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B-Tech | the way we see it

Project and portfolio management

Experiences taken from Swedish companies and organizations

Contents

Foreword

Far too much money is being invested in unsuccessful projects around the world.

Generating new knowledge in the area of project and portfolio management is important to us at Capgemini given that we see its enormous potential to benefit not only our own business, but also for that of our customers as well as develop education and research in the academic field.

Capgemini is a market leader in the area of IT and Management Consulting with a long track record of high quality results as well as documented customer satisfaction. This is due in large to our desire and ability to embrace and create new knowledge. In addition, we draw strength from our established collaboration with different colleges and universities. This collaboration enables us to both gain access to research skills and the latest findings, as well as generates new knowledge together. In conducting this study we have collaborated with Jönköping International Business School.

Project and portfolio management is part of Capgemini's core business and constitutes a global growth area. By staying in the forefront we strive to provide our customers with the best possible advice in this field!

We would like to thank all the individuals, companies and organizations that have participated in this study and shared their views and experiences. Our ambition is that the study will generate new insights as regards project and portfolio management and that this knowledge will be used to help take these organizations forward.

Bo Erixon
Vice President

Jonas Winqvist
Vice President

Jonas Schlyter
Principal

Participating companies and organizations

Several of Sweden's largest and most successful businesses took part in this study.

ABB

Astra Zeneca

Banverket

Bilprovningen

Blekinge läns landsting

Com Hem

Consafe

CSN

E.ON

Försäkringskassan

Green Cargo

Husqvarna

IKEA

Lantmäteriet

Lernia

Luftfartsverket

Länsförsäkringar

Mölnlycke Health Care

Nordea

Nyx Interactive

OKQ8

Peltorp

Posten

Region Skåne

Rikspolisstyrelsen (RPS)

SAS

SCA

SEB

SEB Trygg Liv

SKF

Sveriges Kommuner och Landsting (SKL)

Swedbank

Systembolaget

Södra Skogsägarna

Tele2

Telenor

TeliaSonera

Fritidsresegruppen (TUI)

Tullverket

Upplysningscentralen (UC)

Vattenfall

Volvo Cars

Volvo Construction Equipment

Värdepapperscentralen (NCSD)

Introduction

The use of projects as a mechanism for organizational development has risen during the last decades and many businesses are currently facing a situation whereby they have to manage several hundred concurrent projects. This creates a requirement to lift focus away from the individual project on to an integrated approach embracing multiple parallel projects.

When the number of projects increases so does complexity. This is often due to project interdependencies wherein the information must be managed across projects and individuals together with the need to involve customers and suppliers. That the issues often cut across organizational boundaries only further increases complexity and the challenge posed to the projects.

There are many studies and books written on the subject of project management models and methodology. However there is not so much written about program and portfolio management. We foresee an increase in demand for models explaining these areas of management and future analysis that can help us understand why projects, program and project offices are not more successful and how project work should be conducted in the future.

The purpose of the study is to create a deeper and better understanding of what problems, obstacles and challenges exist within Swedish companies and organizations dealing with project, program and portfolio management and how these issues could be mitigated[1].

The study was conducted with 113 participants located within 44 companies on the Swedish market. It addressed the following roles within these organizations: Project Office Manager, Line Organization Manager, Business Area Manager, Chief Information Officer, Portfolio Manager, Projects Manager and IT Strategist.

The selection of participating companies was done in order to get an overall picture of project and portfolio management covering different problems and aspects regardless of business area, size or type of business.

[1] In this report we continously will use the term company for both companies and organizations.

Definitions

Project work can be can be divided into three levels; project, program and portfolio. Each has its own distinct function (see Figure 1).

In order to support project, programs and portfolios a project office can be established with one or more of the above functions. Depending on the role of the project office varying amounts of support and governance is provided.

Project

A project is a series of activities, which in a temporary organization with the allocated recourses, must produce predetermined and well-defined deliverables within given time and cost frames. The project level is the operational level within project and portfolio management (see Figure 2).

Program

A program is a group of projects with a common purpose or goal. Unlike the project, which must deliver predetermined deliverables within the given timeframe, the program encompasses all activities from analysis and design through to implementation with the purpose of realizing business value. The activities of a program can be undertaken either as formal projects or as assignments within the line organization. In order to ensure that business value is achieved the program continuously evaluates the needs to start new initiatives or projects in order to realize its goals. A program is temporary in its nature and normally exists until its objectives have been met. The program level is the tactical level within project and portfolio management (see Figure 3).

The term program can have a different meaning depending on whom you are talking to. The above definition of program is somewhat unusual. More common is to view a program either as a very large project or as a collective term for multi-project management where focus lies on deliverables (generating delivery objects), and not to ensure implementation in the receiving organization or the long-term return on investment.

