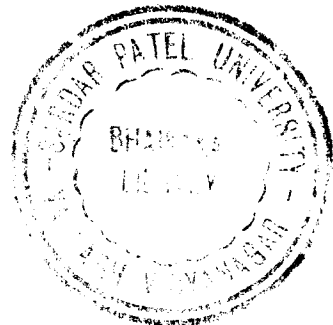


CHAPTER 4

CORPORATE MIS

A COMPREHENSIVE SUPPORT

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CORPORATE MIS - A COMPREHENSIVE SUPPORT

PREAMBLE :

As the objective of Management Information System is to support management in their planning and decision making process, the appropriate system is required for different levels of management.

When we look at the information need of the corporate management, it is usually not well defined because it changes with the organisation and style of the management. And therefore, there is no standard MIS existing for the Corporate Management.

The scope of Corporate MIS is different than the general MIS applications. Here we present some of the important cases which were designed and implemented in various organisations. These cases describe the enhanced scope of MIS and explains the support extended to the corporate management.

In this chapter certain sensitive areas are covered for which MIS had been developed as per the requirements of the management and successfully implemented. These applications gave the analytical projections and generated the informations which helped management at various stages for their planning and effective control. Three projects reflected in this chapter are taken from three different organisations. Out of many such implemented applications, these applications are reflected here as the examples which are little different than the usual applications.

CORPORATE MIS - A COMPREHENSIVE SUPPORT

4.1.0 CORPORATE MIS BACKGROUND

The objective of any Management Information System is primarily to support the management in their planning and decision making process. Although it caters to the need of Operating Management for effective planning and control, it also extends the support to Corporate Management in their planning and decision making process by generating various information at various stages.

The need of Corporate Management is not well defined and it changes with the organisation and changes with the style of Management. Therefore, there is nothing like a Corporate MIS existing as a standard system but then it is all the more necessary to build up a database and the system which helps the Corporate Management providing the information support as and when required - and whatever way it is required.

The complexity of such corporate level MIS enhances where multiple productions unit and multiple locations are operated. The sersitivity of information is also more where there is competitive market environment and productivity of the units are dependent more on external parameters than internal parameters. However, it is observed that in most of the

organisations corporate level decisions follows a pattern which is conceptually not much different. Thus the nitty-gritty of the computerised system may be differing but the approach and concept can be utilized for any given situation. Keeping this in mind, few such areas and applications are reflected in the following part of the chapter which is based on the actual systems design and implementation.

4.2.0 SENSITIVITY ANALYSIS FOR PROJECTS :

For a large chemical industry a model for project sensitivity was developed and the same was used as a management tools for choosing the best option.

4.2.1 Objective :

To choose an option for the project giving optimum return.

4.2.2 Concept :

The profitability of a project would change with the basic parameters like cost of project, cost of productions, sale price and the gestation period of a project. By varying these four parameters an optimum combination can be derived where the return on investment is highest.

4.2.3 Methodology :

The Methodology applied was considering discounted cash flow technique to work out internal rate of

return. The projection of feasibility was worked out considering the various tax structure and development rebate applicable when the system was conceived and designed.

4.2.4 Software Development and Implementation :

The system was designed and software was developed in the period when Microprocessors were not in the market and therefore there was no ready software package available giving you IRR or related computation. The programs were developed in assembly language - and the complexity was felt because of constraint of CPU memory and limited capability of Operating Software. The system was successfully implemented and was extensively used in the decision making for the new projects.

4.2.5 Achievement :

The system was generating 81 options for the given proposal at a time which was considered remarkable work under the severe hardware constraints in the year 1973-74. The paper on the said work had been accepted for the presentation by CSI for their National Convention in 1975. The organisation where this system was used got better and comprehensive look at the various aspects of project feasibility which otherwise was not possible to do it manually and therefore not possible. The projects which were taken up were proved highly profitable at a later date

confirming the judgement which was based on the output of the above system.

4.3.0 INTER-UNIT PROFITABILITY COMPARISON :

For Multi-location organisation it is essential to keep the track of individual unit as profit centre rather than looking at the overall profitability. Unitwise profitability would pinpoint the problem area much precisely and give enough scope of rectification of mistake in time. Especially when the product line of different units are also identical, such analysis has greater impact on decision making.

4.3.1 Objective :

To generate a report comparing inter unit profitability based on the sales and cost of production.

