

# DESIGN OF CORPORATE PERFORMANCE MANAGEMENT SYSTEM: CASE STUDY AT X COMPANY IN INDONESIA

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**Abstract** *This paper focus on design of company performance management for corporate level of X Company that produces food ingredient to supply instant noodle, snack and processed meat industries. The framework of proposed performance measurement systems is combining of the Balanced Scorecard (BSC) and Malcolm Baldrige National Quality Award (MBNQA). Four perspectives that are Financial, Customer, Internal Process, and Learning & Growth are based on the BSC framework in which in every perspective several variables are developed using the BSC as well as the MBNQA approaches. In the Financial Perspective there are three indicators focuses namely Shareholder Satisfaction, Direct Profit Contribution and Asset Utilization. In the Customer Perspective consist of Customer Satisfaction, Market Share and Based Customer. In the Internal Business Process perspective consist of four indicators namely New Product Development, Supply Chain Management, Productivity and Quality System. Learning & Growth perspective consists of three indicators namely Leadership Quality and Employer's Competency, Organization Development and Employer's Retention, and Information & Technology System.*

## Introduction

To be classified as World Class Manufacturers (WCM), manufacturing organisations need to have a number of critical ingredients; one such ingredient is that of an appropriate Performance Management System (Medori and Steeple, 2000). The concept of performance measurement has been accepted, for some years now, as an essential part of WCM (Sellenheim, 1991) and the importance of measurement is well covered in the literature. Throughout the 1990s, various novel frameworks have been derived, to aid manufacturing organisations to select and implement measures, such as *Prism* (Neely, 1999), the *Balanced Scorecard* (Kaplan and Norton, 1996), *Vital Signs*

(Hronec, 1993) and *Questionnaire Methods*. (Dixon, 1990). However, as Zairi and Letza (1994) have observed, research in the area of performance measurement has not produced solid findings and this remains a challenge. This argument is supported by Neely (1999) through his research findings, which show that some 90% of managers fail to implement and deliver their organisation's strategies, by the performance measurement applied. He argues that this failure is mostly because the business performance is itself a multi-faceted concept that needs a different type of PMS. Furthermore, as noted by Sellenheim (1991) and by Ljungberg (1994), methods for developing and implementing detailed measures, adapted to the environment of

a specific company, are seldom described in detail.

In recent years there is a trend in flavor business in Indonesia to merger between Indonesia's companies and international flavor house to strengthen their competitiveness. To name some of this merger are International Flavor & Fragrance (IFF) with Bush Boake Allen, Givaudan with Food Ingredients Specialist & Taste Maker, and Haarman & Rheimer with Dragoco. PT. X produces food ingredient to supply instant noodle, snack and processed meat industries and is the only Indonesia's company has to compete with those multi national companies. To beat that competition PT. X needs to develop appropriate strategy supporting with reliable PMS both at corporate level as well as individual level. The existing system of PMS at PT. X is established through development process of five years planning based on the Chief Executive Officer's (CEO) direction. From that direction then each department directors translate into their program. These programs then have to be presented in

front of the CEO and if the CEO agrees then these documents are signed as Five Years Business Plan for that department. The problem encountered of this current practice is that the system focuses on the annual budget for merely monitoring not for managing strategically. Most of current strategy and programs are developed separately in each functional department with no linkages among them and the focus of the programs is based on the availability of the budget. The research question will be answered in this paper then what kind of integrated PMS appropriate to PT. X that not only focus on financial aspect but also non financial aspect that align to the company's vision and mission and can be used as management communication tools among departments?

### **Research Methodology**

Research methodology of this paper can be drawn as presented in the Figure 1 below.