Figure 1 **Three levels within project and portfolio steering**

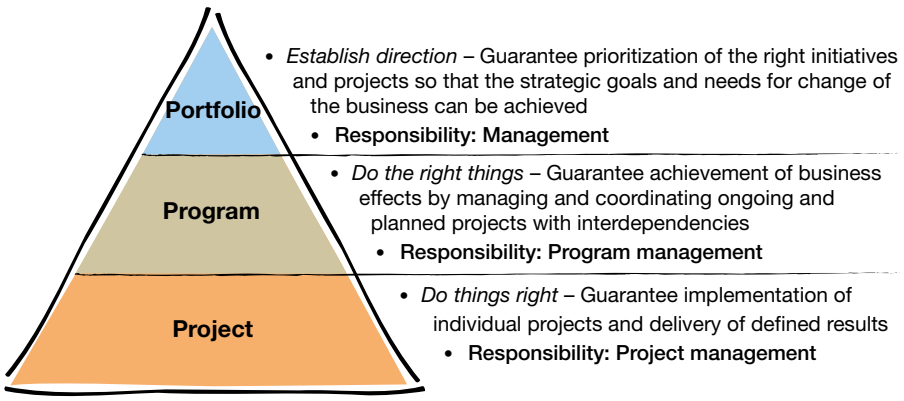


Figure 2 **Examples of project structure**

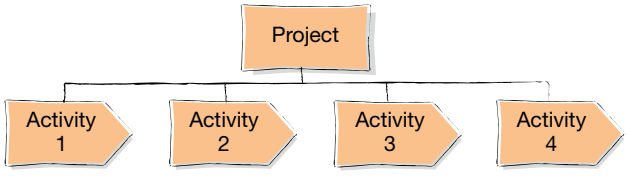
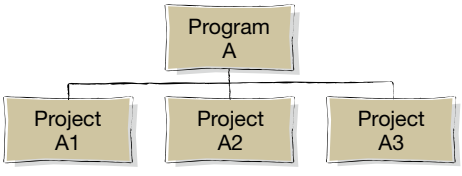


Figure 3 **Examples of program structure**



Portfolio

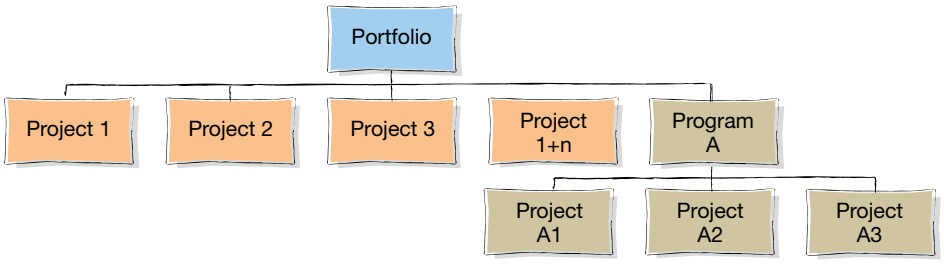
Unlike a project or a program, a project portfolio is not a one off occurrence with a set time but part of the strategic planning process within the organization. The portfolio contains the initiatives, projects and programs required to change the organization and develop the business to achieve the overall agreed goals and strategies. The portfolio level is the strategic level within project and portfolio management (see Figure 4).

Organizations with many projects and programs can group these in portfolios organized by interdependencies and purpose in order to simplify overview and governance. Examples of different portfolio types are:

- Product (Projects that are prioritized by financial factors) and deployment plans
- Efficiency and cost reduction (Projects that are prioritized by financial factors)
- Health, Environment, Security (Projects that are prioritized by risk factors)
- Governance (Projects that are prioritized by legislative requirements).

”In contrast to a project and a program, a project portfolio is not a one-off phenomenon with a time limit but is linked to strategic company planning.

Figure 4 **Examples of portfolio structure**



Project office

A project office is an organizational unit for supporting the company in its management of projects through all its phases. A project office can have different tasks and roles at a global level. Capgemini regards project offices as having three different roles; administrative, supportive and advisory. The organizational location depends on the role. The purely administrative project office is often located lower down in the organization whereas the controlling and advisory project offices report to the highest level of management. The roles build upon each other where the advisory project office is also supportive and administrative by nature (see Figure 5).

The tasks of a project office revolve around six different areas but have a different focus depending on their role (see Figure 6).

