

PMA 2012 Conference, Cambridge UK 11-13 July 2012

# Design and Implementation of Performance Management System in a Pharmaceutical Company – A Case Study

M. Raja Chidambaram, M.Radhakrishnan URs Productively – India Apex laboratories Pvt Ltd – India raja@ursquality.com

#### Keywords: Performance Management Systems, Performance Indicators, Productivity

Abstract: This paper presents the case of design and implementation of Performance Management System (PMS) for a pharmaceutical company. The design of the PMS was based on PDCA approach. As the company did not have a formal performance measurement system, the design perspective was more on the implementation aspects. The paper discusses about the design inputs, the conceptual design of PMS, model used for the conceptual design, the detailed design of PMS and implementation tools for internalization.

#### Introduction:

Design and implementation of a Performance Management System (PMS) is an exercise characterized by unique challenges. This is especially so when it is implemented in a company that is in existence for a long time, with employees of long experience. Ease of implementation and acceptability of the system is of upper most concern in this situation. This paper discusses the case of design and implementation of Performance Management System in a pharmaceutical company in India which has been in existence for more than 30 years. The critical success factors of the proposed PMS were as follows:

- Provide the organization a performance focus
- Adequacy and alignment of performance measures
- Built in mechanism for corrective actions
- Easy to implement mechanism

Apex laboratories in which the PMS has been implemented, has been incorporated in the year 1978, has an employee's strength of 1050 people. It manufactures a wide range of drugs and food supplements. Following were the steps used in the implementation of PMS.

- Design Inputs for PMS
- Expected Design Outputs from PMS
- Conceptual design of PMS
- Detailed Design of PMS
- Tools for Internalization of PMS

The detailed discussion of the above steps is presented in the forth coming sections.

## **Design Inputs for PMS**

The design of PMS was preceded by a diagnostic study which analyzed, the business results of the company for the years 2007-08, 2008 -09, 2009-10, considering parameters like, Value addition, employee cost etc. In addition to this Departmental Review had been carried out for all the departments of the company covering:

- Departmental Resources
- Activity Classification
- Process mapping
- Work Volume Indicators
- Company Growth in the last 3 years
- Employee cost in the last three years.

The above review had resulted in the following key findings:

- The value addition by employee Vs Employee cost would require a review.
- Performance appraisal system was not adequately linked to annual targets.
- Appropriate metrics had not been established for all the departments.
- The growth in cost of employees was not consistent with sales growth.
- The growth in cost of employees was also not consistent with value addition growth.

- While making the interdepartmental comparison a high degree variance could be noticed in departmental performance.
- Departments / employees have not been given annual targets and the efficiency levels have not been formally evaluated

# **Expected Design Outputs from the PMS**

Based on the above findings the critical expectations from the PMS were identified as :

- Synchronized allocation of organization goals with departmental goals.
- Well aligned KPIs covering the adequacy requirements of Quality, Cost, Delivery (QCD)
- A sound measurement system
- Implementation and sustenance
- Sound tools to maintain the drive

## Conceptual Design the PMS. Based on PDCA model

Since implementation was a key requirement, a conceptual model based on PDCA was used to design and implement the performance management system. In the PMS design , the Plan (P), Do (D), Check (C), Act (A) aspects of PDCA are addressed as follows:

#### **Performance Planning (P)**

The performance-planning phase should ensure the:

- alignment of organizational policy and vision
- alignment of organizational objectives and policy
- definition of performance measures
- alignment of performance measures with objectives
- adequacy of performance measures; the measures must address the four basic aspects of measurement, which are quality, cost, delivery (QCD) and flexibility

#### Performing (D) and Performance Measurement (C)

The key aspects of the performing (D) and performance measurement (C) phases include the:

- definition of periodicity
- measurement of values
- control of inputs
- control of processes
- control of outputs

#### Performance Improvement (A)

The key aspects of the performance improvement phase include the:

- analysis of performance values and isolation of the major causes of deviations
- selection of appropriate initiatives for improvement

