DESIGNING CORPORATE PERFORMANCE MANAGEMENT SYSTEM USING INTEGRATED PERFORMANCE MANAGEMENT SYSTEM CASE STUDY HILBREW COFFEE

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Abstract. Company performance plays an important role in maintaining the sustainability of a company. Hilbrew Coffee, a coffee based company was establish in 2014. After 3 years running the business, the company still doesn't have PMS to measure their performance. This research use Integrated Performance Management System (IPMS) as the framework in designing the performance management system for Hilbrew Coffee.

Keywords: Designing; Performance Management; IPMS; Start-up Company; Porter

Introduction

Current information shows that Indonesia is one of the biggest coffee-producing country in the world. In 2015, Indonesia was ranked number four after Brazil, Vietnam and Colombia. This condition led to the growth of coffee trader and coffee lovers in Indonesia. This growing coffee sector generates a lot of business oportunities.

Nowadays, many new entrepreneurs are emerging. New companies also appear along with the increase of new entrepreneur. Increasing in number, all of the companies compete to be the best. Each company should have a good strategy and a good internal systems to become competitive in marketplace. Performance Management System (PMS) becomes an important need for company to compete with others and maintain their performance in high level.

There are many PMS framework in the world. In Indonesia, PMS frameworks that is often used are The Balance Scorecard, Malcolm Baldrige National Quality Award, and ISO Series. This research uses Integrated Performance Management System (IPMS) as the PMS framework.

After three years running their business, Hilbrew Coffee still doesn't have any system to measure their performance. As a growing company, Hilbrew Coffee needs to be more competitive in their business and record a positive growth. This could be done if they have a measurement system to maintain their company quality.

Theoretical Foundation

There were some PMS models that can be used for managing and measuring performance. Generally, most companies are using well-known PMS models, such as Malcolm Baldrige National Quality Award (MBNQA), Balanced Scorecard (BSC), and International Organization for Standardization (ISO). However, in this paper, we will use the Integrated Performance Management System (IPMS), or also known as Knowledge-Based Performance Management System (KBPMS) that is currently being developed by Wibisono for several reasons.
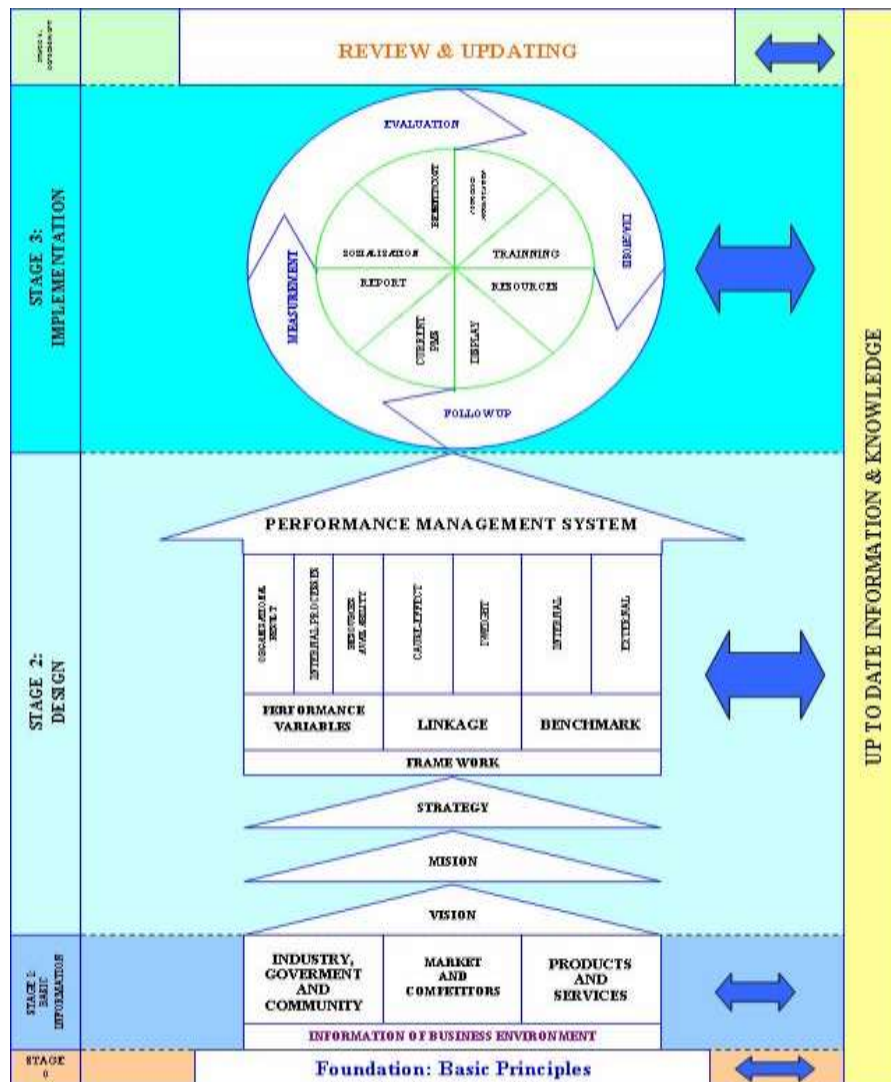