Figure 5 **The different tasks/roles of the project offices**

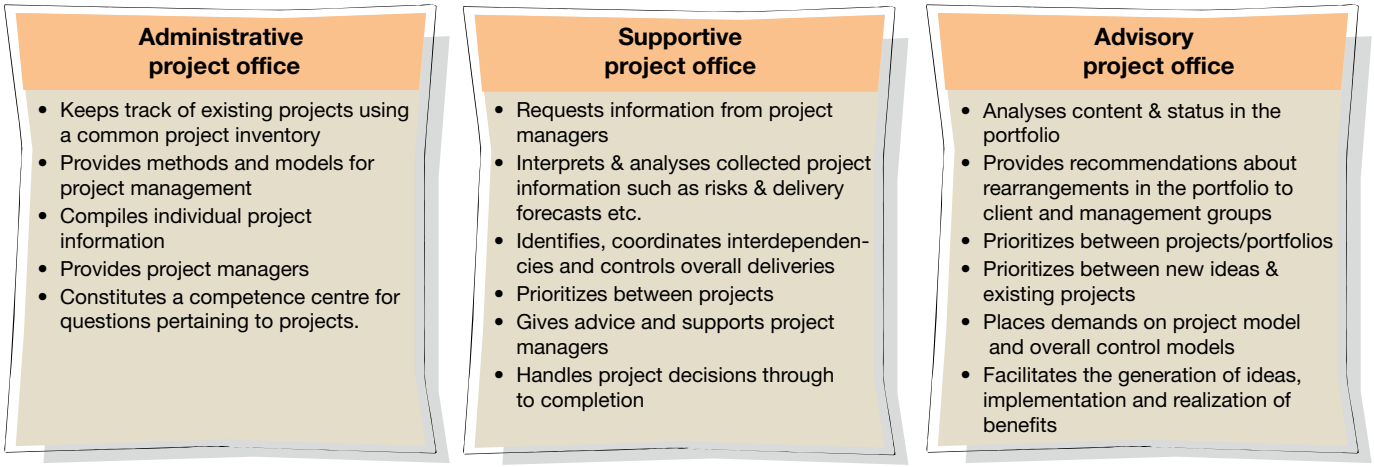
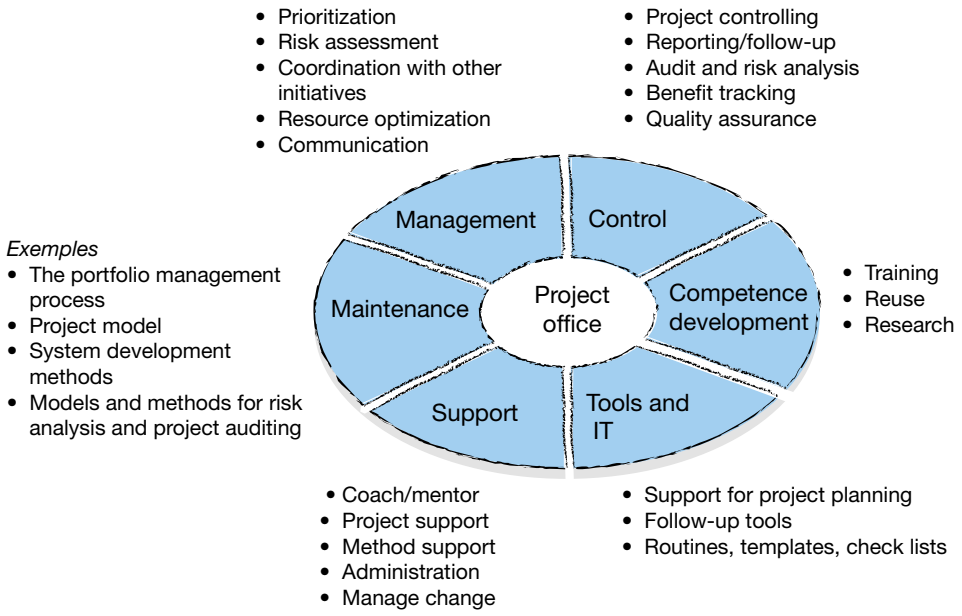


Figure 6 **Examples of areas of work of a project office (regardless of task/role)**

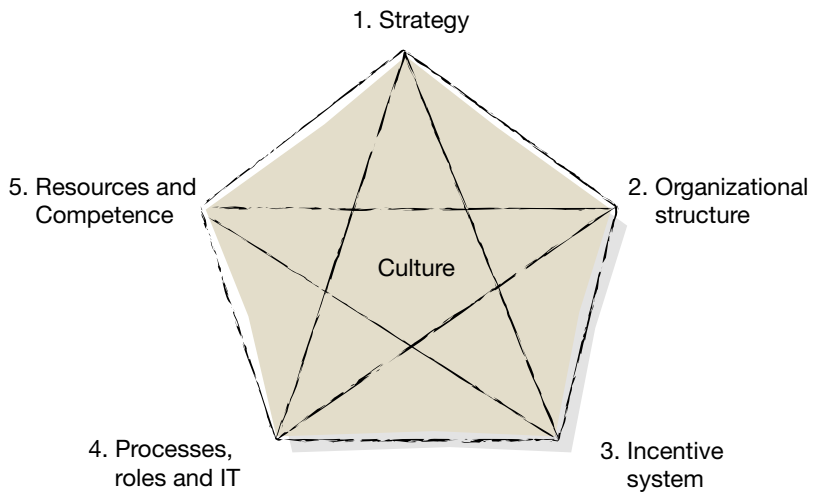


Analysis model

In order to obtain a deeper understanding of the project business, different aspects need to be highlighted. This is done using the Star Model[1] in the study. The model presupposes that a business and organization can be run based on a number of aspects – components. These components are Strategy, Organizational structure, Incentive systems, Processes, roles and IT, Resources and competence as well as Culture (see Figure 7). By making changes in the components and using these as management control measures, ways of working can be stimulated so that the organization becomes more streamlined and performs better. However, altering behavior in an organization takes time and requires that all management controls co-operate and that there is clear and consistent leadership at all levels.

An organization consists of a number of people with different levels of ability. Together they should work towards achieving goals and strategies. Creating efficiency while avoiding unnecessary work tasks, requires structures in the form of organization, roles, working procedures and IT. To further guarantee and stimulate desired ways of working, the business is monitored and incentive systems are put in place (both financial and non-financial). In the following sections, the results of the study are analyzed based on the Star Model in order to explain why carrying out work in project form is difficult and what can be done to improve understanding with project and portfolio management.

Figure 7 **Analysis model for an organization or operation – Star Model**



[1] Edvard E Lawler III, From The Ground Up, 1996

Analysis

The key to a successful project is clarity, commitment and strong project management.

Analysis

Today, an increasing amount of work is being carried out in project form and the share of the total budget being utilized is becoming larger. A larger share of the total budget and a greater share of personnel working in project form, places higher demands on how projects and project portfolios are handled so as to take control of development and guarantee expected returns.

There is general consensus in the study regarding the success factors required for a successful project. The three factors that are advanced as being the most critical are:

- Clear project goals
- Firm commitment from the sponsor and steering group
- Strong project management.

At the same time, these success factors constitute the area that companies specify as the principal reason for why a project fails. This is further supported by other studies[1] that argue that it is difficult to work in project form and that too many projects fail. An interesting fact is that the success factors required are both tangible and intangible. Projects need to be supported by better structures and clear directives from management (project manager and steering group) with the power to make decisions.

