Effective Management Reporting System

Chimo Koo*

Ⅰ. Introduction

In order to be useful to Management, accounting information must be communicated to mana-gement personnel. Communication implies that a person receiving the information understands the nature and significance of material contained in the reports he receives. When communication is genuinely effective, management's actions and decisions are likely to be based on the facts which they receive rather than on untested impressions and guesses.[1] However, there is reason to believe that accounting reports to management have not always achieved their intended purpose because the reports were not understood, recipients lacked time to grasp the meaning, or the content of reports was not relevant to problems facing the persons who received them.[2] Reports that communicate effectively to all levels of management stimulate action and influence decisions. Those charged with the design and preparation of reports for management, to be effective, must know and understand the problems and approaches used. Thus this thesis deals with the major issues which arise in designing a internal reporting system.

Ⅱ. Essential Features of Good Reports

To design an effective reporting system, the designer must know the

* 釜山産業大學 專講(會計學)

1) G.A. Welsch, Budgeting: *Profit Planning and Control*, 4th ed., Prentice-Hall, Inc., 1976, p.489.

2) "Reports Which Management Find Most Useful," NAA Bulletin, *Accounting Practice Report*, no.9, sec.3.

essentials features of good reporting system. A good reports answer a wide variety of need and are as diverse as the desires and needs of differing managements. However, certain principles should govern the design of reporting system.

The following principles is adapted from "Cost Accounting" by J.A. Cashin and R.S. Polimeni.[3)]

① Fit report to recipient; Find out what the manager wants and what he can use. Provide more detail for lower levels, more summarized data for upper levels.

② Fit report to organization chart; Have individual reports for each organization level.

③ Keep number of reports to a minimum. Make sure each report is used and serves a specific purpose.

④ Make reports timely; Determine if the report should be made daily, weekly, or monthly.

⑤ Use action reports; Use action techniques that motivate management to take corrective action.

⑥ Include only essential data; Emphasize important elements; group less important items into significant totals.

⑦ Issue reports earlier; Make flash reports when practical; organize accounting system to expedite reports; make earlier cutoffs.

⑧ Pinpoint responsibility; Fit data to responsibility. Individual responsibility should be apparent.

⑨ Standardize presentation, forms, etc; Style of presentation should be consistent. Use conventional form, size, paper, etc.

⑩ Simplify and Clarity. State facts concisely; arrange data in logical sequence; interpret significant data; use short titles; use physical units as well as dollars.

⑪ Show comparisons, ratio, trends, etc; Compare current and cumulative data to budget and to last year; use principle of exception; Show va-

3) J.A. Cashin and R.S. Polimeni, *Cost Accounting*, McGraw-Hill, 1981, pp.652-653.

riances as favorable or unfavorable.

⑫ Make system flexible; Revise reports as conditions warrant; change emphasis as needed; issue special reports if needed.

⑬ Consider cost; Avoid duplication of data; obtain data from regular accounting process; investigate alternate methods of presentation, reproduction, etc., to reduce costs.

⑭ Use visual aids; Visual presentation conserves management time; relationships and trends are clearer than statistical presentation; consider advantages of each chart type; use trend indicators, daily, weekly, etc.

⑮ Control distribution; Make sure the individual responsible gets report; fix responsibility for distribution of reports; keep distribution list up to date.

Shah proposed nineteen principles to design an effective reporting system.[4] Many of these principles are interrelated or overlapping in nature. The principles are given below:

① Purpose-oriented character; Every report should have a useful and well-defined purpose: a report should not exist for its own sake. A related principle is that not only should a report be useful but users should use it.

② Relevancy; A report must contain data which are relevant to the person to whom it is submitted and to the purpose for which it is required.

③ Materiality; Data included in a report should not only be relevant but also be significant enough to be reported, and all significant data should be properly highlighted.

④ Report by exception; Whenever appropriate and feasible, the principle of reporting by exception should be adopted. According to this principle, only items which are out of line with normal expectations and which merit management attention are reported.