Figure 1:IPMS Framework

According to Kaplan and Cooper et al. in Wibisono study, there were some limitations of the conventional PMS. First, there is lack of relevance implementing uniformed performance variables to each level of corporate structure; people on different corporate level see things differently, thus having the same variable for every level is irrelevant. Second, there is lagging metrics from the data collection of past performance; past performance might give false or late alerts because the data only represent the condition of the past, not the present. Third, conventional PMS is short-termism; it focuses on increasing short-term financial profitability by cost cutting, however it is no longer seen to be effective as cost-cutting reduces the ability of a company to improve its product which in the long run might yield more advantages. Fourth, the variables are inflexible; some conventional PMS are using standardized indicators, which are no longer appropriate to be applied right now in current business environment that is very dynamic and competitive. Fifth, it doesn't foster improvement; to improve, a company could benchmark its performance with other comparable companies, yet

conventional PMS doesn't suggest such approach. Last, there is cost distortion; conventional PMS measures everything with cost which often overlooks the measurement utilization, analysis, and follow-up actions.

Methodology

The figure below explains how this research will be done. There are several stages to be done, start from finding the problem, defining research objectives until proposing solutions for these problems.
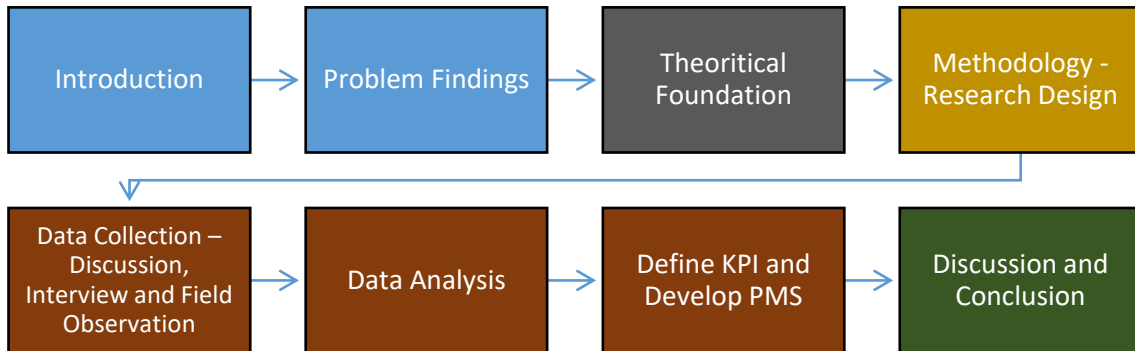

Figure 2: Research Methodology

Research Finding

As mentioned, this research use Integrated Performance Management System as the framework for measuring company performance.

Table 1: IPMS Perspective

Perspective	Aspect
Organization Output	Financial
	Non Financial
Internal Process	Innovation
	Operation Process
	Marketing
	After Sales Service
Resource Capability	Human Capital Resource
	Technology Resource
	Organization Resource

This research developed 16 variable with 18 key performance indicators for Hilbrew Coffee. The following are IPMS framework with KPIs that have been developed through discussion, interview and field observation.

