

Importance of the Control Function in Effective Operational Planning and Rational Decision Making in Mining Organisations

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Abstract

The control function is an important tool to monitor organisational performance of the operational plans. The control function is dynamic and can be used as an end function of an activity or for forward looking in planned activities. The control function is important in operational planning and decision making in mining organisations. Without the control function, mining organisations cannot monitor and evaluate the performance of their operational plans.

Keywords: Control function, decision making, operational planning

1. Introduction to Controlling

The control function is very important for the successful operation of mining organisations. Controlling is the process of verifying whether everything occurs in conformities with the plans adopted, principles established and instructions issued. Controlling ensures that there is effective and efficient utilization of organizational resources so as to achieve the planned goals targets. Controlling measures the deviation of actual performance from the standard performance, discovers the causes of such deviations and helps in taking corrective actions. Controlling is a systematic exercise of checking actual performance against the standards and plans with a view to ensure adequate progress and also recording such experience as is gained as a contribution to possible future needs (Koontz et al., 1980). Controlling has two basic purposes which are facilitation of co-ordination and helping in planning. The characteristics of the control function of management include:

- i. Controlling as a pervasive function. Under this function, control is performed by managers at all levels and in all type of concerns.
- ii. Controlling as a dynamic process. Under this function controlling requires taking reviewed methods and changes have to be made wherever possible
- iii. Controlling as a forward looking technique. Effective control is not possible without the past being controlled. Controlling always looks to future so that follow-up can be made whenever required.
- iv. Controlling as an end function. This is the function which comes once the performances are made in conformities with plans.
- v. Controlling in relation with planning. Planning and Controlling are two inseparable functions of management. Without planning, controlling is a meaningless exercise and without controlling, planning is useless. Planning presumes controlling and controlling succeeds planning.

2. Steps in the Control Process

The 4 steps of the Control Process include:

- i. Establishing standards and methods for measuring performance
- ii. Measuring the performance
- iii. Determining whether performance matches the standard
- iv. Taking corrective action

The steps are clearly indicated in Figure 1.

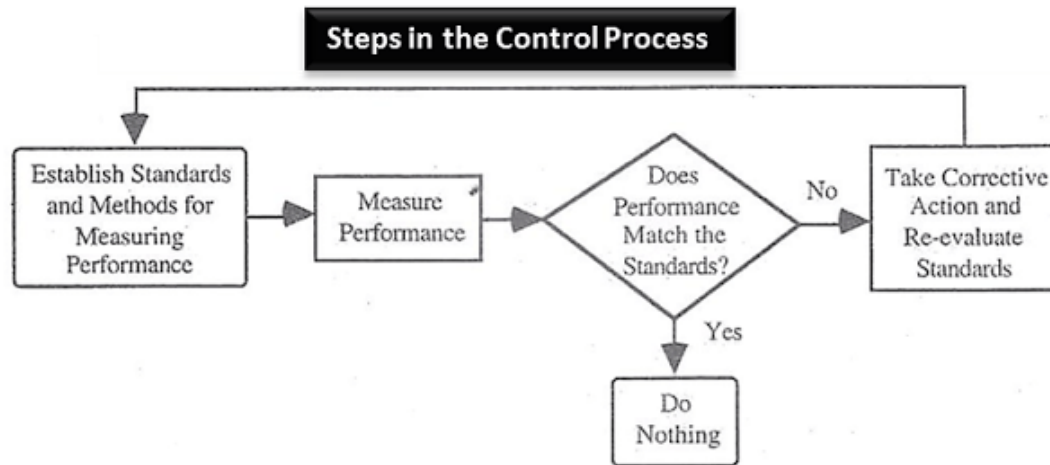


Figure 1: Steps in the Control Process

The 4 steps in the Control Process are described in detail below.

Step 1-Establishment of Standards and Measurement Methods for Performance

Standards are simply the criteria of performance. Standards are the selected points in an entire planning program at which performance is measured so that managers can receive signals about how things are going and do not have to watch every step in the execution of plans. Standard elements form precisely worded, measurable objectives and are especially important for control. In the mining sector standards may include monitoring of production targets as well as health and safety records.

