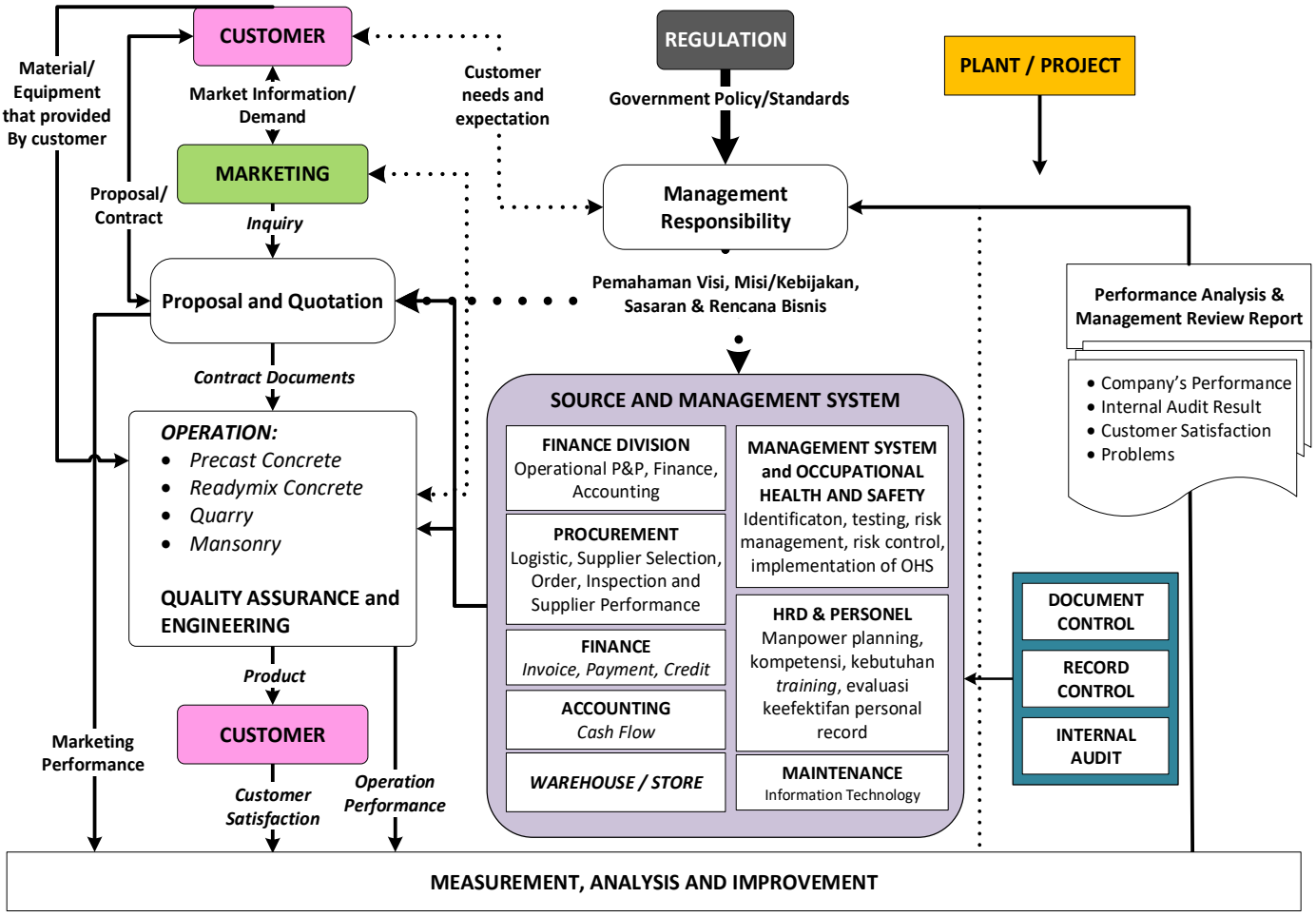

Fig. 3. Business Process of XYZ Company

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D. Business Goal

KPIs that had been set is derived from the vision and mission of the company. The vision and mission of the company were as follows:

- Vision
  Being a concrete and aggregate company first choice in the national market.
- Mission

1. Producing and selling concrete and aggregates that meet customer requirements (appropriate quality, timely and exact quantity).
2. Increasing profits that can support the growth of the company in a sustainable and provide welfare of all stakeholders.
3. Runs a prime business process supported by professional employees, in accordance to laws and regulations.

