Feature

Project Portfolio Management

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A program or project portfolio explains how an organization is implementing its strategy with projects. If product management answers the question "Are we managing the projects correctly?," then project portfolio management answers the question "Do we have the right projects?"

DEVELOPMENT PROJECTS USUALLY FAIL, EXCEPT BY CHANCE

Although an increasingly larger part of organizational development takes place in projects, only one out of four development projects succeed. Projects are easy to start, but hard to finish.

Project Selection

The reasons for project failures can usually be ascertained by determining what has happened before, during and after a project. Unsuccessful projects are often caused by:

- Poor planning
- Lacking or fuzzy project ownership
- The lack of a business case
- No explanation of the project's affiliation with, and effect on, the corporate architecture
- Inadequate preparation, which leads to a project that solves the wrong problem or solves the right problem in the wrong way

Project Preparation

For a project to succeed, the choices made at the next phase are crucial. These choices include the selection of the project manager, project team and steering group. However, if a project does not have sound starting points, even a good team could fail to save a project.

Implementation Plan

An inadequate implementation plan is the final factor that can sabotage an otherwise successful project performance. After a project has been completed, there is a tendency to focus on the next project, neglecting to confirm the utilization of the results. Proper subsequent appraisals that compare the results to the stated objectives should be included in development projects. This feedback is necessary to improve the project portfolio management process and the project evaluation criteria. Appraisals are a way to educate management on how to set effective goals and how to ensure that those goals can be achieved through projects.

WHY IS IT SO HARD TO IDENTIFY THE RIGHT PROJECTS?

Problematic project choices are often structural. Roles and rules are missing in the organization, making it impossible to render feasible decisions. Factors that can lead to bad decisions include:

- The organization sees the project as a solution for all challenges; there are too many projects going on at once, and starting a new project is easy.
- Management lacks criteria to evaluate projects.
- Decision makers finance their own pet projects.
- Technology is an end in itself; there is a desire to implement new technologies quickly even if they lead to incompatibilities with the corporate architecture.
- Management lacks a coherent way to align projects with strategic objectives.
- Organizations are unable to manage the totality; the lack of an overall grasp often results in overlaps and inefficient scheduling.

PROJECT PORTFOLIO MANAGEMENT AS A SOLUTION TO PROGRAM PROBLEMS

Project portfolio management (PPM) is the management of an organization's development projects as a totality that systematically and consistently implements an organization's strategy. There are prerequisites for successful program management, including:

- Unified concepts and a consistent management model
- A management process in which the project portfolio has a designated task
- Tools that enable the management and project organizations to communicate the status of planned, current and completed programs

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Figure 1—Principles of Project Portfolio Management

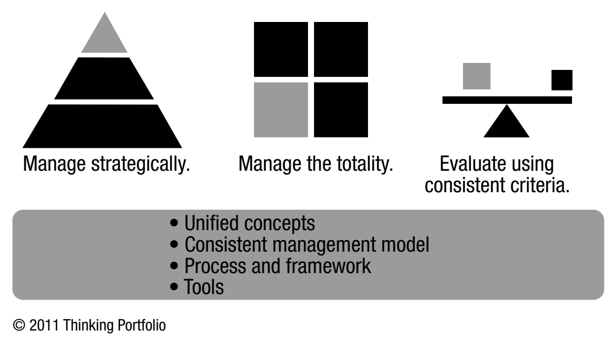


Figure 1 shows what is required from the organization for successful project portfolio management.

Results

Organizations that have adopted project portfolio management as a tool have been able to reduce the percentage of unsuccessful programs. Success happens when a project's operations have reached a sufficient level of maturity throughout the entire organization, for example, in a group.

TERMS RELATED TO PROJECT PORTFOLIO MANAGEMENT

When an organization is considering using project portfolio management, the first practical and necessary step is to standardize the conceptual terminology to avoid any possible misunderstandings.

The concepts and exemplary definitions associated with project portfolio management include:

- **Strategy**—A plan concerning long-term goals and choices, as well as the means for their implementation
- **Program**—A coordinated group of projects generating benefits and operational efficiencies that could not be achieved if the projects were being managed separately
- **Project**—A fixed-term endeavor undertaken to achieve a one-off product, service or result
- **Project portfolio**—The entity formed by the projects, in which the strategic objectives are common and the projects share the use of the same resources

In many organizations, the concepts of program and project are identical in terms of their content. The term "program" presented here represents an aggregate consisting of several projects.