The most likely reason for failure is also connected to the complexity created by the fact that a project organization cuts across the traditional line organization and the existing power structures.

In addition, it seems that risk management is a neglected area causing companies to experience difficulties in identifying and assessing risks. This result in more than 20 % of projects having to be closed down during implementation, due to the fact that project and portfolio management becomes too reactive and event-driven (see Figure 8).

In the following analysis, each aspect is handled individually in order to better understand where the basic problems are located and to be able to address the correct measures.

Strategy

The strategy component comprises the focus of the business in both the short-term and long-term. It serves as a guide (steering principles) for how the business should be organized and run and constitutes a basis for prioritizing such things as investments and projects.

Steering principles exist at several levels; at the corporate level, broken down at a unit level as well as for each project, program and project portfolio in order to provide a guide for how, where and in what way tasks should be pursued and organized. The study shows that most organizations actively prioritize and re-prioritize in their project portfolio, but that they are not satisfied with the balance of the portfolio (see Figure 9).

Figure 8 Success factors and reasons for project failure

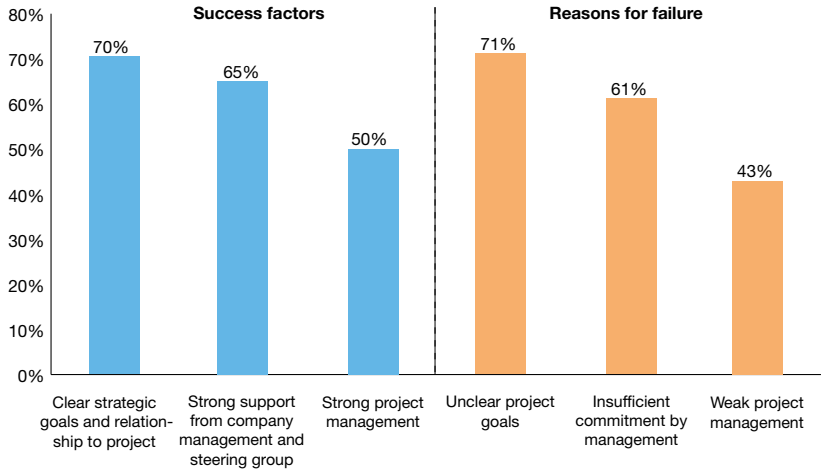
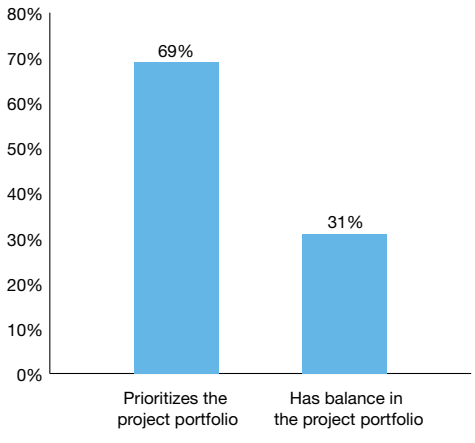
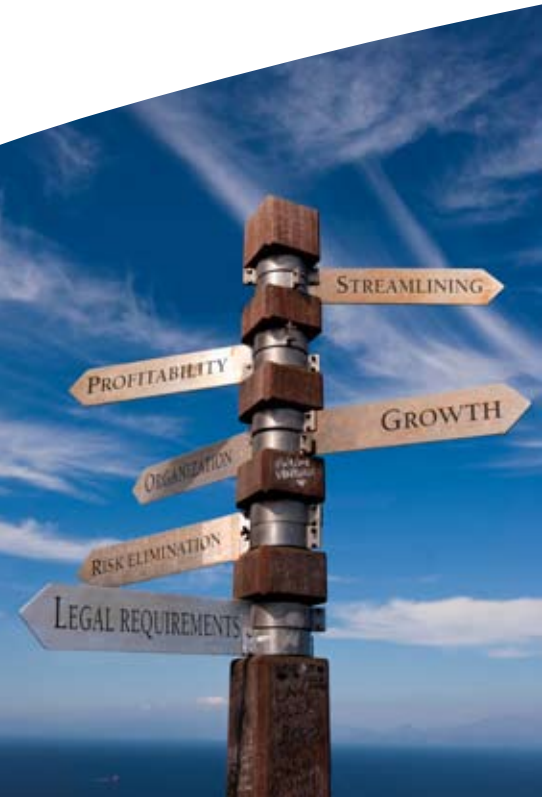


Figure 9 Understanding the balance in the project portfolio



[1] e.g. Gartner Research 2008-12-04, ID Number G00163351

Most organizations are dissatisfied with how the portfolio is balanced.



"Governing principles and guidelines for how prioritization should be carried out are missing or unclear.

The study shows that there are four general explanations as to why companies are not able to balance their portfolios.

1. There are too many projects running in different time frames, thereby making an overview more difficult.
2. The projects are not clearly linked to business strategies and goals.
3. Governing principles and guidelines for how prioritization should be carried out are missing or are unclear.
4. Internal politics and power struggles limit the possibility for prioritizing on rational grounds.

There can be many reasons for having a large number of projects. The study illustrates the fact that it is difficult to obtain a decision to start major projects and that this is often solved by parceling the initiatives into smaller projects. This enables decisions to be made within the current decision-making procedure and without regard to or coordination with either the overall strategy for the business or with other projects being carried out in surrounding areas of business.

When many projects have to be prioritized with regard to each other, linking them to general strategies and goals could be the method used. Decisions about prioritizations would be facilitated with uniform project directives requiring a connection to the strategic goals, however, in the study, 71 % thought that the project directives did not have clear objectives and goals.