And the goals were:

a) Increasing corporate earnings
b) Optimizing resource management
c) Improving organizational management
d) Improving operational excellence
e) Improving innovation program
f) Reducing the number of incompetence of human resources
g) Building an effective and responsive corporate culture
h) Improving IT usability and reliability

From this goals, there are 24 KPIs which represented indicator for the goals. Table 3 show the KPIs that were classified into 4 perspectives BSC.

BALANCE SCORE CARD	**TARGET**	
Measurement	**Nilai**	**Unit**
FINANCIAL		
Total EBITDA (in 000)	64,937,434	IDR
Cash Inflow (in 000)	855,374,578	IDR
Total Income (in 000)	781,262,468	IDR
Percentage of profit to sales	4.31	%
Receivable Turnover	4	times
Debt Turnover	3.49	times
Fixed-asset Turnover Ratio	1.72	times
CUSTOMER		
Market Share for Ready Mix Concrete (Province)	1	rank
Customer Satisfaction Index	1	score
INTERNAL BUSINESS PROCESS		
Major Audit Findings	0	ea/smt
Fulfillment of Resources in accordance with company's budget plan:		
1. Raw Materials, Parts and Supporting Material	100	%
2. Equipments	100	%
3. Human Resources/Personels	100	%
4. Funding	100	%
5. Information and Communication Technology	100	%
Equipments Productivity	> 85	%
Marketing Program Plan	100	%
Innovation in each Department or Plant	1	times
Internal customer satisfaction index	2	times/ year
LEARN AND GROWTH		
Human Resource Competence Index	75	%
Dissemination of company's culture	12	times
New Application Program	5	app.
Frequency of COFR implementation	2	times
Frquency of management meeting	12	times

Table 3. Company's KPIS Balance Scorecard

E. Risk Related to KPIs Achievement

After derived corporate's goals into department's goals and plant's goal, it had been obtained risks list in every department and plant. From this lists were taken some risks that related to KPI's achievement, namely corporate risks. In this stage, risk level and their mitigation were determined for all corporate risks.

In the next step, the opinion of expert (Director) is gathered to weight the risks based on its effect to corporate's goals achievement. The director was chosen because of his experience and his competency. He has working experience in this company for 28 years and occupied some operational position so he knew detailed about business activities in operational production and the potential factors that might disrupt the production process. This weighted process used AHP method with Expert Choice 2000 as data processor. Risks priority can be seen in table 5. It was found that one risk had related to some KPIs, it was the lack of income. This risk related to 3 KPIs, namely:

a. Total income
b. Percentage of profit to sales
c. Fixed-asset Turnover Ratio

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KPI	RISK	*R**	WEIGHT	VALUE	PRIORITY
Total EBITDA	EBITDA target is not reached	15	0.015	0.23	15
Cash Inflow	Unsustainable liquidity	16	0.094	1.50	3
Total Income	Lack of income	8	0.106	0.85	4
Percentage of profit to sales	Lack of income	8	0.106	0.85	5
Receivable Turnover	Accounts Receivable due	20	0.098	1.96	2
Debt Turnover	Debt due	12	0.01	0.12	18
Fixed-asset Turnover Ratio	Lack of income	8	0.106	0.85	6
Market Share for Ready Mix Concrete (Province)	Failed to dominate market share	6	0.016	0.10	22
Customer Satisfaction Index	inaccurate of customer satisfaction evaluation	5	0.066	0.33	12
Major Audit Findings	ISO 9001, 14001 and OHSAS certificates are revoked	10	0.05	0.50	9
Raw Materials, Parts and Supporting Material	Unfulfilled raw materials, parts and supporting materials	20	0.1	2.00	1
Equipments	Unfulfilled Equipment needs	10	0.055	0.55	8
Human Resources/Personels	Development of competency-based human resources is not achieved	6	0.042	0.25	14
Funding	Unfulfilled need for funding	5	0.051	0.26	13
Information and Communication Technology	Less reliable information technology systems	12	0.033	0.40	11
Equipments Productivity	Breakdown Maintenance is high	12	0.047	0.56	7
Marketing Program Plan	The market information system is not up to date	6	0.03	0.18	17
Innovation in each Department or Plant	No innovation program	4	0.013	0.05	23
Internal customer satisfaction index	Work Environment is not conducive	1	0.036	0.04	24
Human Resource Competence Index	Job occupied is not optimal	9	0.056	0.50	10
Dissemination of company's culture	5R has not become a culture	6	0.033	0.20	16
New Application Program	Integrated information system application could not support new application program	12	0.01	0.12	19
Frequency of COFR implementation	Recurring findings	8	0.014	0.11	20
Frquency of management meeting	Lack of performance evaluation in management level	4	0.027	0.11	21

**Risk Level*

Table 4. Risks Related to KPIs

F. Performance Measurement with OMAX and Traffic Light System

After obtaining the KPI priority based on its value as shown in Table 4, the next step is to enter the KPIs into the OMAX table in the criteria column. The criteria column 1 is filled by KPI with the highest risk weight, i.e. KPI fulfill requirement of raw materials, parts and supporting materials and followed by receivable turnover, cash inflow and so on. Filling of columns criteria starting from left to right according to KPI priority. The target value of each KPI achievement in the BSC as shown in Table 3 becomes the target value placed on the line with a score of 10. A line with a score of 0 is filled with the value considered to be the worst achievement for the KPI concerned. For example in KPI meet the needs of raw materials, parts and auxiliary materials with a score of 10 filled target achievement of 100%. Whereas a row with a score of 0 is filled with a value for a poor achievement not expected by a company worth 70%. Lines in scores 1 to 9 are filled with

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linearly increased values. This addition factor is obtained from the difference in values at rows 10 and 0 then divided by 10 so that the raise is linear in each row. Measurement results with OMAX can be seen in Table 5. Performance line is filled with the achievement value of the company at this time then the achievement is given the score in accordance with the existing range. The weight is obtained from the percentage of AHP value weight. Performance scores for the related KPIs are obtained from the multiplication of scores and weights.

G. Result and Analysis

From table 5 obtained results 3 KPIs whose performance is still below the target which is marked with red color and need to be followed up immediately. The three KPIs are:

1. Meet the Needs of Raw Materials, Parts and Supporting Material with a score of 3;
2. Receivable turnover with score 3;
3. Debt Turnover with score 3.

While 8 KPIs are yellow has a value that is close to the target but the performance indicator is still not achieved. The eight KPIs are:

1. Percentage of profit to sales with score 6;
2. Human resource competency index with score 6;
3. Index of customer satisfaction with score 5;
4. Meet funding needs with a score of 5;
5. Total EBITDA with score 5;
6. Marketing program plan with a score of 7;
7. Number of new application program with score 6;
8. Number of innovations per department/plant with score 4.

13 KPIs are marked in green to indicate that the performance of the 13 KPIs has been excellent. The thirteen KPIs are:

1. Total fixed asset turnover with score 8;
2. Cash inflow with score 9;
3. Total income with score of 10;
4. Equipment productivity with score of 8;
5. Meet equipment needs with score of 10;
6. Major audit findings with score of 10;
7. Meet the needs of information systems with a score of 8;
8. Meet the needs of human resource with score 8;
9. Dissemination of company’s culture with score of 6;
10. Frequency of COFR implementation with score 10;
11. Number of frequency of management level meeting with score 10;
12. Market share level of ready mix concrete (province) with score 10;
13. Internal customer satisfaction index with score 10.