4) P.P. Shah, *Cost Control and Information Systems*, McGraw-Hill, 1981, pp.403-411.

⑤ Pyramid structure of reporting; The pyramid structure of reporting can be adopted for both a single report and reports submitted at different levels of management.

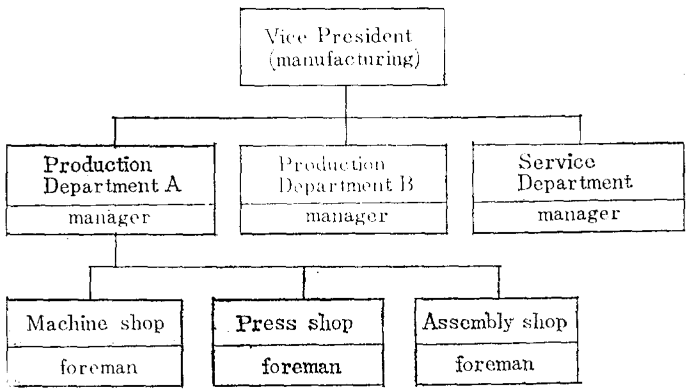


Exhibit 1: Pyramid Structure of Reporting

Management reports submitted at different levels of management should vary in details inversely with the level of management, a shown diagrammatically in Exhibit 1. Operating management needs details of individual transactions. Middle management needs a summary of individual transactions, and upper management is interested only in key items, highlights, or exceptional items for overall control. These reports should be prepared from the same data base, and the lower-level report should support the higher-level report on the same item.

⑥ Reporting by levels of responsibility; For responsibility accounting, costs should be reported by levels of responsibility within the organization structure. In other words, the reporting structure should parallel the organization structure of the entity.

⑦ Timeliness; Reports should be submitted in good time to be useful.

⑧ Accuracy: The quality of decisions and actions based on reports depends upon the accuracy of the information contained in them. Further, wrong reports may mislead management. To ensure accuracy, the designer must provide for built-in checks and cross-checks in the system.

⑨ Clarity; A report should be clear, unambiguous, and easy to read and understand. Either it should be self-explanatory or appropriate explanations should be attached to it.

⑩ Simplicity; A report should be as simple as possible.

⑪ Comprehensiveness; The principles of clarity and comprehensiveness are interrelated. A logical grouping of products, departments, divisions, territories, etc., reduces the mass of information to be digested.

⑫ Analysis and narrative interpretation; Insofar as possible, the report should not leave analysis and interpretation to the reader. particularly when the report is meant for several readers or for upper management.

⑬ Two-way communication, or feedback principle reporting should be a two-way street; A subordinate who submits a report to a superior should be informed of the superior's reaction. Similarly, the superior should keep the subordinate apprised of decisions made or actions taken on the basis of that report.

⑭ User-oriented reports; Since reports are meant for use by their recipients, the designer should give weight to the users' preference regarding the format, arrangement of items, etc., of course, convenience in preparing a report should also be considered.

⑮ Integrated reports; Insofar as possible, an integrated reporting structure, in which related reports are tied to one another, should be adopted. Such a structure offers the advantages of greater accuracy in reporting, integrity of management decisions, coordination among different functions, promptness in reporting, and prompt futher investigation if necessary.

⑯ Tailor-made reports; Most of the above principles lead logically to the principle that every report should be tailor-made and not just copied.

⑰ Cost-benifit analysis; The cost of reporting should not exceed the benefits likely to be derived from the reports. Hence, the designer should conduct a cost-benefit analysis at least for reports which do not seem to offer much benefit or for those which involve significant cost.

⑱ Keeping the system up to date; As and when major changes occur in an organization or in any aspect of its business, its reporting system should be reviewed to eliminate unnecessary reports or reporting procedures or to add to or modify existing reports to take care of the changed circumstances.

⑲ Balancing; It will be obvious that some of these principles conflict with one another. Hence, the principles should be balanced by making trade-off decisions whenever appropriate.