Table 2: IPMS Framework for Hilbrew Coffee

Perspective	Aspect	Variable	Key Performance Indicator	Formula	Period	Standard	Target
Organizational Output	Financial	Profitability	Net Profit	((EBIT - Tax) / Revenue) x 100%	Monthly	Must be positive	> 40%
		Growth	Revenue Growth	((Revenue - Rev. Last Period) / Rev. Last Period) x 100 %	Monthly	Must be positive	> 5%
	Non Financial	Product Quality	Product Durability	Average period of Bottled Coffee Product durability	Monthly	More than 6 days	> 7 days
		Repeat Order	Percentage of consumer that order again	(Number of repeat order from consumer / total number of consumer) x 100%	Monthly	Must be positive	> 5%
		Products	Number of New Products	Number of new product(s)	Monthly	0	1
		Delivery	Average Time of Delivery	Average time from order received until shipping	Monthly	Less Than 2 days (< 48 hours)	Less than 1.5 days (< 36 hours)
Internal Process	Innovation	Product Innovation	Number of Innovation	Number of Innovation	Monthly	>= 1	>= 2
		Research and Development	Budget allocated for Research and Development	(Total Budget allocated for R&D / Total Profit) x 100%	Monthly	>= 10%	20% - 40 %
	Operating Process	Production	Cost and Profit Margin	(Total production cost / total selling price) x 100%	Monthly	Less than 70%	50% - 60%
			Production Time	Average of Total production time from green bean to ready-to-sell goods	Monthly	8 - 30 Minutes	8 - 22 Minutes
		Waste or Defect	Number of Waste or Defect	(total waste or defect / Total production batch) x 100%	Monthly	Less than 5%	< 2%
	Marketing	Consumer	Number of new	(Total new customer / Total	Monthly	0	> 10 %

		Growth	customer	customer) x 100%			
	After Sales Service	Custom er	Percenta ge of Complain	(Number of complain / Total order) x 100%	Month ly	Less than 5%	0%
		Daya tanggap	Average Response Time to Customer	Average response time from customer's review or complain	Month ly	Less Than 24 Hours	12 Hours
Resou rce Capab ility	Human Resourc e	Labor Producti vity	Qualificat ion Level	(Total Number of Employee that had bachelor degree / Total employee) x 100%	Month ly	70%	85%
	Technol ogy	Machin e	Roasting Machine Downtim e	(Total Hour of Machine Downtime / 30-days Work Hour) x 100%	Month ly	< 5 %	1%
			Grinder Machine Downtim e	(Total Hour of Machine Downtime / 30-days Work Hour) x 100%	Month ly	< 5 %	1%
	Organiz ation	Leaders hip	Leadershi p Effectivit y Index	Leadership Effectivity Index Survey	Month ly	> 60%	80%

The data used in this paper are limited to Hilbrew Coffee's data from April – July 2016. The data were entered to the framework and classified to a 1 – 5 scale according to a standard to measure the target and realization of each indicators. Both classification table and the result table will be given below.

Table 3: Result Classification

Perspectiv e	Aspect	Variable	Key Performa nce Indicator	1 (Wors t)	2 (Bad)	3 (Avera ge)	4 (Good)	5 (Best)
Organizati onal Output	Financial	Profitability	Net Profit	≤ - 20%	-20% < x < 0%	0%	0% < x < 30%	≥ 30%
		Growth	Revenue Growth	≤ - 20%	-20% < x < 0%	0%	0% < x < 20%	≥ 20%
	Non Financial	Product Quality	Product Durability	1 - 2 Days	3 - 5 Days	6 -7 Days	7 - 9 Days	≥ 10 Days
		Repeat Order	Percentag e of consumer that order again	0%	0% < x ≤ 3%	3% < x ≤ 6%	6% < x ≤ 9%	> 9%