THE PROJECT PORTFOLIO'S ADMINISTRATIVE TASKS

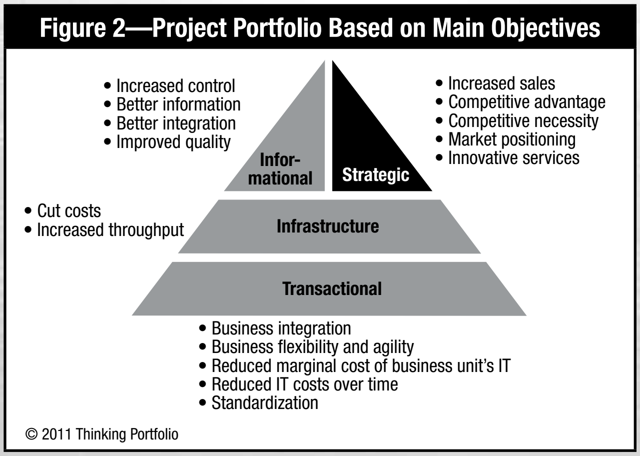
The project portfolio's management consists of the specification of the portfolio, the inclusion of programs in the portfolio and the balancing of the portfolio.

Specification of Evaluation Criteria

Portfolio criteria are measured as expressed by an organization's strategy or as estimated variables. Portfolio criteria are suited to classification and evaluation; they can be financial, strategic or tactical. Portfolio criteria change with strategic changes. The criteria should be sufficiently comprehensive, but at the same time universally applicable to facilitate the satisfactory depiction of all types of programs.

Massachusetts Institute of Technology (MIT)'s Peter Weill lists four main criteria for IT programs imported to the project portfolio, which are shown in **figure 2**:[1]

1. **Infrastructure programs**, which develop an organization's information and communication technologies (ICT) infrastructure and target, for example, the advantages of scale, standardization and integration
2. **Operational process/transactional programs**, which develop business processes and their information management while cutting costs and increasing productivity
3. **Informational programs**, which generate solutions related to management and communications that also aim at, for example, improved information quality and availability
4. **Strategic programs**, which management has specified as a strategy and that create, for example, a competitive advantage or market growth



Many companies classify programs according to their focus by utilizing balanced scorecard (BSC) perspectives (i.e., financial results, customers, processes, personnel and growth).

From the standpoint of ICT programs, an important criterion is the relationship of the program to various architectures: corporate, informational, applications and technology. The program can rely on existing architectures, deviate from them or even require entirely new architectures.

Financial criteria include, for example, payback period, return on investment (ROI) or turnover effect. Tactical criteria include assessment factors related to risk, quality or customer satisfaction.

Specification of Other Descriptive Information

Other possible program-related descriptive information can include, for example:

- Basic program or project information, e.g., owner, time schedule, budget, composition of steering group, project's key personnel
- Decision-making situation
- Program's users—organizations or processes
- Program's means of implementation
- Program results
- Tracking information

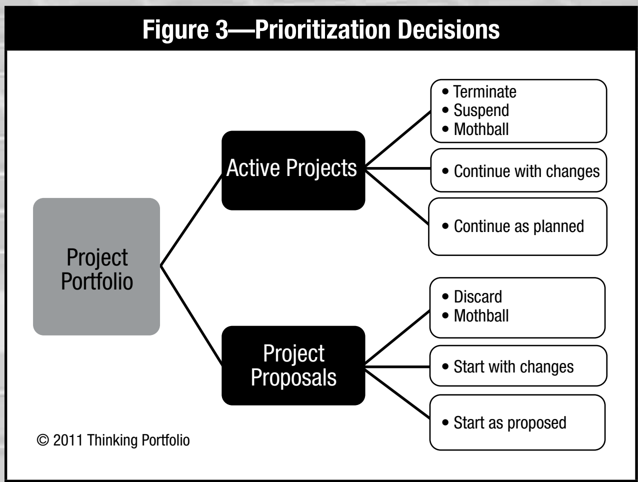
Portfolio Inclusion

Portfolio inclusion entails the program's description, classification and evaluation. The person submitting new program proposals describes and classifies the program according to the aforementioned criteria. After a program has been described, a portion of its data remain unchanged, unless management decides otherwise. Information related to the project's tracking, on the other hand, is updated regularly.

Balancing the Portfolio

The owner of the project portfolio evaluates the program proposals. The organization can weigh the programs according to, for example, their risk, size or resource allocations.