Step 2-Measurement of the Performance

The measurement of performance against standards should be done on a forward-looking basis so that deviations can be detected in advance of their occurrence and be avoided by appropriate actions. If standards are appropriately drawn and if means are available for determining exactly what subordinates are doing, appraisal of actual or expected performance is easy. But there are many activities for which it is difficult to develop accurate standards and there are many activities that are hard to measure. It may be quite simple, for example, to establish labor-hour standards for the production of a mass-produced item and it may be equally simple to measure performance against these standards, but in the less technical kinds of work.

Step 3-Determination of Whether Performance Matches the Set Standard

Determination of whether performance matches the set standard is an easy but critical step in the Control Process. It involves comparing the measured results with the standards already set. If performance matches the standard, managers can assume that everything is under control. In such cases the managers do not have to intervene in the organization's operations.

Step 4-Taking of Corrective Action

Taking the corrective action becomes critical if performance falls short of standards and the analysis indicates that corrective action is required. The corrective action could involve change activities of the organization's operations. For example, if there are low production returns declared, an investigation can be conducted on the real cause and find out whether there are leakages or other challenges that may be affecting the sector. Control can also reveal inappropriate standards and in that case, the corrective action could involve a change in the original standards rather than a change in performance. It needs to be mentioned that, unless managers see the control process through to its conclusion, they are merely monitoring performance rather than exercising control. The emphasis should always be on devising constructive ways to bring performance up to a standard rather than on merely identifying past failure.

3. Importance of the Control Function

Every business wants to grow, succeed and survive for long and in order that it may attain a sustainable development, it sets its own objectives to be pursued by delineating the responsibilities among the employees while directing and motivating them (Brickloe and Coughlin, 1977). However, after the plans are set and the responsibilities delegated, it is not necessarily assured that the objectives may be achieved in a way as planned. There might be several reasons that a business can fail to achieve its intended objectives. The controlling function of management then becomes apparent while its importance is understood in terms of the results that are attained. Thus, controlling is an indispensable function of management. Controlling as a function of

management is of great importance in a business organization to ensure that the actual state of affairs of a business is along the lines of what is expected. One of the most obvious benefits of controlling function is that it provides the accurate information which is what is wanted for effective decision making process as well as maintaining effective functioning state of a business.

Controlling is the process through which the activities are turned into producing better results and also improved in a way to continue success while eliminating obstacles that get in way of business progress. In addition, the controlling function has a great application during the times that demand immediate attention. If the timely action is not taken, there might be considerable loss to a business (Fahy and Fuller, 2007). The controlling function is of great use to offer timely help and assistance to key individuals of a business. Control is not just limited to determine whether or not the plans are being adhered to, but it also leads to identifying the reasons of deviations and to take corrective actions accordingly. Managers play a variety of roles in an organization and these also include controlling, which ensures work rules and discipline are done in a manner which is expected of (Bredmar, 2016). This function should not be taken in isolation while there is a need to understand its functionality properly. The control function is aimed at improving efficiency, effectiveness and achieving better results. It is therefore to be used to support the mining organization in achieving its objectives. An effective control system can bring better results while it can lead a mining organization to survive, succeed and attain its goals.

4. Importance of Operational Planning

Operational plans are derived from the organizations' strategic plan as indicated in Figure 2. Planning is an intellectual activity directed towards predicting, anticipating and handling change. The output is the recommended course of action to deal with probable future developments.