Furthermore, having a large number of projects causes difficulties in identifying the interdependencies between projects. These interdependencies also require attention when prioritizing. Assembling projects with a common objective and/or mutual dependencies in separate portfolios facilitates prioritization.

Capgemini's observations and recommendations

It can be debated whether or not there will be one or several portfolios, but in our opinion, initiatives/projects should be organized in separate portfolios according to their objectives and be supplied with separate budgets. Separate portfolios will facilitate prioritization since it will be possible to apply similar assessment criteria within the portfolios.

Another complicating factor when prioritizing projects has to do with the strategy of the business. According to Capgemini's experience, the official strategy can be perceived to be unclear, or at worst not communicated to the business, leading to different opinions regarding what the projects should be prioritized against. Furthermore, it is common that the businesses have defined a large number of goals that have not been ranked internally, e.g. using a Balanced Scorecard, which makes things even more difficult when prioritizing projects.

This implies that a Balanced Scorecard is more a measurement and analysis tool for visualizing and understanding the business than a tool for controlling and prioritizing (e.g. a project).

The fact that a strategy is unknown in the business may be due to the fact that it takes time to communicate and establish.

Communicating economic awareness can be done fairly quickly, but changing the strategy when there are changes going on in the outside world and passing this on within the organization, often takes time. Experience shows, that there is a gap from the time a decision is made about the strategy and before this is known and applied within the organization. During the transition period, the old strategy still continues to apply and this affects the behavior of the employees.

This organizational inertia creates uncertainty about what applies and what should be applied during prioritization.

According to the studies, re-prioritizations and balancing are carried out too infrequently and are not a direct consequence of changes in general goals and strategies. 57 % believe that prioritization is not changed when strategy is changed. The study also shows that re-prioritization is far too much a consequence of the annual budget process based on financial measures rather than what is of most strategic importance.

Capgemini's observations and recommendations

The fact that so many people in the study feel that they have difficulties with prioritization indicates that this is a troublesome area requiring extensive changes. Those companies that make a clear connection between projects and strategies will have a better base for success in taking on the right project. By establishing a good basis for decision-making (clear project directives linked to prioritized goals), transparency is created between strategy and project prioritizations and thereby the right conditions for starting "the right project" and shutting down "the wrong project".

Organizational structure

The organizational structure component comprises the allocation of resources and responsibility between line, project office and projects. A clear organizational structure, showing how roles, responsibility and mandates are allocated, provides better conditions for management, competence development and resource utilization.

The study shows that there are primarily three areas that address organizational shortcomings and ambiguities as regards project and portfolio management:

1. Allocation and responsibility for resources between the line organization and projects
2. The role, responsibility and tasks of the project office
3. Responsibility and mandate of the steering group.

Allocation and responsibility for resources between the line organization and projects

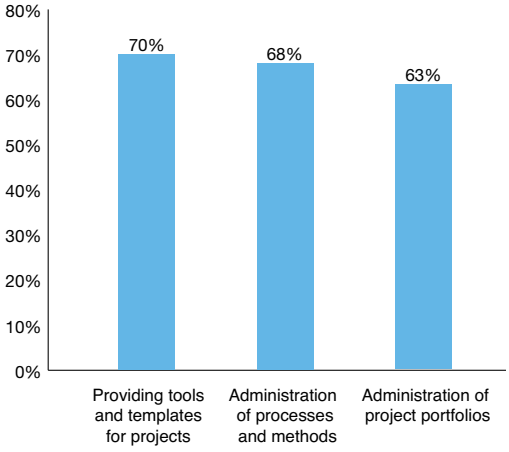
It is obvious from the study that successful projects require dedicated management and efficiency. However, these areas have turned out to be difficult to manage concurrently. It is difficult to combine project work with line work and the general feeling (86 % of the companies) is that project work "always" has a lower priority than line work. Often the situation occurs when part-time resources are allocated who must simultaneously carry out their normal work or who alternatively are allocated to several parallel projects. If these resources are key persons, a bottleneck will arise that will risk delaying the projects.

According to other studies, it is possible to create a more efficient utilization of resources by using part-time resources, as time slots can be filled with several tasks. However, at the same time, this will make things more difficult for management as the responsibility for the resource will be unclear and the need for coordination between different projects and with the line will increase considerably.

Capgemini's observations and recommendations

By increasing the number of key personnel assigned full-time to the various projects and by simultaneously ensuring that other resources take care of the line duties, efficiency will increase in both the line and the project.

Figure 10 The primary responsibility of the project offices



The responsibility of the project office

Historically, project offices have been established to improve control and coordination of projects and programs in large and complex organizations. However, most project offices have limited possibilities to manage and supervise resources and work changes. The study makes clear that this has resulted in project offices primarily focusing on work of an administrative nature, on data acquisition, reporting and other relatively simple work tasks (see Figure 10). Approximately half of the companies approached feel that their project offices create insufficient value, as they do not work with the right issues.

Through their administrative role, the project offices have an overview that is not utilized since they do not have representation in steering groups or in the strategic planning.

Considering the current economic situation, there is an obvious risk that those project offices that do not take on greater responsibility for project implementation and achievement of results or create value by taking on budget planning, helping the company determine how money should best be spent, will be closed down within 1-2 years[1].

Most project offices (54 %) feel that the responsibility for prioritizing and re-prioritizing initiatives and projects is not well defined. Normally, project offices try to take responsibility, but they lack the formal authorization.