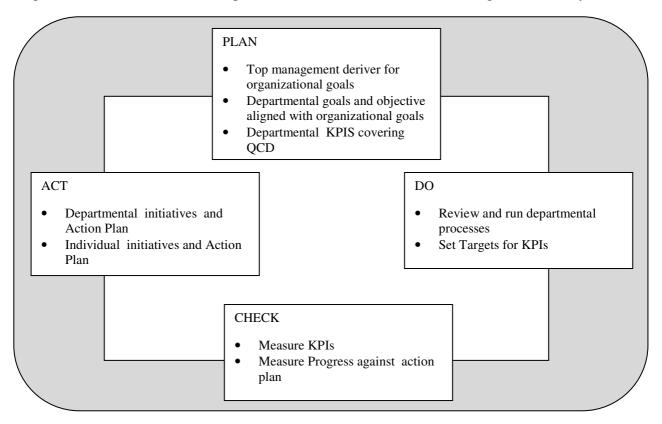


Figure 1 illustrates the conceptual model, which follows Deming's PDCA cycle.

#### Figure-1: Performance Management Model and PDCA

## **Detailed Design of PMS :**

Following the model of the conceptual design, the detailed design of PMS was carried out for each department of the company, resulting in the departmental Framework of PMS for each department.

The detailed design and the departmental framework of each department is illustrated in figure -2

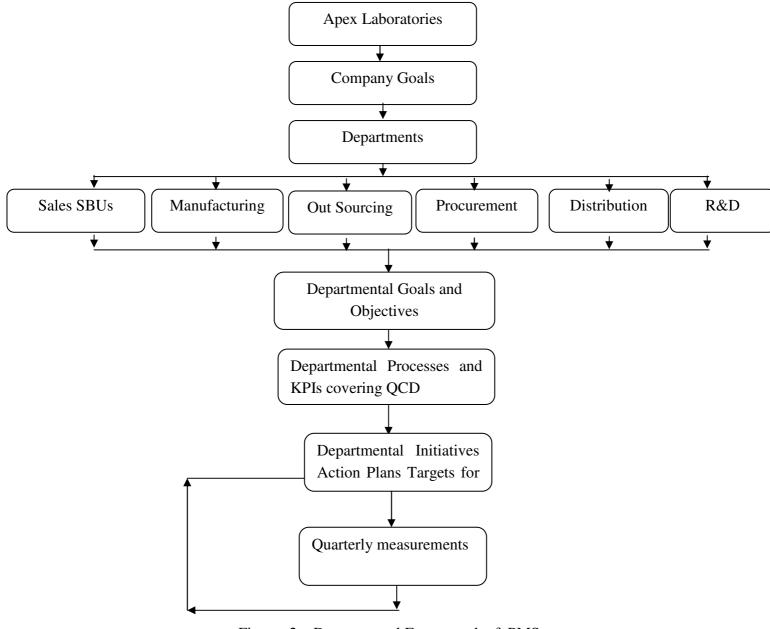


Figure -2 – Departmental Frame work of PMS.

## **Tools for Internalization:**

For each department a format called PMS Framework – Work sheet was used to enumerate the objectives, KPIs and initiatives. The adequacy of KPIs was censured by mapping the KPIs across dimensions of Quality (Q), Cost (C) and Delivery (D). A sample sheet is given in Figure- 3A. Quarterly PMS measurements and review was captured in PMS Review Work sheet . Figure 3B gives the format of PMS Review Work sheet.

The summary of KPIs is given in Figure -4.

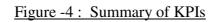
	PMS – FRAME WORK – Wo	ork Sheet		
Department	: Sales SBU - SKV			
Employee :				
Goals / Obje	ectives			
To impr	ove sales by 48.55 % in the year 2010-11.			
To laund	ch new products			
• Control	Expenses			
KPIs		Target Year	For the	Category
Sales Ac	ctual Vs Target (Monthly/ Quarterly) - %			С
• Departm	nental Expenses – Actual / Budget - %			С
• New pro	oducts launched - No			D
PSR Pro	• PSR Productivity – INR /Person Month			С
• Expiry 9	70			D
• Returns	%			Q
INITIATIV	ES			L
S.No	Initiatives		Target Date	Weight
	• In clinic campaign of selected produc	ets		
	Bulk Sampling to selected customers			
	Focused product promotion			
	Emotional & Religion based campaigns			
	<ul> <li>Minimum 4 new products to be introduced &amp; 5 products to be re-launched</li> </ul>			
Month wise review on rack stocks to a expiry at C&As				
	<ul> <li>Month wise review on stocks transfer non moving C&amp;As</li> </ul>			
	• Updating of MSL (Must See List) & Sales Force Automation with call card introduction			