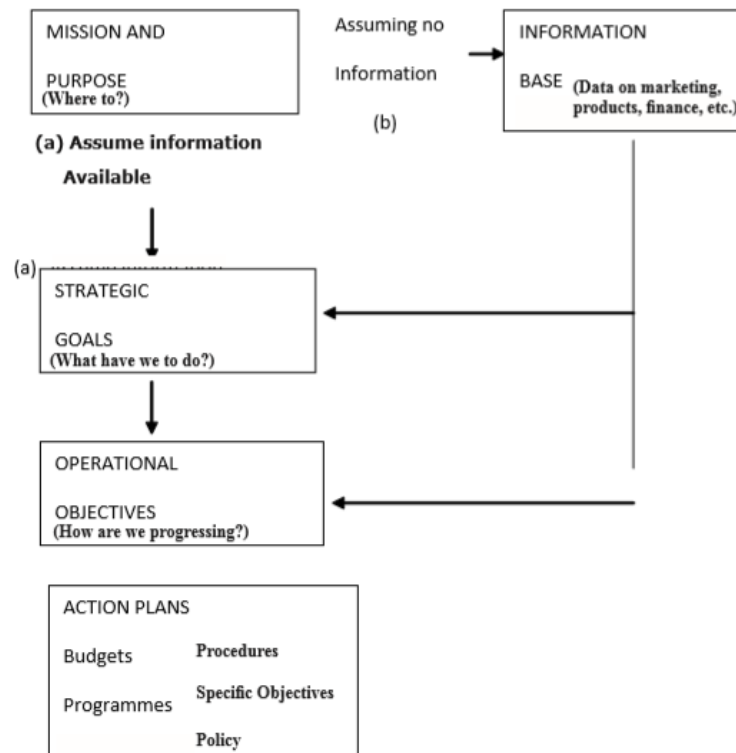


Figure 2: Linkages between organizational strategy, operational plans and action plans

Planning helps in operational risk management. A manager can anticipate problems and how to deal with them. Planning creates a sense of mission which allows a manager to motivate and measure the performance of people under him/her. Planning bridges the gap between where the mining organization is and where it wants to be in the short term and long term future. Senior managers are concerned with planning overall corporate strategy, rate of growth as well as new markets and products. Mid-level managers are concerned with planning a high degree of coordination with minimal overlapping among organizational units and the enhancement of resource utilization among these units. First-line managers and supervisors plan the implementation of policies and procedures, work activities and ways to enhance the effectiveness and efficiency of work operations. Planning occurs at all levels and needs information flow up, down, and sideways in the mining organization to be effective.

Plans may be classified as short- or long-term, by function or by scope. Long-term plans are done at senior management levels and encompass a number of years, such as moving into another market sector. These long-term plans are usually strategic plans designed to identify, determine and shape the direction of the organization.

Short-term plans are done at lower management levels and encompass a short period of time, such as plans for a project. These plans are usually operational plans helping with day-to-day operations of the organisation. Function plans can be developed for key organizational functions, such as engineering and each of these plans could be evaluated for potential conflicts between functional areas.

The plans can address objectives, procedures, policies and methods (Marr, 2006). Objectives provide general statements about the mission of the organization and are filtered down through the organizational hierarchy where plans are created to achieve them. Policies are implemented to accomplish objectives and are general guides to action. Procedures give the steps for accomplishing the policies such as standard operating procedures which show the set of steps e.g. in determination of the physico-chemical characteristics of a mineral. Methods are detailed plans showing the sequence of individual tasks to complete a specific assignment, such as how to complete a prototype design of a mineral processing plant. Plans succeed when they are monitored, used and changed as work progresses but they can also fail if they are not kept up-to-date, realistic or clear in accordance to the organisational strategy.

6. Decision Making as Part of the Control Function

Decision making involves the ability to collect, organize and synthesize information into a useful form for identifying and evaluating alternate options. A well-known decision theorist, Herbert A. Simon (1962) conceptualises three distinct phases in the decision making process. There are:

1. Intelligence Activity – the military meaning of intelligence. Searching the environment.
2. Design Activity - Inventing, developing and analysing possible courses of action.
3. Choice Activity – the third and final stage is the actual choice, selecting a particular course of action.

Decision making takes knowledge and puts it into action; i.e. it applies and uses knowledge. Another element of decision making is risk taking. For example, a decision without some risk is usually easy to make. A decision with risk requires the use of your judgment and good judgment is learned through practice and experience i.e. oddly enough, probably in making bad decisions and learning from them. You can certainly discuss decisions with your team, other managers and mentors to help lower risk, but you must make the decision and help it to be a successful decision. As a manager, you can defer decision making, refuse to make a decision, make a decision quickly and reverse a decision. Your motive should be to do everything to help your team to get the job done effectively and efficiently. Many times, a decision will have to be made among vague and conflicting alternatives; i.e. complete information may not be available or may take too long to obtain.