Without a formal and clear role with representation in not only the management group but also in steering groups, there is an increased risk for conflicts of interest and ineffective decision-making processes resulting in incorrect decisions.

Capgemini's observations and recommendations

The project offices wish to have a greater contribution to the strategic process with advice and the prioritizing of projects as well as the following up of business results. This role cannot merely be taken on but requires a formal mandate as well as acceptance from affected decision-makers in the line.

In order to create the right conditions for project office to be accepted in an advisory capacity, responsibility for running the entire decision-making process – from idea/initiative to project initiation, implementation and coordination as well as the benefit realization – should be assigned to it. In addition, the project office should be responsible for assuring the quality of the structure and adherence to different responsibilities within the project organization in order to secure the means for an appropriate basis for decision-making.

[1] Gartner Research 2008-12-04, ID Number G00163351

The responsibility of the steering group

Normally, a steering group is responsible for and has authorization to start and stop projects, add resources, provide policy decisions and approve deliveries. More than half (51 %) of the companies feel that the steering groups do not take responsibility, primarily due to the following reasons:

- Steering groups have difficulty in reviewing and managing coordination
- Members of steering groups lack preparation time prior to the steering group meetings
- The data on which decisions are based is inadequate (Incomplete, of poor quality or not confirmed with stakeholders)
- Lack of knowledge within the steering groups about what is expected from their work.

Many companies (48 %) feel that there are too many projects in progress at the same time and therefore it is difficult to see the interdependencies and the need for coordination. When each project also has to report to a dedicated steering group for that particular project, there is an increased risk of a poor outcome, i.e. decisions are taken without a comprehensive view and consideration for adjacent projects and the company as a whole.

The study shows that there is a desire to combine the function of project coordination and portfolio management.

This solution works normally, as long as the projects are managed within the framework of a dedicated area of responsibility. The fact that coordination and decision-making does not work between different areas of responsibility could be attributed to an individual's desire to optimize their personal area of responsibility and the fact that there are different opinions about what is best for the company as a whole.

In order to achieve complete and correct data and to enable an effective decision-making process, we assume that the project will address all the needs of stakeholders by allowing them representation on the project where required, e.g. in a steering group, a joint action group, a referral group and a reference group.

If groups of stakeholders are not represented or are not allowed to exert sufficient influence, conflicts of interest and shortcomings in data used to make decisions can easily occur, rendering the decision-making process more difficult.

By having a function for quality control linked to the project, the project can be evaluated with respect to how the structure meets the needs and requirements that exist and to what degree the responsibility of the organization is considered.

Capgemini's observations and recommendations

By having the same steering group representing projects with interdependencies, increases the decision-making capacity of the steering group and decreases the risk for poor decision-making. The decision-making process is accelerated with positive consequences for the lead times of the projects involved. Furthermore, improved conditions are created for attending to the company as a whole, increasing consensus regarding different issues and solutions as well as reducing poor outcomes. In addition, above and beyond taking necessary decisions, the steering group should assume a more obvious responsibility by showing that they stand behind the project both in words and deeds.

Incentives are used to stimulate desired work practices and include all kinds of rewards – both financial and non-financial.

Incentive system

Incentives are used to stimulate appropriate actions and include all kinds of rewards – both financial and non-financial.

The study shows that there is a lack of not only interest but also of need to stimulate actions associated with projects using rewards. What emerges is that customary compensation in the form of salary seems to suffice (in addition to current structures such as methods, processes, project models etc) as an incentive for appropriate action (see Figure 11).

A project is an organizational structure that is well suited for testing not only new ideas but also employees with potential, for a limited period. Given that the aim and content of the project is of sufficient interest for the business, the exposure and interest surrounding the project can be seen as a reward. According to the study, it is the project manager who is responsible when projects do not meet client expectations.

This implies that the role of project manager can entail a career opportunity if things go well, but at the same time there is a real risk if the project fails (see Figure 12).

Capgemini feels that projects can be divided into two groups; those projects that have positive consequences and those that have negative consequences for employees or other stakeholders.

The "negative project" group refers principally to projects aimed at implementing savings, streamlining processes and work procedures or otherwise adapting a project to new requirements.

There is a real risk for the project manager involved with these projects becoming a symbol for all that is negative. When appointing a project manager, the organization is faced with the choice of either appointing the best project manager and thereby risking that he/she becomes expendable, or appointing a less qualified resource and accepting a higher project risk. The study shows that a predominant percentage of the negative projects that are carried out are of a "reduce costs", "quality improvement" or "organization development" nature, often implying some form of streamlining with "negative consequences" for various stakeholders.

Since it is primarily the project manager who has responsibility for the project results and there is no obvious career path or "guarantee" for a future career as a project manager, probably explains why it is difficult to staff "negative projects" with the right project manager. The study shows that to a great extent (88 %) external resources are used in order to gain access to the right competence.

Capgemini's observations and recommendations

There must be greater balance between risk-taking and rewards in order to get the best project managers to take on challenges with complicated projects or projects that are caught up in internal politics.