Figure -3A :	PMS	Framework	Work Sheet

PMS REVIEW WORK SHEET				
Department :		Review Period:		
KPI (2011-12)	UOM	2011-12	2011-12	Root Cause and
		Target	Actual	Corrective action
Sales	INR - Crores	71.00	68.11	
Actual / Target				
Sales Expenses Actual	INR - Crores	28.53	23.97	
/ Budget				
PSR Productivity	INR in Lakhs	2.8	2.43	
Expiry	%	<2%	1.93%	
Service Level to PSR	%	100%	100%	
Market Return %	%	<1.12%	0.09 %	

#### Figure -3B : PMS Review- Work Sheet

Marketing SBUs	Distribution		
<ul> <li>Sales Actual Vs Target</li> <li>Sales Expenses Actual / Budget Wise -</li> <li>New products launched/Re-launch</li> <li>PSR Productivity</li> <li>Expiry %</li> <li>Returns %</li> </ul>	<ul> <li>Service level to stockiest Order</li> <li>Service level for samples</li> <li>Lead time to process to orders</li> <li>Freight expenses as % of Invoice</li> <li>No. of claims</li> <li>No. of claims outstanding</li> <li>Accounts Receivable %of sales</li> <li>No. of Errors dispatch</li> <li>No. of Billing Errors</li> <li>Manufacturing Target</li> </ul>		
Procurement	Manufacturing - SBUs		
<ul> <li>No. of New Vendors developed by each individual</li> <li>Service level to factory (% of on time deliveries)</li> <li>% of Cost reduction achieved for the year</li> <li>No. of Material substitution achieved for the year</li> </ul>	<ul> <li>Departmental Expenses – Actual / Budget</li> <li>Manufacturing Target ACTUAL Vs TARGET</li> <li>Service level</li> <li>Productivity – Output / Input</li> <li>Process Rating – GMP / ISO.</li> <li>No. of Productivity Improvement Projects.</li> <li>No. of Incidents per Month.</li> <li>Plant availability</li> <li>Mean time to fail</li> <li>Energy efficiency</li> </ul>		



# Conclusion:

The PMS system was fully implemented in the year 2010-11 and had been continuing since then. The PMS system has resulted in establishing the right types of measures for different functions and helping the organization members focus on KPI based initiatives. The sales SBUs shown significant improvement in the sales man productivity from the base year 2009-10. (44% for SBU – M-WSand 28% for SBU- M-ES). Similarly the Manufacturing SBUs also have registered good improvement in productivity that is 21 % improvement for P1-TB and 19% for P1-OL. These results are summarised in figure -5.

SBU	KPI pointing Productivity	Base Year 2009-10	2010-11	2011-12	Increase in %
M-WS	Sales Per person per month	1.63	2.34	2.43	44
M-ES	Sales Per person per month	3.60	4.61	5.40	28
P1-TB	Production units per man day	9200.00	11131.00	12330.00	21
P1-OL	Production units per man day	601.00	715.00	780.00	19
PR-OL	Production units per man day	700.00	826.00	883.00	18

Figure -5 : PMS Improvement Summary

# BIBLIOGRAPHY

Anthony, R.N. and Govindarajan, V. (1998). "<u>Management Control Systems</u>" (9<sup>th</sup> ed.), Irwin / McGraw-Hill, Homewood IL.

Kaplan, R.S. and Atkinson, A.A. (1998). "<u>Advanced Management Accounting</u>" (3<sup>rd</sup> international ed.), Prentice Hall, Upper Saddle River, New Jersey, USA.

Neely, A.D. and Waggoner, D.B. (1998). "Preface", In: Neely, A.D. and Waggoner, D.B. (ed.), <u>Performance Measurement – *Theory and Practice*, Volume I</u>, University of Cambridge, Center for Business Performance, p. iii