The number of proposed programs in an organization generally exceeds the available resources that would have to be deployed to manage them. Strategic criteria, the organization's snapshot and the resource situation require prioritization decisions that can be made for new and ongoing programs (see **figure 3**).



One of the project portfolio's success factors is that it offers the possibility to suspend programs whose continuation would no longer be sensible as a result of, for example, a changing business situation. Without the portfolio, the decision to suspend a program can be extremely difficult because it is often based on assumptions instead of knowledge.

One or Many Portfolios?

Project portfolio management sets no limits on the number of portfolios. Some companies handle all programs in a single portfolio, while others prefer to assemble the programs in several portfolios.

One way to think about portfolios is to see them as views of the entire program and project stack. For example, an

ICT infrastructure development project is in the information management portfolio, but is simultaneously a part of a certain development program affecting the entire company.

PROJECT PORTFOLIO START-UP

The project portfolio's start-up is not just a management tool for procurement and teaching. What is more important is to bring the entire organization to a level of maturity at which the desired competence level for portfolio management is possible. In a group, for example, this could mean the management of all common group projects and their resources, according to the portfolio model.

Start-up Tasks

The start-up of the project portfolio entails the following five main tasks:

1. **Management commitment and targets**—A clear justification for the project portfolio's start-up, targets and commitment to them
2. **Planning of management model**—The way in which portfolio management is linked to the organization's management processes, e.g., strategic planning, budgeting, the management of resources and decision making
3. **Specification of project portfolio**—Portfolio inclusion criteria and other portfolio information
4. **Description of management process**—Parties, roles, tasks and decisions
5. **Organization**—Required tools, phased start-up, necessary support and instructions

Many companies have begun using the project portfolio in connection with ICT programs. In that case, information management functions as a pioneering operational model and example to business operations. In any case, ICT upgrades are now a part of almost all business development activities.

Integration With the Organization's Planning System

In many organizations there is a planning cycle, a so-called anniversary clock, that repeats annually. The project portfolio can be joined to this planning system at various points.

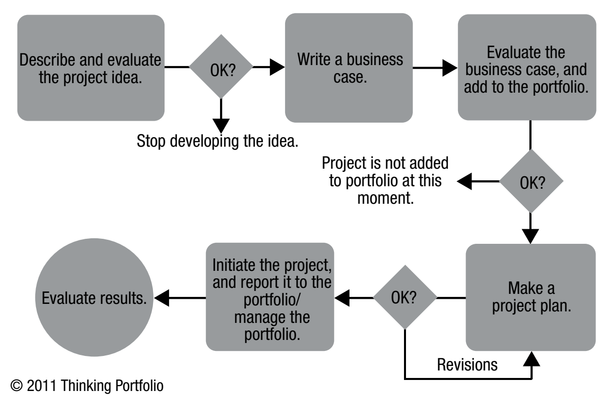
When planning strategic implementations, the project portfolio is an essential tool because organizations often develop their operations through projects. In budgeting processes, the project portfolio provides information concerning ongoing and planned programs. The project portfolio also provides data on the use of key resources and strategic implementation.

PROGRAM PROCESS

Development programs can originate from different starting points (see **figure 4**). Certain projects are discretionary, while others can be considered mandatory, such as projects arising as a result of revised legislation. In any case, a documented business case should be required for any program whose addition to the project portfolio has been proposed.

Although the writing of a business case is the task of the program's future owner, the parties eventually benefiting from the results of the program should participate in its formulation.

Figure 4—Project Decision-making Process



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Program Proposal

The writer of the business case presents it to members of the organization (e.g., management team or steering group) so that they can make a decision concerning the project portfolio. The business case must be evaluated according to the project's portfolio inclusion criteria, and a program decision must be made. If the program is extremely significant and comprehensive, its approval may require a decision by the enterprise's or a group's board of directors.

In practice, the program decision can also mean a permission to draw up plans for projects associated with the program. If ongoing, program-related or independent projects are being processed, the decision-making group can make the start-up decision.

Management of Approved Program or Project

When the program or project has obtained start-up permission, certain situational and predictive information must be reported in the project portfolio. These data typically relate to budget and schedule realization, as well as the values of the selected quality indicators.

Reporting during the project period is naturally the task of the project manager or program manager. The reporting schedule matches the steering group's meeting times.

The executive group tracking the progress of the entire portfolio can intervene in the progress of a project if its implementation begins to deviate from the original plan. At times, it may be necessary for the executive group to prioritize programs and suspend or terminate a program or project before the date originally scheduled.