**Figure 1. Research Methodology**

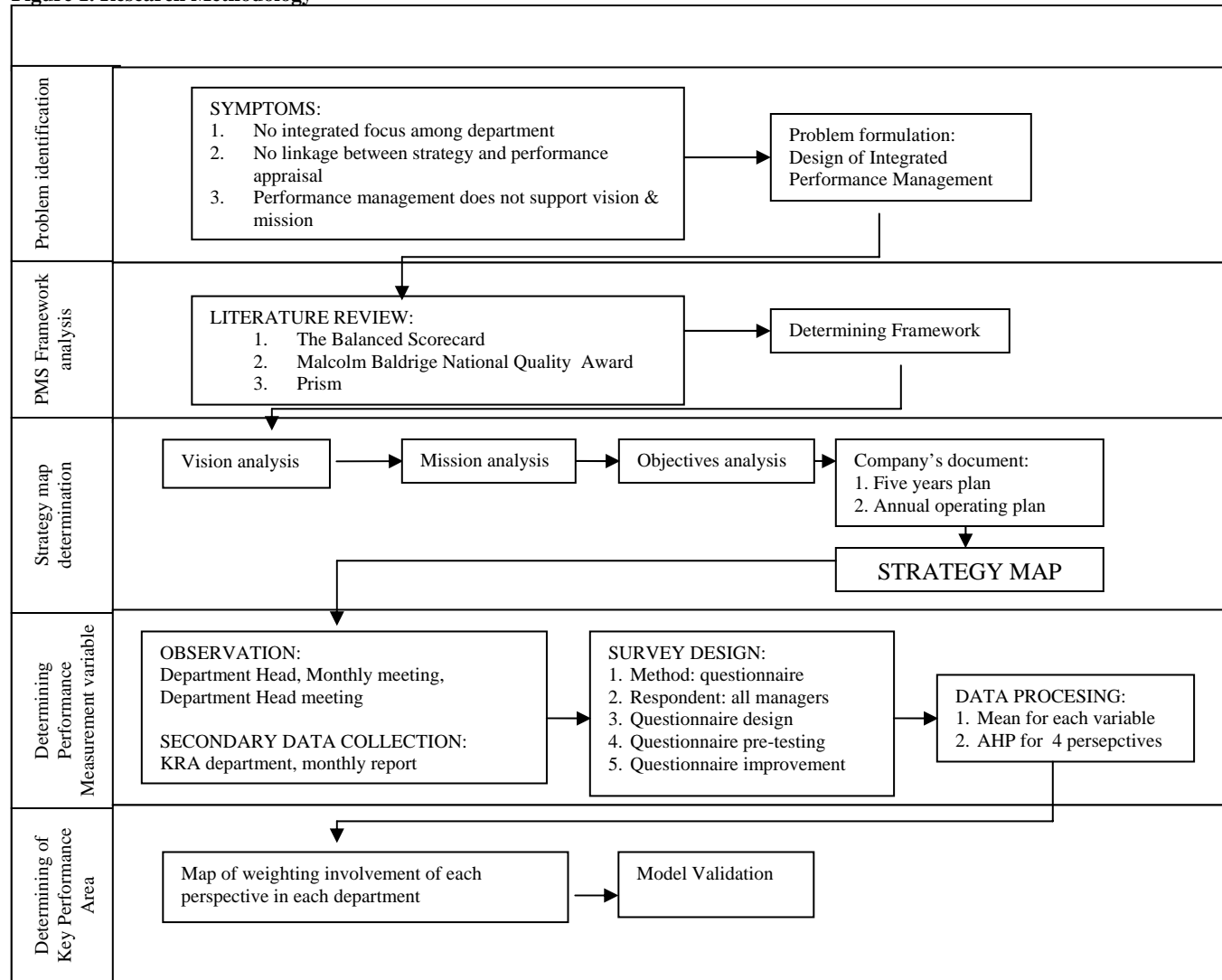


Table 1. Intero relation between BSC and MBNQA

	<b>BSC</b>				
	<b>FINANCIAL</b>	<b>CUSTOMER</b>	<b>INTERNAL PROCESS BUSINESS</b>	<b>LEARNING &amp; GROWTH</b>	
<b>MBNQA</b>	<b>LEADERSHIP</b>				
	Organizational Leadership			SEF	
	Public Responsibilities & citizenship			SOF	
	<b>STRATEGIC PLANNING</b>				
	Strategy development	SBTF	SBTF	SBTF	SBTF
	Strategy Deployment	SEF	SEF	SEF	SEF
	<b>CUSTOMER &amp; MARKET FOCUS</b>				
	Customer & market knowledge		SBTF		
	Customer satisfaction & relationship		SBTF		
	<b>MEASUREMENT, ANALYSIS &amp; KNOWLEDGE MANAGEMENT</b>				
	Measurement of Organizational Performance	SBTF		SBTF	SBTF
	Analysis of organizational performance	SBTF		SBTF	SBTF
	<b>HUMAN RESOURCE FOCUS</b>				
	Work System				SEF
	Employee education, training & development				SEF
	Employee well-being & satisfaction				SEF
	<b>PROCESS MANAGEMENT</b>				
	Product & Service Process			SEF	
	Support process			SEF	
	Supplier & partnering process			SEF	
	<b>BUSINESS RESULTS</b>				
	Customer focused results		SBTF		
	Financial & market results	SBTF			
	Human resource results				SEF
	Supplier & partner results			SEF	
	Organizational Effective results				SBTF