The following principles is adapted by welsch. Eight principles are given below.[5)]

① Tailored to the organizational structure and controllability (that is, by responsibility centers)

② Designed to implement the exception principle in management

③ Repetitive and relate to short time spans.

④ Adapted to the requirements of the principal user.

⑤ Simple, understandable, and report only essential information.

⑥ Accurate and expressive of significant distinctions.

⑦ Prepared and presented promptly

⑧ Constructive in tone

Up to now, we have seen many principles to design effective reporting system. Since different managements require different information at different times and for different purposes, all the principles cannot always be supplied to design good reports. Therefore good reports must be tailored to the characteristics of each particular environment.

Ⅲ. Report Form Design

For effective communication of any information, it is necessary to use

5) G.A. Welsch, *op. cit.*, p.490.

a proper report form. A good form will make the report easy to read and understand, will take less time for preparation, will be pleasing to the eyes, and, above all, will not lack clarity. Guide lines for report form design was proposed by shah.[6]

Firstly, for each report, we must list its contents and think of the best way to arrange them. Usually, the best arrangement is arrived at by trial and error. We have to try to arrange the information in the order in which the reader would like to read it. At the same time, convenience in preparation should be borne in mind. Secondly, in so for as possible, the report size should be standardized; usually $8^{1/2}$ by 11 inches is considered a standard business size in america. Thirdly, work sheets and report sheets should be separated. Fourthly, necessary references and cross-references should be given. For example, if two items in a report are added, this fact should be indicated in parentheses beside them. Fifthly, all headings, subheadings and particulars should either be self explanatory or be suitably explained on the face of the report itself. Sixthly, report headings, subheadings, and contents should be as concise as possible. For example:

Undesirable heading:

XYZ Company

Statement Showing Cost of Production of Rayon Yarn of 120 Denier for the Month of March 1981

Better heading:

XYZ Company

Cost of Production of Rayon Yarn (120 Denier)

Month: March 1981

Seventhly, if different columns and lines in a report are separated by blocks, the report is more readable.

Eighthly, consider whether adding some cost information on existing noncost accounting reports will eliminate the need for an additional cost report. Ninthly, use appropriate reporting techniques and tooks such as tables, charts, graphs, decision trees, diagrams, curves, and narratives,

6) P.P. Shah, *op. cit.*, p.413.

Tenthly, test the suitability of each form by filling it in with actual data for any of the past months or with assumed data to see if any difficulty will arise in preparing it.

Ⅳ. Responsibility Reporting System

We now turn to a system of reporting that produces a hierarchy of reports, from lowest to highest levels within a company. Each level of management is responsible for all performance to that level, and the several layers or levels of reporting enforce this concept level by level, up to the highest level, which is that of the president. Responsibility reporting of costs is found in all areas of operations: manufacturing, selling, and general administrative cost areas. It points up where costs were incurred, who was responsible, what they were incurred for, and how much they were.

1. Laying the Ground Work

Responsibility reporting calls for some unique planning, both conceptual and practical, neither of which will be carried out successfully unless the following are understood and accepted.[7]

(1) Parallels Chain of Command

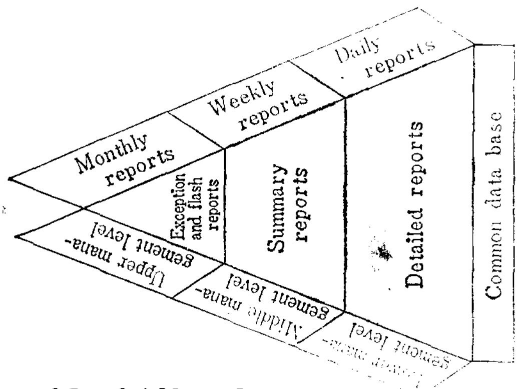
Responsibility reporting as a system problem use a report hierarchy that parallels the chain of command. In the case of cost reports they are accumulated and reported up the several layers of management. Exhibit 2, for example, there are three layers of levels.[8]

Referring to the manufacturing area, the level 3 report is addressed to the foreman of a production department. The level 2 report is addressed to the production manager and covers all of the departments for which is responsible. The levelreport is for the attention of the vice president, and embraces all activities of the manufacturing department.