		Products	Number of New Products	0	1	2	3	≥ 4
		Delivery	Average Time of Delivery	≥ 48 Hours	36 < x < 48 hours	24 < x ≤ 36 Hours	12 < x ≤ 24 Hours	≤ 12 Hours
Internal Process	Innovation	Product Innovation	Number of Innovation	0	1	2	3	≥ 4
		Research and Development	Budget allocated for Research and Development	0%	0% < x ≤ 5%	5% < x ≤ 10%	10% < x ≤ 15%	> 15%
Internal Process	Operating Process	Production	Cost and Profit Margin	≥ 75%	70% < x < 75%	65% < x ≤ 70%	60% < x ≤ 65%	≤ 60%
			Production Time	≤ 5 Minutes; ≥ 30 Minutes	5 < x ≤ 6 Minutes; 24 ≤ x < 30 Minutes	6 < x ≤ 8 Minutes; 22 ≤ x < 24 Minutes	8 < x ≤ 10 Minutes; 20 ≤ x < 22 Minutes	10 < x < 20 Minutes
		Waste or Defect	Number of Waste or Defect	≥ 4%	2% < x < 4%	1% < x ≤ 2%	0% < x ≤ 1%	0%
	Marketing	Consumer Growth	Number of new customer	0%	0% < x ≤ 5%	5% < x ≤ 10%	10% < x ≤ 15%	> 15%
	After Sales Service	Customer	Percentage of Complain	≥ 12%	8% < x < 12%	4% < x ≤ 8%	0% < x ≤ 4%	0%
		Responsiveness	Average Response Time to Customer	≥ 48 Hours	36 < x < 48 hours	24 < x ≤ 36 Hours	12 < x ≤ 24 Hours	≤ 12 Hours
Resource Capability	Human Resource	Labor Productivity	Qualification Level	0% < x ≤ 20%	20% < x ≤ 40%	40% < x ≤ 60%	60% < x ≤ 80%	80% < x ≤ 100%
	Technology	Machine	Roasting Machine Downtime	≥ 8%	4% < x < 8%	2% < x ≤ 4%	0% < x ≤ 2%	0%
			Grinder Downtime	≥ 8%	4% < x < 8%	2% < x ≤ 4%	0% < x ≤ 2%	0%
	Organization	Leadership	Leadership Effectivity Index	0% < x ≤ 20%	20% < x ≤ 40%	40% < x ≤ 60%	60% < x ≤ 80%	80% < x ≤ 100%

Table 4: Hilbrew Coffee's Performance; April - July 2016

Perspective	Aspect	Variable	Key Performance Indicator	Formula	Period	Standard	Target	Apr-16	Mei-16	Jun-16	Jul-16
Organizational Output	Financial	Profitability	Net Profit	((EBIT - Tax) / Revenue) x 100%	Monthly	Must be positive	> 40%	45,48%	47,89%	48,03%	47,13%
		Growth	Revenue Growth	((Revenue - Rev. Last Period) / Rev. Last Period) x 100 %	Monthly	Must be positive	> 5%	N/A	15,95%	28,86%	20,57%
	Non Financial	Product Quality	Product Durability	Average period of Bottled Coffee Product durability	Monthly	More than 6 days	> 7 days	9,17	9,67	10,50	10,67
		Repeat Order	Percentage of consumer that order again	(Number of repeat order from consumer / total number of consumer) x 100%	Monthly	Must be positive	> 5%	N/A	6,82%	10,53%	9,30%
		Products	Number of New Products	Number of new product(s)	Monthly	0	1	3	2	1	2
		Delivery	Average Time of Delivery	Average time from order received until shipping	Monthly	Less Than 2 days (< 48 hours)	Less than 1.5 days (< 36 hours)	12,50	15,14	13,04	14,29
Internal Process	Innovation	Product Innovation	Number of Innovation	Number of Innovation	Monthly	>= 1	>= 2	0	2	0	1
		Research and	Budget	(Total Budget	Monthly	>= 10%	20% - 40	N/A	N/A	N/A	N/A

		Devel opme nt	allocat ed for Resear ch and Devel opme nt	allocated for R&D / Total Profit) x 100%			%				
Opera ting Proces s	Produ ction	Cost and Profit Margi n	(Total productio n cost / total selling price) x 100%	Monthly	Less than 70%	50% - 60%	49,48%	49,04%	50,32%	50,40%
		Produ ction Time	Average of Total productio n time from green bean to ready-to-sell goods	Monthly	8 - 30 Minut es	8 - 22 Minu tes	N/A	N/A	N/A	N/A
	Waste or Defect	Numb er of Waste or Defect	(total waste or defect / Total productio n batch) x 100%	Monthly	Less than 5%	< 2%	0,34%	0,21%	0,17%	0,21%

Table 5: Hilbrew Coffee's Performance; April - July 2016(cont.)