SBTF: substances in both of two approaches

SEF: substances explicitly in one framework and implicitly in another framework

SOF: substances just in one framework

## Research Result

Based on the intensive analysis of company's nature of business and the characteristic of Performance Management System (PMS) framework stated in the literature, the framework chosen for proposed PMS is combination between BSC and MBNQA in which the Interco relation between that two approaches can be summarized as in the Table 1.

It can be seen that both the BSC and MBNQA framework have similarities scope on performance perspectives even though there are several different focus on them. By combining those two frameworks the proposed model would more comprehensive in capturing performance variables and increasing applicability in the current though competition. The MBNQA fulfill the gap especially in the aspects of leadership and internal processes business. Furthermore, public responsibility and citizenship as important factors should be considered in this kind of industry also becoming focus of MBNQA that would enrich the BSC framework. Based on the chosen framework and analysis of company's vision, mission, goal, five

years plan and CEO's direction then can be composed strategy map as stated in the Table 2 below. Based on the strategy map then performance variables in each department can be determined through surveying using questionnaires and interview of ten managers in each department. Those ten managers asked to rank and give suggestion of the most important performance variables both in their own department as well as in the other department relates to company competitiveness. The average score of managers more than 3.5 is considered as important variables that has to be used in performance management system in that department. Results of those importance performance variables can be listed in the Table 2 below. Based on the strategy map and key performance indicators then can be mapped Key Result Area (KRA) should be focus by each department in supporting company competitiveness. The KRA of each department can be seen in the Tables 4, 5, 6, 7, 8 and 9 respectively.

Table 2. Strategy Map

Company Statement	Vision: To be leading food ingredient suppliers. Mission: Provide high quality and innovative products. Goal: Health and continuous growth
Financial Perspective	F1: Increasing shareholder satisfaction through managing Return on Investment F2: Increasing direct profit contribution through managing customer group, product category, total sales and decreasing department expense F3: Increasing Assets utilization through managing working capital turnover
Customer Perspective	C1: Increasing customer satisfaction through managing customer satisfaction index, customer retention and customer intimacy C2: Increasing market share through managing main customer and market share product group C3: Increasing base customer through managing customer acquisition
Internal Business Processes Perspective	I1: Increasing new product development through managing new product sales, new product development success rate, new product sales internal driven I2: Improving Supply Chain Management through managing order fulfillment I3: Increasing productivity through managing inventory turnover, reprocesses and cost reduction I4: Improving Quality System through managing GMP audit, halal certification, and implementation ISO standard
Learning & Leadership Perspective	L1: Increasing leadership quality & employers' competencies through managing core competencies, leadership score L2: Organizational development & employees' retention through managing employee satisfaction & retention L3: Improving IT system through managing technology development and computerized implementation

Table 3. The Important of Performance Variables in Each Department

Department	Performance Variables	Average
Customer Relation	Total Sales to budget	5.0
	Customer Retention-Sales to Existing Customer	4.8
	Customer satisfaction	4.5
	Customer acquisition-Sales to New Customer	4.3
	Market share in key customer	4.2
	New product sales	4.2
	Customer Complaint Handling	4.2
	Lead time to customer	4.1
	System improvement	3.1
	Customer Relation expense	3.0
Product Group	New Product Sales-Internal driven	4.7
	Market share Product category	4.1
	Sales per product category	3.9
	System improvement	3.8
	Product group Expense	3.4
Operations	<b>Production:</b>	
	Productivity	4.8
	Inventory Data Accuracy	4.8
	Master of Product Schedule Performance	4.3
	Down time	4.2
	Bad stock from handling & storage	4.1
	System Improvement	4.1
	Maintenance Time	4.0
	GMP Audit Result	3.9
	Production Cycle Time	3.9
	Reprocess	3.9
	Production Expense	3.8
	HCP Production	3.6
	<b>QC/ QA:</b>	
	Handling Customer Complaint	4.8
	Customer Complaint	4.7
	Return from Customer	4.7
	Halal certificate	4.4
	GMP Audit Result	4.1
	Cycle Time QC	3.9
	Reprocess	3.7
	QC Expense	3.7
	System Improvement	3.7
	HCP QC	3.0
	<b>Purchasing:</b>	
	Procurement Cycle Time	4.6
	On time delivery	4.6
	Down time because of Raw Material Late	4.6
	Error of Purchasing	4.5
	New Sources/ suppliers	4.3
	Supplier certificate	4.1
	Raw Material Reject rate	3.9
	HCP Purchasing	3.4
	Purchasing expense	3.3
	<b>Logistic:</b>	
	Order fulfillment	4.8
	Freight cost/ kg	4.2
	Inventory Days	4.1
	Delivery expense	4.1