Decisions may be programmed or non-programmed. Programmed decisions recur and are predictable. Well-defined procedures are used to make these decisions, such as production scheduling, following standard operating procedures, assigning shifts and inventory maintenance. Non-programmed decisions are addressed as they develop, are usually ill-defined and complex and have a large number of variables that may be less predictable or measurable. For example, non-programmed decisions may involve moving a theoretical result into a production system, determining which of two new commercial packages would work better in operational use, and helping a dysfunctional team work. Decisions have five characteristics: Futurity - how long will the decision commit the organization? If the commitment is quite long, then the decision should be moved up to higher levels. Reversibility - how fast can a decision be reversed and its consequences resolved? If the decision would be hard to reverse, it should be moved up to higher levels. Impact - are other areas or activities affected by the decision? If the decision would have wide impact, it should be deferred to a higher level. Quality - are social, human, ethical, and other values involved in the decision? If many qualitative factors are involved, move the decision to a higher level. Periodicity - how often is the decision made? Rare decisions should be made at higher levels. Decisions should be made at a high enough level where full consideration of all activities and objects affected by the decision can be given, but as close to the scene of action as possible. It may be helpful to look at the points where the decision can be made and where it should be made. If a large gap exists between the points or an excessive number of people are involved, then possibly personalities and their preferences are playing a major role (Karl, 1965). Watch out for traps that can derail a good decision making process. Bias in the information gathered, such as using only one person's point of view and selecting only favourable results. Poor decisions can be made due to using only one interpretation of the information, creating similarities or differences where none exist - perceived rather than real, not communicating, sweeping failures under the rug instead of letting the past be used to empower the present and future, relying on the memories of people and treating external departments like foreign powers as well as allowing a few individuals who have a need to be indispensable to hoard information that should be generally available to everyone.

7. The Rationale Decision Making Process in Mining Organisations

Decision making in mining organizations can be accomplished with the following steps when there is time and the decision requires analysis before it is made (Collier et al., 2006). What is the objective in making the decision? What results are desired from making this decision? What is trying to be achieved? Objectives should be operational, practical and attainable. Statements of objectives should include constraints which can refer to how the objective will be attained, how resources are used and how conflicts with organizational goals are avoided. Objectives should be ranked according to their importance, such as critical, desirable or good to have.

Problem diagnosis is the most critical and difficult step as the right problem must be identified. For example, if there is breakdown in the plant it is important to find out the root cause of the breakdown through trouble shooting.

Steps in Problem Diagnosis include: Finding out if there is a problem. Compare the results you have with the results you wanted to achieve. Investigate what is wrong, find the reasons behind deviations from objectives. Approach the problem analytically and realistically finding the distance between wanted and actual results, barriers to success major deficiency factors and satisfactory solution requirements. Identify the constraints to the solution such as cost, personnel and information. Focus on the cause of the problem rather than deviations from defined standards such as employee turnover rate. Use symptoms to find the problem such as asking why the symptom exists - noticing the symptom of conflict between two departments and then determining why the conflict exists. Determine the barriers to problem identification such as some managers thinking the cure is worse than the disease, rationalizing decisions, postponing decisions or hating to make unpopular decisions. Obtain available information and gather facts and information continually to identify the problem. Make a thorough and comprehensive effort to identify all logical alternatives to the problem and encourage team participation and brainstorming. Be flexible enough to deviate from the traditional way of doing things, to include taking no action on the problem. Evaluation of each course of action and determine a set of attributes such as risk and schedule slippage, cost and resource utilization by which you will judge the alternatives.

A poor decision can be made due to lack of alternatives from which to choose from because of the dynamic nature of the organization's environment, incomplete information, lack of time and risk (Williams, 2003). How a decision is implemented will have a bearing upon its success and a plan of action should be created to announce the decision, to gather the resources to implement the decision and to assign responsibility to the individuals who carry out the implementation. It is important to keep in mind that people are more willing to participate in decision implementation if they have been given the opportunity to participate in the decision making, follow-up and decision evaluation. In order to determine how accurate the decision was, it is critical to examine the results over time and compare them to the desired results of the objectives..

8. Conclusion

For mining organizations to thrive, there is need of the control function. Controlling ensures that the set targets during operational planning are met and adhered to. In addition, the control process helps in sound decision making resulting in effective and performing organizations.

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