Figure 11 The need for an incentive system

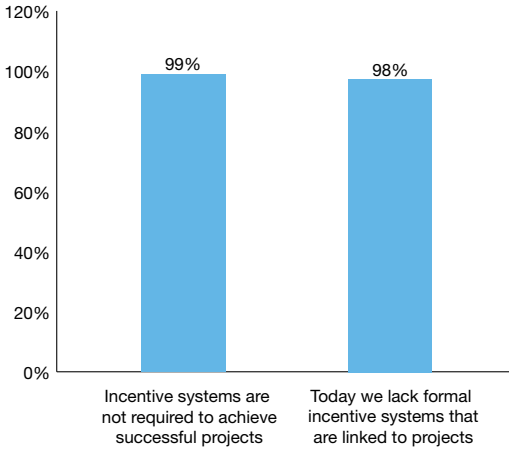
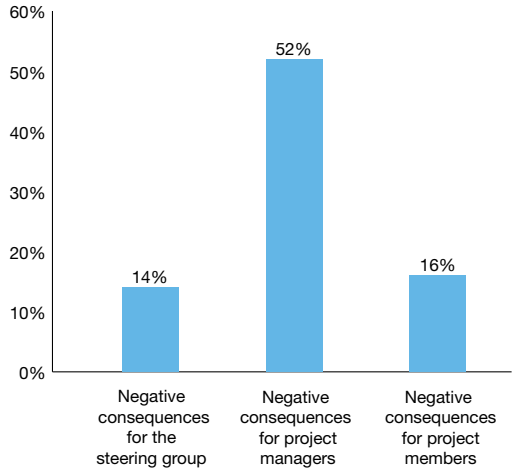


Figure 12 Responsibility for failed projects

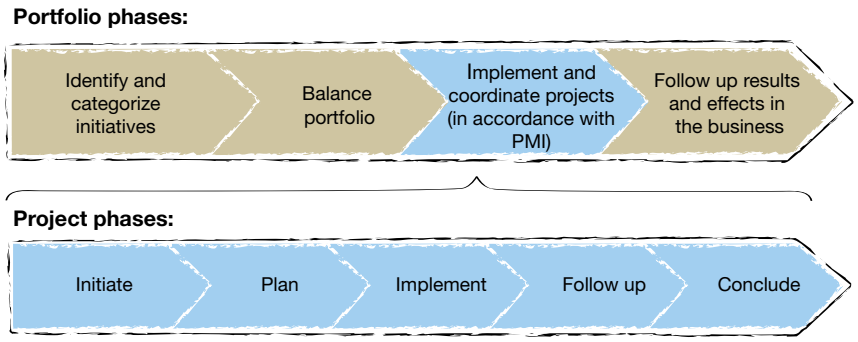


Processes and IT

The Processes and IT component includes the work procedures used within the four phases of project and portfolio management:

1. *Identify* and categorize initiatives
2. *Balance* the portfolio – select and prioritize initiatives and projects
3. *Implement* and coordinate projects (in accordance with PMI (Project Management Institute)
4. *Follow up* business effects (benefit tracking).

Figure 13 **Portfolio and project phases**



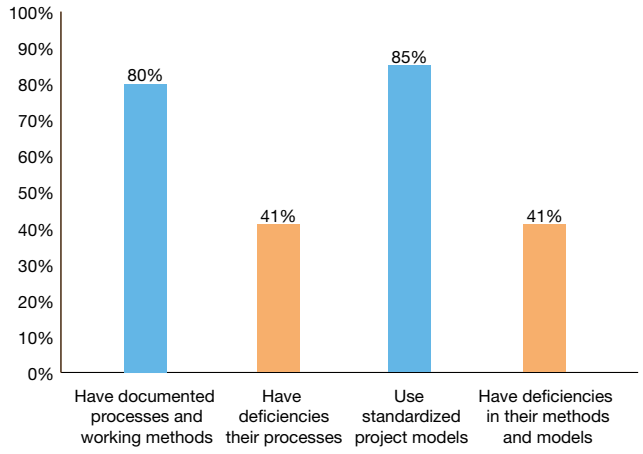
The third portfolio phase, "Implement and coordinate projects", can be described and analyzed using PMI's definition of five project phases (see Figure 13). These project phases are described in a linear structure, but in reality, the phases can take place partly in iterations, partly in parallel. An example of this is that follow-up work takes place continuously and not simply at the end of the project.

Processes

Processes are primarily defined as WHAT should be done and in what order. There are methods and models to supplement and support HOW work tasks should be carried out in the process. In addition, IT (see section on IT tools, page 22) is used to streamline the process and guarantee the quality of information.

Most companies involved in the study feel that they have well-developed processes, methods and models. The consensus is that these structures are appropriate not only for large and

Figure 14 **The companies' view of their processes, methods and models for projects**



complex projects but also small and simple ones. At the same time, almost half of the companies involved feel that the greatest obstacle to getting project and portfolio management to work is shortcomings in existing processes, methods and models (see Figure 14). A probable explanation for this is that current structures are too general and in practice not applicable in the individual project and that they are not implemented correctly in the organization. This failure is reinforced by the fact that it is not unusual that the culture within an organization dictates that it is more important to achieve results than to follow set ways of working (43 %). Since too little time is set aside to evaluate implemented projects (74 %), companies are not made aware of what lessons could be learnt and the chance of learning and improvement is lost.

The use of Tollgate models has become increasingly popular (83 %). The purpose of the Tollgate method is to guarantee that the correct conditions exist for the project to enter into the next project phase. With the Tollgate method, the steering group can choose to either postpone a Go/No Go decision until the right moment, or alternatively close down projects in which they believe conditions for success cannot be created. The study shows that the model does not work particularly well when lots of projects are allowed to continue (65 %) despite the fact that they are not deemed to have the prerequisites to succeed.

What is it then that does not work? Projects are primarily evaluated in regards to time (92 %), budget (89 %) as well as achievement of results (71 %). If the targets are not achieved, the future of the project should be re-evaluated. However, the study shows that exceeding the project budget is acceptable to a certain extent – the most important thing is achieving results. Financing always seems to be made available for business critical projects. The reason for projects being cancelled or stopped is primarily due to the fact that the reasons for carrying out the project have radically changed or because the project cannot deliver the specified solution (see Figure 15).