---

7) J.L. Livingstone and H.D. Kerrigan, *Modern Accounting Systems,* John Willey & Sons, 1967, pp.415-418.
8) P.P. Shah, *op. cit.*, p.145.

Exhibit 2: Organization Chart



(2) Data Relevancy of Level Addressed

The management level to which a report is addressed determines report scope, form, and degree of detail, but there are certain fundamentals that are found in any report. For one thing, the data is cumulative to a given level, using the well-known technique of consolidating. Secondly, the data is restricted more or less to costs that are believed to be controllable by the management level represented. Thirdly, because the reports feed into each other as they are built up level by level, it is important to regard the reports as integrated into a system embracing all levels, from the lowest to the highest. All three features are introduced in Exhibit 3.

The level 3 report is addressed to foreman of Machine shop as an example, for the period reported, Machine shop incurred costs totaling $ 26, 200, detailed by six items of controllable costs, each item presented in three terms, actual, budget, and variance. Over all, Machine shop went over the budget by $ 1, 400. The level 2 report is at the same time both wider in scope and less detailed than the level 3 report. High-level reports do not repeat details of lower level reports, for the latter always accompany the report hierarchy as "back-up" information, to be consulted if desired. The level 2 report shows that costs for which the production manager is responsible totaled $ 71, 600, compared with $ 69, 800 budgeted. This report not only serves the production manager to help him evaluate his "domain", but as a feeder report to level 1, the report helps the president to evaluate

Exhibit 3: Pyramid Structure of Responsibility Reports[9]

Report No. 1

Responsibility center: Manufacturing Department

Controllable costs of	Actual	Budget	Better (worse) than budget
Production Department A	$ 71,600	$ 69,800	$ (1,800)
Production Department B	75,000	76,000	1,000
Service Departments	50,400	53,000	2,600
Total	$ 197,000	$ 198,800	$ 1,800

Report No. 2

Responsibility center: Production Department A

Controllable costs of	Actual	Budget	Better (worse) than budget
Machine shop	$ 26,200	$ 24,800	$ (1,400)
Press shop	23,400	24,000	600
Assembly shop	22,000	21,000	(1,000)
Total	$ 71,600	$ 69,800	$ (1,800)

Report No. 3

Responsibility center: Machine shop

Controllable costs	Actual	Budget	Better (worse) than budget
Indirect labor	$ 10,000	$ 9,000	$ (1,000)
Indirect material	5,500	6,000	500
Employee benefits costs	6,000	5,500	(500)
Power	2,500	2,400	(100)
Maintenance	1,000	1,100	100
Other	1,200	800	(400)
Total	$ 26,200	$ 24,800	$ (1,400)

the performance of his production manager, who is one of a number of level 2 managers.

(3) Controllable Costs

In the reports presented in Exhibit 3 the costs shown are those which can be controlled by the responsibility unit managers. That approach is a matter of preference, which is based on the premise that managers should not be charged with costs over which they have no control.[10] But it is difficult to distinguish controllable costs from noncontrollable costs.

There are several criteria by which to judge controllability of costs at

9) *Ibid.*, p. 146.

10) J.A. Cashin and R.S. Polimeni, *op. cit.*, p. 653.

an indicated management level. The most common one is whether the costs are volume-related, and variable or time-related, and hence more or less fixed. Then as a practical solution, variable costs are treated as controllable, and fixed costs as not controllable. A second view is to regard as controllable, any cost that is incurred under the authority of a particular manager, either directly by the manager himself. A third view is to combine these two tests of controllability, so as to arrive at "realistic" applications of the idea. Which view is adapted in a given situation is a management option that is heavily influenced by the cost analysis presented to management by the controller's staff. For a theoretical definition, we may say that a controllable cost is one that is identified to vary with volume, efficiency, and the decisions of the manager in an operating area to which he is assigned.[11]

2. Essential Features of Responsibility Reporting System

A responsibility reporting system should contain the following essential feature.[12]

① The cost accounting department should compare actual costs with budgeted or standard costs and compute variances. In comparing actual expenses with flexible budgets, budgeted expenses should be adjusted for the volume of activity actually attained; i.e., if the actual activity level is higher than that planned for a particular month, budgeted expenses should be increased appropriately.