4.3.2 Concept :

The concept of 'profitability' working is not new however the importance is no less, especially in multi-unit environment, when the final products are identical. Comparison of this nature must be taken as X-ray of operational efficiency and can be used for improvements whenever required and possible.

4.3.3 Methodology :

A standard method was used to work out the fixed and variable cost of the unit and apportioning the same to

arrive at the unit cost of production for each product. The same method was applied to different units. The marketing network being common for all the units, pro rata marketing expenses were allocated.

4.3.4 Software Development & Implementation :

The system was designed and implemented using the data from sales accounting data base and costing data. Based on the actual sales value and quantity, sales realisation per unit was derived. This realisation is interacted with costing data which is arrived at cost of production per unit. Product wise report was generated which gave the information like which are the products giving positive combination and which are the products giving negative combination.

Now the above information for different units were compared which generated MIS summary about inter-unit profitability comparison. This comparison was quite indicative for the same products being produced from the different units.

4.3.5 Achievements :

The organisation could precisely arrive at short-listed items which contributed to negative contribution. Management could get better clarity about why profit or why loss situation. The reality situations were magnified and was well understood that the production of older unit is tend to show better

projections because of lower cost or the lower fixed cost. And therefore, the comparison can not be in absolute term but the relative factor is to be applied before making the comparison. This exposure of concept could introduce more rational approach in overall decision making and could give better strategic analysis resulting into better economics of operation.

4.4.0 **EXCEPTION REPORTING SYSTEM** :

For a public limited company, with a limited equity base, balancing the inflow and outgo of fund is a very sensitive application. The management of money in such situation calls for continuous monitoring of budgetary control and deployment of money to the options with better returns. In this specific case the system was designed and implemented for high risk industry with a low success rate which calls for the optimum utilization of available fund and acute control on budgeted expenses.

4.4.1 Objective :

To generate report on investment and expenditure with budget variance.

4.4.2 Concept :

The concept of inflow of money and outgo of money is no different than conventional financial system. But arriving at the precise reporting on investment

scenario and expenses projections with budget variance integrating the data bases of multiple locations is new from the angle of its implementation. The sensitivity of such application is very high and system is geared up to take care of human errors to a reasonable extent beyond which, in any case, it will get amplified and reflected in the reports.

4.4.3 Methodology :

Methodology used was the standard way of working the interest on investments in terms of fixed deposits, inter corporate deposits and financial instruments.

Methodology to work the budget variance is the same as statistical variance of expenses against budgeted figures.

4.4.4 Software Development and System Implementation :

Software development was partly supported by the accounting package 'Tally'. However, the support of Tally was taken to the extent of using the data base of monthly transactions. These transactions were exported in the form of a data file for the said system.

Second part of the software was the 'Investment System' which creates an investment data base and generates various reports for operational and management controls.

Third part of the software took the input from 'Tally'

exported file and generated project wise budget variance report with the help of annual budget master datafile which contains project and cost centre wise budget data for both capital and revenue expenditures. The implementation was in phases. Tally was implemented at two locations together. Parallel, at one location, Investment system was designed, software was developed and then implemented. At second location, budgetary control system was developed and integrated to arrive at the MIS exception reports reflecting investment scenario and expenses status and budget variance.

4.4.5 Achievements :

The following aspects were achieved which were not possible to take care of earlier :

1. Comparison of inflow vs. outflow of money and monitoring the budget concurrently.
2. Tax planning and expenditure planning and monitoring where inflow for causing higher tax, allowable expenditure were rescheduled to take the full benefit of tax exemptions wherever possible.

Suppose some planned expenditure is delayed for some reason then it would amount to paying higher income tax. In such situation some other expenses can be preponed to take care of budgeted expenses and thereby taking the benefit of saving on income tax.

3. Better Cash Flow Management :

Always expenses can be planned to match the availability of fund at maturity date this would save on loss of interest and would help in maintaining the payments schedules.

4.5.0 CONCLUSION :

Contribution through this chapter on CORPORATE MIS is presented as follows :

Management Information System has to serve the requirements of different levels of management. Here some of the vital applications are chosen from the real life environment which were developed as per the need of the corporate management. Very obviously it is seen that these applications are the extension of general MIS and through these implemented cases, we have extracted important points that are exclusively identified for Corporate MIS design and implementation.