	Marke ting	Consu mer Growt h	Numb er of new custo mer	(Total new customer / Total customer) x 100%	Monthly	0	> 10%	N/A	N/A	N/A	N/A
	After Sales Servic e	Custo mer	Percen tage of Compl ain	(Number of complain / Total order) x 100%	Monthly	Less than 5%	0%	0%	0%	2,63%	2,33%
		Daya tangg ap	Avera ge Respo nse Time to Custo mer	Average response time from customer' s review or complain	Monthly	Less Than 24 Hour s	12 Ho urs	0	0	4	7

| Resource Capability	Human Resource	Labor Productivity	Qualification Level	(Total Number of Employee that had bachelor degree / Total employee) x 100%	Monthly	70%	85%	**100%**	**100%**	**100%**	**100%**
	Technology	Machine	Roasting Machine Downtime	(Total Hour of Machine Downtime / 30-days Work Hour) x 100%	Monthly	< 5 %	1%	**0%**	**0%**	**0%**	**0%**
			Grinder Machine Downtime	(Total Hour of Machine Downtime / 30-days Work Hour) x 100%	Monthly	< 5 %	1%	**0%**	**0%**	**0%**	**0%**
	Organization	Leadership	Leadership Effectivity Index	Leadership Effectivity Index Survey	Monthly	> 60%	80%	**N/A**	**N/A**	**N/A**	**N/A**
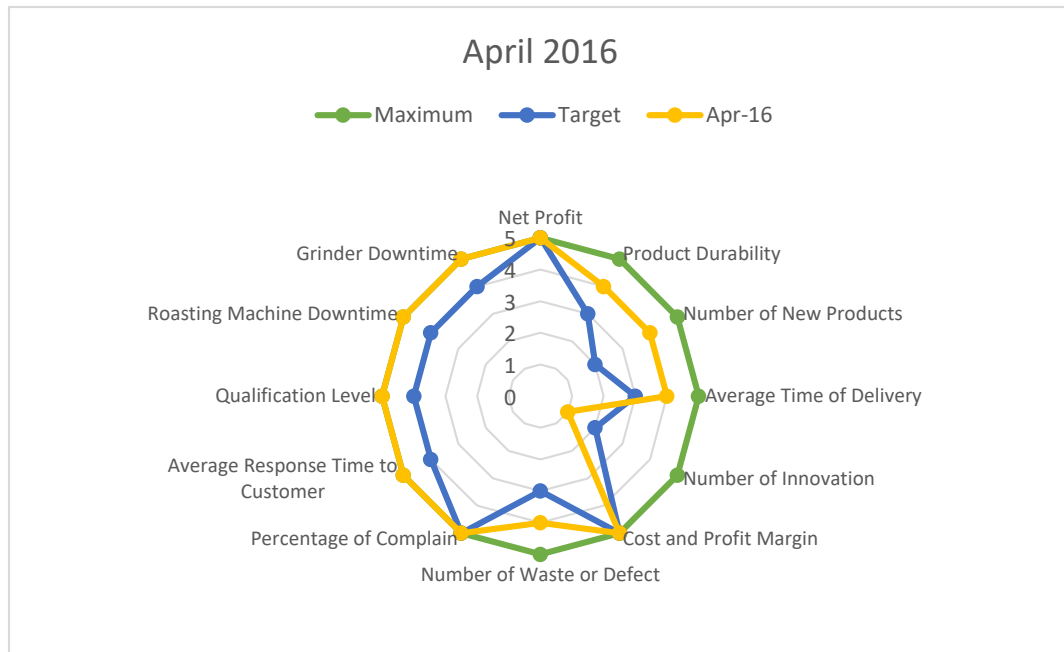
Figure 3: Hilbrew Coffee - April 2016

This figure shows the result of company's performance during April 2016. In this month The Number of Innovation performance result is below target because Hilbrew Coffee was focusing on diversity of coffee products and doesn't launch any innovative product.
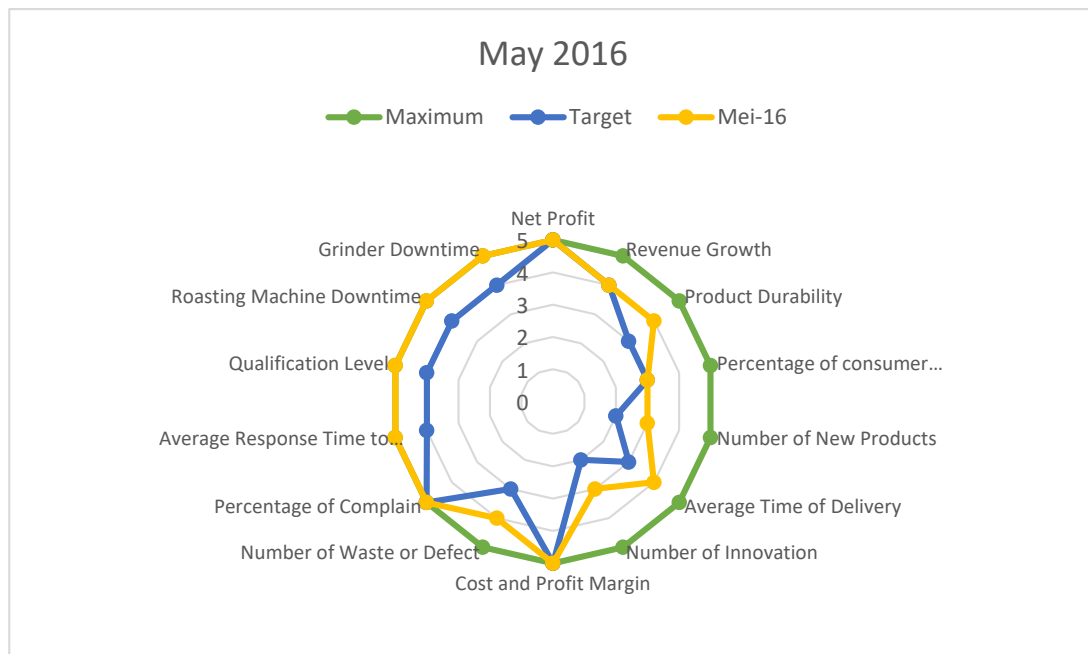