② Then, the cost accounting department should analyze variances by causes; direct materials and direct labor variances into usage and price or rate variances; fixed overhead variances into volume variance, efficiency variance, and spending variance; variable over head variances into efficiency variance and spending variance. The types of variances computed will depend upon the cost control techniques used and the significance of each type of variance.

11) J.L. Livingstone and H.D. Kerrigan, *op. cit.*, pp.417-418.
12) P.P. Shah, *op. cit.*, pp.143-148.

③ The cost accounting department should next identify variances with the individual responsibility centers and prepare responsibility reports by responsibility centers.

④ The responsibility reports should be sent to the concerned responsibility center managers, who should be asked to explain;

- The causes of all significant variances (favorable or unfavorable) in expenses.
- How they propose to correct unfavorable variances.
- How, if at all, major unfavorable variances could have been avoided.

An unfavorable variance does not necessarily mean poor performance, and a favorable variance does not necessarily mean good performance. Both variances could be the result or the indicator of a problem.

⑤ Once the responsible managers have explained the significant variances and the corrective or preventive actions taken or planned, there may be review meetings among the controller or budget director, the president, and the concerned responsibility center managers to evaluate the resonableness of the explanations and the adequacy of the actions taken or planned. Such meetings are necessary particularly if a planned action requires the cooperation of more than one department. If the responsibility centers are at different locations, written reports may take the place of review meetings.

⑥ There should be a periodic follow-up of planned actions to see that they have been implemented and are effective. The follow-up is the job of the line manager and not of the controller.

V. Conclusion

Management reports are the lifeblood of any organization, providing upward, downward, and lateral communications channels. Reports are an important requisite to delegation of authority because through reports subordinates account for the authority and duties delegated to them. They are also a vehicle for providing direction to subordinates, for evaluating their performance, and for controlling operations. Without management reports, management may fail to take timely action or will have to base its decisions on ignorance. Thus, management reports are an internal in formation system and are essential for effective management of any business organization. To design an effective reports, we must understand the principles which govern the design of reporting system and guidelines for report form design. Responsibility reporting system was introduced in order that actual costs can be controlled by the responsible manager and compared with budgeted costs. By responsibility reporting system, we can manage business organization effectively.

《References》

1. Anthony, R.N. and Reece, J.S., *Accounting: text and case*, 6th ed., Richard D. Irwin, InC., 1979.
2. Böer, G., *Direct Cost and Contribution Accounting*, John Wiley & Sons, 1974.
3. Cashin, J.A. and Polimeni, R.S., *Cost Accounting*, McGraw-Hill, 1981.
4. Copeland, R.M. and Dascher, P.E., *Managerial Accounting*, 2nd ed., John Willey & Sons, 1978.
5. Livingstone, J.L. and Kerrigan, H.D., *Modern Accounting Systems*, 4th ed., John Wiley & Sons, 1975.
6. Madden, D.L., *Management Accounting*, John Wiley & Sons, Inc., 1980.
7. Meigs, W.B., Johnson, C.E. and Meigs, R.F., *Accounting: the basis for business decisions*, 4th ed., McGraw-Hill, 1977.
8. Moscove, S.A. and Simkin, M.G., *Accounting Information Systems*, John wiley & Sons, 1981.
9. NAA Bulletin, *Accounting Practice Report*, "Reports Which Management Find Most useful," No.9, Sec. 3.
10. Shah, P.P., *Cost Control and Information Systems*, McGraw-Hill, Inc., 1981.
11. Welsch, G.A., *Budgeting: Profit Planning and Control*, 4th ed., Prentice-Hall, Inc., 1976.