



# Considerations in Setting Project Priorities

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# Considerations in Setting Project Priorities

## Introduction

As is the case for most work, there are many more things to be done than can be completed with the available time, money, and personnel. As a result, there is the need to examine closely and prioritize the existing activities. Each project manager typically considers his/her project to have the highest priority. Similarly, functional managers consider that the allocation of resources and priorities within their functional areas is their own business.

To resolve or prevent conflict situations, the functional manager is continually faced with the problem of setting priorities. There are at least three levels of priorities that concern the functional manager:

1. The overall enterprise priorities that rate project needs in relation to other activities within the enterprise.
2. The overall departmental priorities that rate project needs in relation to other projects within the department.
3. The priorities within a project for the utilization of personnel, equipment, and facilities.

The first level of priority may be beyond the control of the functional manager, but it is a problem with which he/she must be continually concerned. The second level of priority is within the departmental organization and, therefore, within the control of the manager. These priority problems must be handled on a day-to-day basis. The third level of priority must be handled by the functional manager and/or individual project managers on a day-to-day basis, but in a manner that will promote the integration of the system.

## Priorities and Precedences

In addition to priorities, management must also consider *precedences*. *Precedences* are technical considerations that impact on development efforts. For example, data must be created before it can be accessed; hardware must be installed before it can be used. *Priorities* are business considerations. For example, senior management or external regulations may state that specific requirements will be available by a particular date.



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Typically, priorities are more important than precedences. This is the reality of business. However, understanding the technical considerations permits a manager to recommend certain actions. These recommendations may include a change in the priorities, a reduction in scope for a project, development of the requirements in releases, work-arounds, or a combination.

## Priority Setting Activities

There are a number of factors that an organization must have before priorities can be set. They include:

- Defined goals and objectives.
- Identified critical success factors (CSFs).
- Key business drivers.
- An individual or group that decides priorities.

It is also helpful to prepare a business plan that is updated/prepared annually. The business plan contains the goals and objectives, the CSFs, and business drivers that assist in setting priorities for the organization. It also contains descriptions of the projects and initiatives for each of the business areas within the organization.



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## Priority Setting Techniques

### Squeaky Wheel

#### Description

The Squeaky Wheel approach is the most commonly used method for setting priorities. In this approach, the highest priority is given to the activities/project managed by the person who complains the most in the loudest voice and/or who has the attention of the highest management level.

#### Advantages

- Some activities are prioritized

#### Disadvantages

- Not a formal approach
- Not linked to business drivers, goals, objectives, and CSFs
- Importance is based on subjective opinion of the “squeaky wheel”
- Seldom influenced by technical precedences
- Important activities/projects may be assigned low priorities

## Experience and Knowledge

#### Description

Experience and knowledge of the person/group setting the priorities is the second most commonly used method. It is often used in conjunction with the Squeaky Wheel approach. It considers a number of issues surrounding the activities/projects in question, such as:

- Senior management desires
- Legislated/regulated deadlines and associated sanctions
- Available funding and personnel
- Identified organizational goals, objectives, and CSFs

This method relies heavily on the experience of the personnel setting priorities and their knowledge of the business and its environment. This method is subjective and unstructured.



# Considerations in Setting Project Priorities

## Advantages

- Uses knowledge of the business to assess factors on the new project/activity
- Adapts to exceptional circumstances

## Disadvantages

- No better than the knowledge and the objectivity of the person performing the prioritization
- Priorities can be biased (e.g., Squeaky Wheel influence)
- Incomplete knowledge
- Seldom influenced by technical precedences

## Algorithm

### Description

This method is an attempt to remove biases and politics from priority setting and to formalize a structured process.

Algorithmic methods for priority setting use some or all of the following parameters:

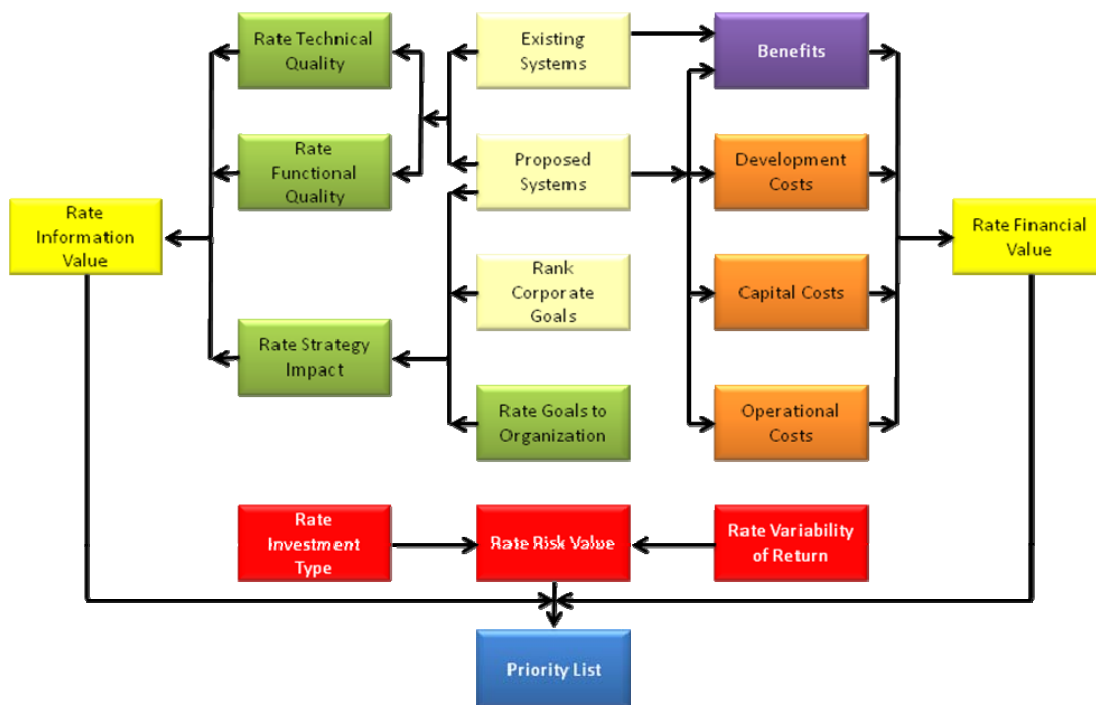
- Information value that relates to the technical and functional quality of each existing and proposed information system and their strategic impact
- Financial value that relates to the costs incurred during the full “cradle to grave” lifecycle and the expected monetary return
- Importance of business goals
- Importance of business areas on achievement of business goals
- Strategic impact of an information system on the achievement of business goals
- Evaluation of information systems on their provision of quality, timeliness and accuracy of information compared to an “ideal” information system from a user’s point of view
- Estimation of the proposed system’s impact on the infrastructure of the organization in terms of reliability, maintainability, extensibility, and technological obsolescence
- Monetary cost associated with the development of an information system



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- Costs associated with system operation
- Estimation of capital costs
- Assessment of monetary benefits
- Evaluation of risks

The relationship among these parameters are shown in the following diagram:



## Advantages

- Can be automated
- A consistent and reliable measure
- Easily understood by management

## Disadvantages

- Requirement for agreement on goals, objectives, CSFs, and business drivers
- Difficulty in obtaining some values before development (e.g., size estimates)



# Considerations in Setting Project Priorities

## Recommendation

The development of information systems is very important to today's organizations. It is also a fact of business that the development of some applications is more important than others. This has to do with both technical considerations as well as business reasons. Since resources (e.g., people, dollars, and facilities/equipment) are finite, organizations must prioritize their development efforts so that the applications of highest importance are the ones to which resources are given first.

To ensure repeatability and objectivity of the prioritization process, algorithmic and statistical means of setting priorities should be emphasized. Any assessment should include an inventory of applications and/or activities to evaluate, and a prioritization of the critical nature of that inventory in terms of the size of the risk. The purpose of the assessment is to determine if each application or activity is critical to the success of the organization.

Criteria for the selection of a prioritization system or process should include the following:

- Easy to use
- Can be used during early planning stages when not much information is available for each project/activity/initiative as well as at later stages when more information is available
- Realistic, intuitive to management
- Can be automated
- Considers technical precedences
- Based on business drivers and CSFs
- Can be used at each level of the organization so that there is consistency between levels for priorities
  - The overall enterprise priorities that rate project needs in relation to other activities within the enterprise
  - The overall departmental priorities that rate project needs in relation to other projects within the department
  - The priorities within each project for the utilization of personnel, equipment, and facilities