	Logistic Expense	3.8
	System Improvement	3.7
	HCP Logistic	3.6
Finance & Accounting	Report Submission	4.8
	Return On Investment	3.9
	Cost management initiative	3.9
	Working Capital Turnover	4.1
	A/R Collection	4.9
	A/P Payment	4.7
	IT program Implementation	3.8
	Adequacy of Internal Control System & Compliance	4.1
Human Resource Development	Employee Satisfaction	4.6
	Employee Retention	4.5
	Recruitment Fulfillment	4.1
	Training	4.0
	Man Power Planning	4.0
	System Improvement	3.8
	Performance Appraisal Summary	3.7
Research & Development	New Product Sales-Total	4.5
	New Product Sales-Internal Driven	4.5
	Technology Development	4.4
	Cost Reduction-Reformulation	4.3
	Quality Improvement	4.1
	New Product Development Cycle Time	3.9
	New Product development Success Rate	3.7
	System Improvement	3.7
	R & D Expense	3.3
HCP R&D	3.1	



Table 4. Key Result Area Customer Relation Department

Perspective	Strategic Goal	Weight	Key Performance Indicator
F2	Increasing DPC	20	DPC customer group
			Total Sales
C1	Increasing Customer Satisfaction	30	Customer Satisfaction
			Customer complaint handling
			Customer retention
			Sales forecast accuracy
C2	Increasing Market Share	20	Market share in key customer
C3	Increasing Base customer	17	Customer acquisition
I1	Increasing new product development	13	New product sales
			New product development success rate
Total		100	

Table 5. Key Result Area Product Group

Perspective	Strategic Goal	Weight	Key Performance Indicator
F2	Increasing DPC	29	DPC Product category
			Total sales
C2	Increasing Market Share	29	Market share product category
I1	Increasing new product development	19	New product sales
I3	Improving Information System & Technology	23	IT program implementation
			Technology development
Total		100	

Table 6. Key Result Area Research & Development Department

Perspective	Strategic Goal	Weight	Key Performance Indicator
F2	Increasing DPC	30	DPC Product category
I1	Increasing new product development	21	New product sales
			New product development success rate
			New product development cycle time
I3	Increasing productivity	13	Productivity (man, machine, raw material)
			Cost reduction
			Production cycle time
I4	Increasing quality system	13	System improvement
			Halal certification
			Quality improvement
I3	Improving Information System & Technology	23	Technology development
Total		100	

Table 7. Key Result Area Operations Department

Perspective	Strategic Goal	Weight	Key Performance Indicator
F2	Increasing DPC	19	DPC Customer Group
			Department Expenses
F3	Increasing Asset Utilization	13	Working Capital Turnover
C1	Increasing Customer Satisfaction	30	Customer Complaint Handling
			Lead Time to Customer
I2	Improving SCM Processes	21	Procurement Cycle Time
			Down Time of Raw Material Delay
			New Source Supplier
			Order Fulfillment
I3	Increasing Productivity	9	Productivity of labor, machine & raw material
			Inventory turnover
			Freight cost/kg
			Cost reduction-Raw Material
			Reprocesses
			Production Cycle Time
I4	Increasing Quality System	8	GMP Audit Result
			System Improvement
			Inventory Data Accuracy
			Halal Certification
			Quality Improvement
			Return from Customer
Total		100	

Table 8. Key Result Area Customer Finance & Accounting Department

Perspective	Strategic Goal	Weight	Key Performance Indicator
F2	Increasing DPC	30	DPC Customer Group
			Department Expense
F3	Increasing Assets Utilization	20	Department Expense
			A/R Collection
			A/P Payment
I3	Increasing Productivity	13	Productivity of labor, machine & raw material
I4	Increasing Quality System	13	System Improvement
L3	Increasing Technology & Information System	24	Accuracy & timely Report Submission
			IT Program Implementation
			Adequacy of Internal Control System & Compliance
			Technology Development
Total		100	