Completion

A completed program or project is not deleted from the project portfolio. It continues to be included, but with a different status. Within a certain specified time, its results must be evaluated and compared with the targets stated in the project portfolio.

THE PROJECT PORTFOLIO AS A COMMUNICATIONS TOOL

At its best, the project portfolio promotes an open management culture. Within a specified scope, program proposals, project situations and results can be open to the entire organization.

The reports generated from the project portfolio are not just lists of monetary amounts or person-workday quantities. The project portfolio depicts an organization's strategy. It tells where the organization is headed and how it will get there (see **figure 5**).

Communications should be clear and understandable. Visual presentations provide a quick overall view of the portfolio from different viewpoints. Examples of overviews are shown in **figures 6** and **7**.

TOOLS FOR MANAGING THE PROJECT PORTFOLIO

The project portfolio's management is not solved with tools, but the project portfolio's information must be communicated to management in some way. Many begin using the project portfolio by simply assembling it with a spreadsheet program. The table's row describes a single project and the columns describe its classification, evaluation and basic information.

The table is a flexible tool, but its simultaneous use by the user and organization requires special arrangements.

Figure 5—Project Distribution by Strategic Goals

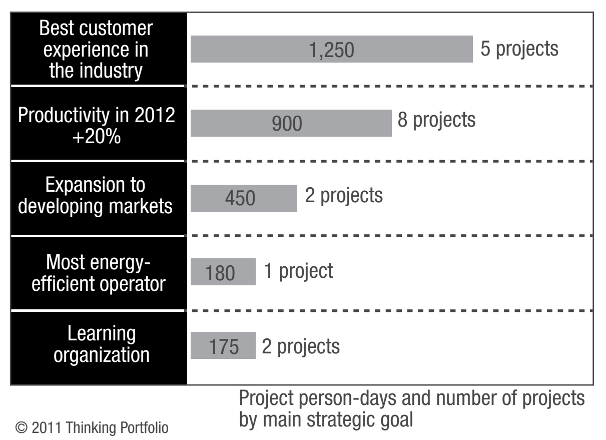


Figure 6—Example Annual Cash Flow Effect of Projects in Portfolio

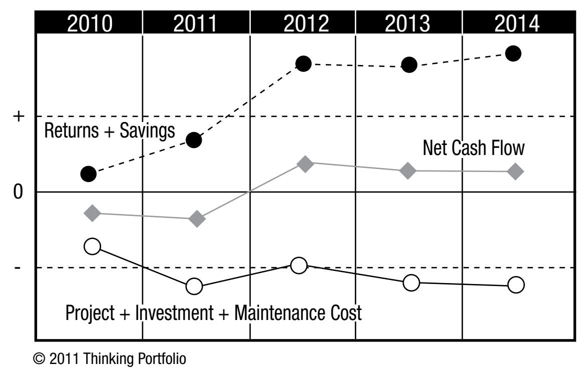
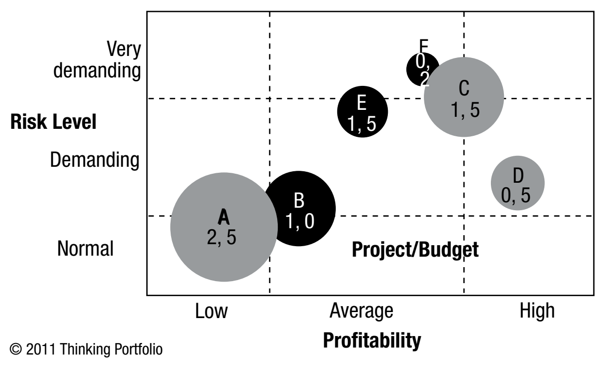


Figure 7—Example Risk, Profitability and Budget of Projects Chart



Many organizations have implemented a project portfolio according to their own specifications based on a modified database. In such cases, multiple users have the opportunity to edit, browse and report on the project portfolio's content simultaneously and concentratedly.

A few commercial project portfolio applications—most of them extensions of project management programs—exist. There are only a few independent project portfolio programs on the market.

When selecting tools, one must keep in mind that they are meant to be used by management and, thus, must be intuitive and easy to use.

CONCLUSION

PPM helps align projects with the strategy of the organization. It improves the success rate of projects because it introduces a managed process of turning ideas into projects and projects into business results. Organizations using PPM make good use of their resources and are able to invest in opportunities that matter the most in their future.

ENDNOTE

[1] Weill, Peter; *Managing the IT Portfolio: Getting More Value From IT Investments*, Microsoft Solutions Forum, USA, 2004