Figure 4: Hilbrew Coffee - May 2016

This figure shows the result of company's performance during May 2016. In this month, Hilbrew Coffee records a net profit of 47,89%, indicating that their performance is at top level. All of the KPIs in Organizational Output met the standard.All of Hilbrew Coffee KPIs achieve the target. In this month, there is new innovation and company performance exceed the target. This is an enhancement compared to prior month which Number of Innovation KPI had a negative performance.
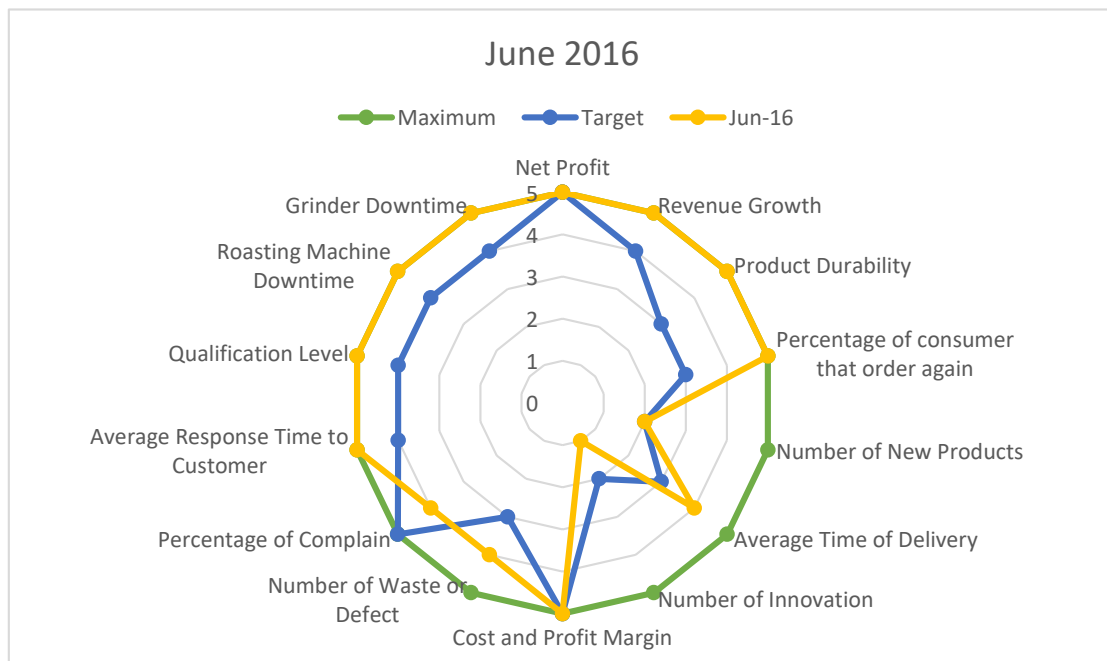