Table 9. Key Result Area Human Resource Development Department

Perspective	Strategic Goal	Weight	Key Performance Indicator
I3	Increasing Productivity	13	Productivity of labor, machine & raw material
I4	Increasing Quality System	13	GMP Audit Result System Improvement
L1	Increasing Leadership Quality & Employees' Competences	29	HCP Department Performance Appraisal Summary Core Competences
L2	Organizational Development	23	Employee Loyalty Employee Satisfaction Recruitment Fulfillment Man Power Planning Accuracy
L3	Increasing Technology & Information System	22	Accuracy & Timely Report Submission IT Program Implementation Adequacy of Internal Control System & Compliance Technology Development
Total		100	

Table 10. Advantages of the Proposed PMS Model

Department	Focus	Existing PMS	Support by Proposed PMS
Customer Relation	Customer satisfaction, sales & profit	Sales Customer Group, New Customer Development, New Expense Control, Human Capital Productivity	All that existing variables plus Customer Satisfaction, Customer Retention
Product Group	Growth of Group Product	Sales/ product category, new product/ product category, Raw Material ratio, Product Group expense, Promotion & Product research	New Product Sales internal driven, market share product category
Research & Development	New Product Development	New Product launch, on time development, cost reduction, project Accomplishment	New Product Development Success rate, New Product Development Cycle Time, Technology development
Operations	Customer Order Fulfillment with productive human resources	Inventory level, New Sources Raw Material, Order Fulfillment, Operations Expense, Cost Reduction, Customer Complaint	Down Time, Inventory Data Accuracy, Procurement Cycle Time, rating Supplier, GMP Audit Result
Finance & Accounting	Financial Performance supporting with information system	Report Submission, Cost Management Initiative, Working Capital Turn Over, A/R Collection, A/P Payment, ERA soft Implementation, Adequacy of Internal Control System & Compliance	Costing System
Human Resource Development	Human Resource Development	Recruitment, Employee Turn Over, Training Development, Reward & Punishment System, Industrial Relation, Employee Leadership	Employee Satisfaction, Social Responsibility,

Table 11. The Weighting of Responsibilities for Each Department

No	Perspective	Strategic Goal	Weight	KRA Department					
				CR	PG	R&D	OP	F&A	HRD
1	F1	ROI	7	-	-	-	-	-	-
	F2	Increasing DPC	9	20	29	30	19	30	-
	F3	Increasing Assets Utilization	6	-	-	-	13	20	
2	C1	Increasing Customer Satisfaction	14	30	-	-	30	-	
	C2	Increasing Market Share	10	20	29	-	-	-	
	C3	Increasing Base Customer	8	17	-	-	-	-	
3	I1	Increasing New Product Development	6	13	19	20	-	-	
	I2	Improving SCM Processes	10	-	-	-	21	-	
	I3	Increasing Productivity	4	-	-	13	9	13	13
	I4	Improving Quality System	4	-	-	13	-	14	13
4	L1	Increasing Leadership Quality & Employees' Competences	8	-	-	-	-	-	29
	L2	Organizational Development	7	-	-	-	-	-	23
	L3	Improving Technology & Information Systems	7	-	23	23	-	23	23
Total			100	100	100	100	100	100	100

## Discussion

The existing PMS of PT X has not systematically designed for strategic supporting systems in decision making. Through re-mapping, it can be compared between existing PMS and the proposed one for each department task as stated in the Table 10 below.

The weighting of responsibilities for each department on managing performance variables can be different. Those focuses of responsibilities can be summarized as seen in the Table 11.

The hypothesis of this research was to show that the application of combination between the BSC and MBNQA approach was a viable PMS methodology to improve company competitiveness based on the financial and non-financial variables and both based on the qualitative and quantitative assessment processes. This has been shown to be a valid hypothesis, whereby the development and the subsequent application of the proposed model in industrial applications have identified

key areas of performance improvements. The design of PMS is a complicated process as it involves many performance variables and formula. Using combination of the BSC & MBNQA approach, the proposed model consist four performance perspectives was developed to serve the purpose. The hybrid system performs the detailed analysis of the company performance. In the validation processes based on the industrial information using questionnaires and interview to the company's experts, the proposed model can determine accurately (for every level) which performance variables should be tackled for improvement by the company.

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