For company performance indicator reach value 848,10. While the highest performance indicator is 1.211.58. Percentage of company performance reached 70%. If both KPIs are fulfillment of raw materials, parts and auxiliary materials and receivable turnover improved performance will provide a significant increase for the company's performance.

For the following company performance analysis will be emphasized on 3 KPIs that have performance indicators below the target.

- Meet the Needs of Raw Materials, Parts and Supporting Material

Raw material, specially for sand, is difficult to get in large volume. It is because sand mining industry in East Java often getting resistance from local communities and affecting supplies of sand in market. Infrastructure projects start to run in second semester and cause demand of sand and the price increase significantly. It make the company difficult to suit production cost to company’s budget plan. Management need to review the inventory system for raw material sand and revise to adjust with the situation and condition in market. Management need to recalculate the cost of adding the inventory and the cost that exceeds budget plan.

- Receivables Turnover

The payment period in large-scale project work is long enough. This can cause the company's liquidity to be disrupted due to the slow turnover of money. Therefore, the company currently receives more large projects that have a system of payment bank guarantee. If perceived customer payment system has the potential to become bad debt, the company tends to refuse or withdraw from the auction process. The weakness in the payment system with bank guarantee is a long period. Generally the payment period time is 6 months. If the company wishes to withdraw funds before 6 months, then the company will be subject to discount bank guarantee or withholding of funds in accordance with the applicable regulations of the bank. Currently the company always withdraw the funds before due date so it is always subject to discount bank guarantee which could reduce profits. This happens because the flow of funds in the company is not sufficient to finance the company's operating expenses for 6 months. For jobs outside of large projects, the target of the ACP (Average Collecting Period) determined by the company is generally longer than the Average Payment Period (APP). For ACP is generally 90 days while APP 30 days or longest is 60 days. If these short term payables are not paid on time will be at risk of stoppage of supply from the vendor. And material availability greatly affects the production process so management must be prioritized which debt should be paid first. In addition, maintaining good relationships with related vendors also needs to be built in order to getting vendor trust, so the company can negotiate to extend the

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CRITERIA		Meet the Needs of Raw Materials, Parts & Supporting Material	Receivable turnover	Total fixed asset turnover	Cash in Flow	Total income	Percentage of profit to sales	Equipment productivity	Meet equipment needs	Human resource competency index	Major audit findings	Meet the needs of information systems	Index of customer satisfaction
PERFORMANCE		79%	2.12	1.45	838,268,815,500	838,065,291,903	2.86%	80%	100%	65%	0	95%	0.5
TARGET	10	100	4.0	1.72	855,374,578,000	**781,262,468,000**	4.50	85.0	**100**	75.0	**0**	100	1
	9	97	3.7	1.55	**829,837,120,200**	763,136,221,200	4.05	81.5	97	72.5	1	97	0.9
	8	94	3.4	**1.38**	804,299,662,400	745,009,974,400	3.60	**78.0**	94	70.0	2	**94**	0.8
	7	91	3.1	1.20	778,762,204,600	726,883,727,600	3.15	74.5	91	67.5	3	91	0.7
	6	88	2.8	1.03	753,224,746,800	708,757,480,800	**2.70**	71.0	88	**65.0**	4	88	0.6
	5	85	2.5	0.86	727,687,289,000	690,631,234,000	2.25	67.5	85	62.5	5	85	**0.5**
	4	82	2.2	0.69	702,149,831,200	672,504,987,200	1.80	64.0	82	60.0	6	82	0.4
	3	**79**	**1.9**	0.52	676,612,373,400	654,378,740,400	1.35	60.5	79	57.5	7	79	0.3
	2	76	1.6	0.34	651,074,915,600	636,252,493,600	0.90	57.0	76	55.0	8	76	0.2
	1	73	1.3	0.17	625,537,457,800	618,126,246,800	0.45	53.5	73	52.5	9	73	0.1
	0	70	1.0	0.00	600,000,000,000	600,000,000,000	0.00	50.0	70	50.0	10	70	0
SCORE		3	3	8	9	10	6	8	10	6	10	8	5
WEIGHT %		9.98	9.78	9.38	10.58	10.58	10.58	4.69	5.49	5.59	4.99	3.29	6.59
VALUE		29.94	29.34	75.05	95.21	105.79	63.47	37.52	54.89	33.53	49.90	26.35	32.93