Figure 5: Hilbrew Coffee - June 2016

Hilbrew Coffee was getting better each month. This month, nine of its KPIs reach the maximum rating and exceed the target. The growth of corporate revenue is at 28,86% while the company target is at 5%. Hilbrew Coffee should revise and set the company target higher.The target of complain is 0%, which means no complaint at all. In this month Hilbrew Coffee received one complaint from customer and make their performance didn't reach the target.
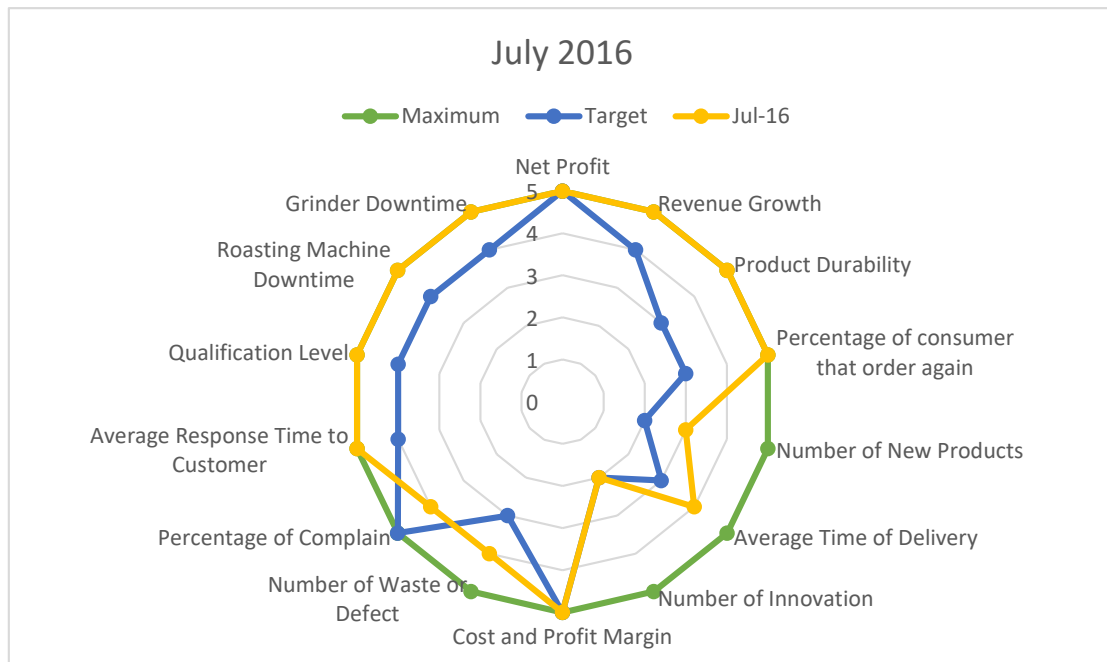
Figure 6: Hilbrew Coffee - July 2016

This month, Hilbrew Coffee manage to maintain the company's positive trends of prior months. Almost all of the KPIs performance result are exceeding the target, and nine of the company KPIs reach the maximum classification criteria.Same with prior month, the target of complaint is still 0%. In this month Hilbrew Coffee also received one complaint from customer and make their performance didn't reach the target again.

Conclusion

This research found that there was no performance measurement system that applied in the company. Therefore, a new performance management framework was developed for Hilbrew Coffee. Using Integrated Performance Management System framework, this research developed 16 variables with 18 Key Performance Indicators to ensure company performance is on the right track.

This research also analyze company performance for the last four months. In April 2016, almost all of Hilbrew Coffee KPIs meet the target except 'Number of Innovation' indicator. Hilbrew Coffee didn't reach the target for this indicator because Hilbrew Coffee was focusing on diversity of coffee products and doesn't launch any innovative product. The next month, all of Hilbrew Coffee KPIs meet the target.

June 2016, all of the company's KPIs in organizational output and resource capability perspective meets the target, but not in internal process perspective. The company KPI Percentage of Complain didn't reach the target. The target of complain is 0%, which means no complaint at all. In this month Hilbrew Coffee received one complaint from customer and make their performance didn't reach the target.

In July 2016, Hilbrew Coffee KPIs in organizational output and resource capability perspective was at best condition. All of them were exceeding the target, even reaching the maximum classification of result. But not with KPIs in internal process. Same with prior month, the target of complaint is still 0%. In July 2016, Hilbrew Coffee also received one complaint from customer and make their performance didn't reach the target again.

This Research suggest that Hilbrew Coffee should raise their target. In last 4 months, Hilbrew Coffee performance almost always reach the target, even exceed the target. It would be better for Hilbrew Coffee to raise their standard to ensure the company is working hard to be a better company.

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