ISSN No:-2456 –2165

CRITERIA		Meet funding needs	Meet the needs of human resource	Total EBITDA	Dissemination of company's culture	Marketing program plan	Debt Turnover	Number of new application program	Frequency of COFR implementation	Number of frequency of management level meeting	Market share level of ready mix concrete	Number of innovations per department/plant	Internal customer satisfaction index
PERFORMANCE		85%	95%	46,464,441,710	8	78%	1	3	2 kali	18	1	0.4	2
TARGET	10	100	100	64,937,434,000	12	100	3.5	5	**2**	**12**	**1**	1	**2**
	9	97	97	60,443,690,600	10.8	90	3.1	4.5	1.8	11	1.4	0.9	1.8
	8	94	**94**	55,949,947,200	9.6	80	**2.8**	4	1.6	10	1.8	0.8	1.6
	7	91	91	51,456,203,800	8.4	**70**	2.4	3.5	1.4	9	2.2	0.7	1.4
	6	88	88	46,962,460,400	**7.2**	60	2.1	**3**	1.2	8	2.6	0.6	1.2
	5	**85**	85	**42,468,717,000**	6	50	1.7	2.5	1	7	3	0.5	1
	4	82	82	37,974,973,600	4.8	40	1.4	2	0.8	6	3.4	**0.4**	0.8
	3	79	79	33,481,230,200	3.6	30	**1.0**	1.5	0.6	5	3.8	0.3	0.6
	2	76	76	28,987,486,800	2.4	20	0.7	1	0.4	4	4.2	0.2	0.4
	1	73	73	24,493,743,400	1.2	10	0.3	0.5	0.2	3	4.6	0.1	0.2
	0	70	70	20,000,000,000	0	0	0.0	0	0	2	5	0	0
SCORE		5	8	5	6	7	3	6	10	10	10	4	10
WEIGHT %		5.09	4.19	1.50	3.29	2.99	1.00	1.00	1.40	2.69	1.60	1.30	3.59
VALUE		25.45	33.53	7.49	19.76	20.96	2.99	5.99	13.97	26.95	15.97	5.19	35.93

Indikator performa	**848.10**

APP period. But beyond that, the company still has an alternative to cover the funding needs within the span of time between APP and ACP, which is working on the retail market more intensively. Currently, less than 20% of revenue comes from retail customer. The retail customers only buy the product in small volumes, but the payment is much more liquid or smoother. Those included in this group are home construction projects from the general public as well as small-scale property developers groups. The company can increase its penetration into the retail market to obtain current funds that can be used to cover its short-term expenditures. By increasing the retail market revenue will reduce the disbursement of funds before the maturity due date of the bank guarantee.

- Debt Turnover
  For KPI debt turnover will get domino effect from performance increase of KPI receivable turnover. If KPI receivable turnover performance getting better, so KPI debt turnover did better. In this case, there.

IV. CONCLUSION

Performance measurement with OMAX is to assist companies in making decisions which KPI that should be followed up first. By knowing the KPI priority for the company, based on it risks to company's goals achievement, will be the guideline to arrange the right strategy for organization. In this case, there are 2 main KPIs that need to be improved its performance because they are still below the standard, they are KPI meet the needs of raw materials, parts and supporting materials with a score of 3 and receivable turnover with a score of 3. Performance increase for both KPI will affect to improve performance for another KPI which also has a score of 3, namely account debt turnover**.**

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