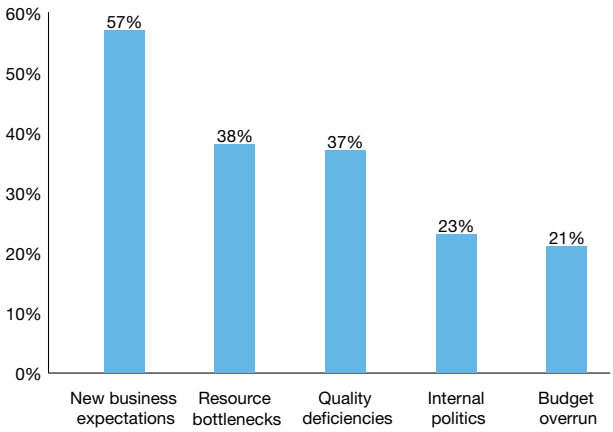
Capgemini has experienced that there can be a number of reasons for not finishing a project in the agreed time. Firstly, no one wishes to be associated with a failure that a cancelled project is often considered to be; project managers and other stakeholders do not see, or do not want to see, the risks that exist. Secondly, cross-functional projects are often associated with internal politics that render decision-making more difficult; it is easier to allow projects to roll on and see what happens (and hope that they succeed). Thirdly, it is "more difficult to stop an almost completed project" and account for a "sunk cost". In the event of a lack of resources, there is a risk that these projects are halted or delay the start of important projects that have no yet begun.

Capgemini's observations and recommendations

Too much confidence is placed in the belief that structures alone will solve the problems. Project models and working methods should be adapted to the needs of the company and it should be ensured that they are applied by requiring a comprehensive introduction and the competence of key persons so as to create the desired project culture.

In order to guarantee that the correct project is run and to prevent projects with insufficient means running too long, the use of objective project audits should be a compulsory feature. This can be implemented by linking it to one or several Tollgates and can, depending on the situation and size of the project, be carried out at different levels (e.g. complete audit, concentrated audit, simplified/minor audit).

Figure 15 **Reasons for projects being prematurely cancelled**



Portfolio and project phases

The study shows that the business operates with varying degrees of success in the different portfolio and project phases. An initial reflection is that companies are most satisfied with the methods used when implementing individual projects. The phases that functions least well are balancing the project portfolios and the follow-up of results and business effects (see Figure 16).

Balancing portfolio

Routines and models to achieve an effective prioritization of initiatives and projects (64 %) are lacking. The consequence of this leads to dependency on key individuals. The composition of the decision-making group and its ability to handle rational aspects with not only emotional but also internal-political considerations affects decisions regarding which projects are to be started and which decisions are taken during the life of the project. This is a common problem given that a number of companies are dissatisfied with how the portfolio is balanced (35 %). The study shows that there is a desire to work with project portfolios, but that primarily there is a lack of workable processes, methods and models, to improve the evaluation of initiatives and prioritization of projects. The study shows that there is often a lack of a clear link between projects and the strategic goals of the company, which makes prioritizing more difficult. Capgemini's experience is that the strategic goals lack an internal prioritization making prioritization of projects even more difficult and consequently minority interests are given greater scope with the risk that an incorrect prioritization will be made for the company as a whole.

Implementing and coordinating projects – Concluding projects

The study shows that projects are not concluded in a satisfactory manner. Too little time is used to evaluate projects and their execution (74 %).

In many project models, it can be seen that evaluation reports should be written before the project is closed. In Capgemini's experience, this is not done, partly because it is not requested, partly because there is not enough time or that it has not been allowed for in the project budget.

The hand-over to the line is another area that is emphasized as being unwieldy. If the receiving organization has not been part of the journey, through representation in the steering group and in developing a solution, it will be difficult to gain acceptance for any results produced, thereby rendering the introduction of a solution and the realization of results more difficult.

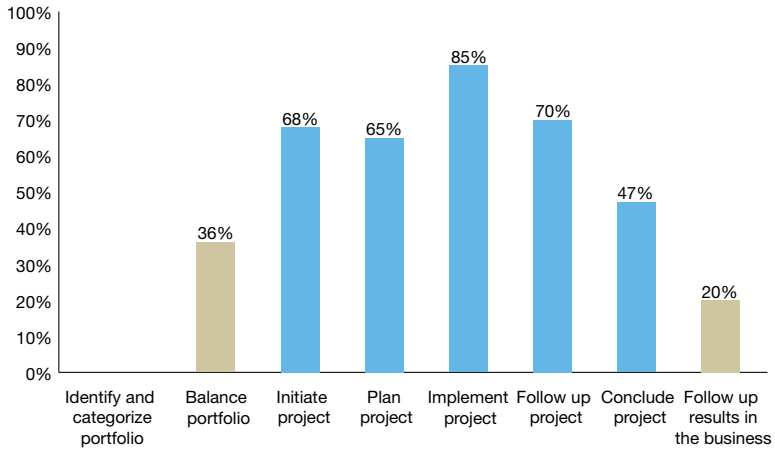
Capgemini's observations and recommendations

Set aside time in the project budget and require that the project manager documents and reports their experiences from the project not only to the steering group but also to the person in charge of the project office so as to create a learning organization. Let the receiving organization be involved in the steering and report groups and prepare in advance the receiving organization for an implementation – not merely for a reception.

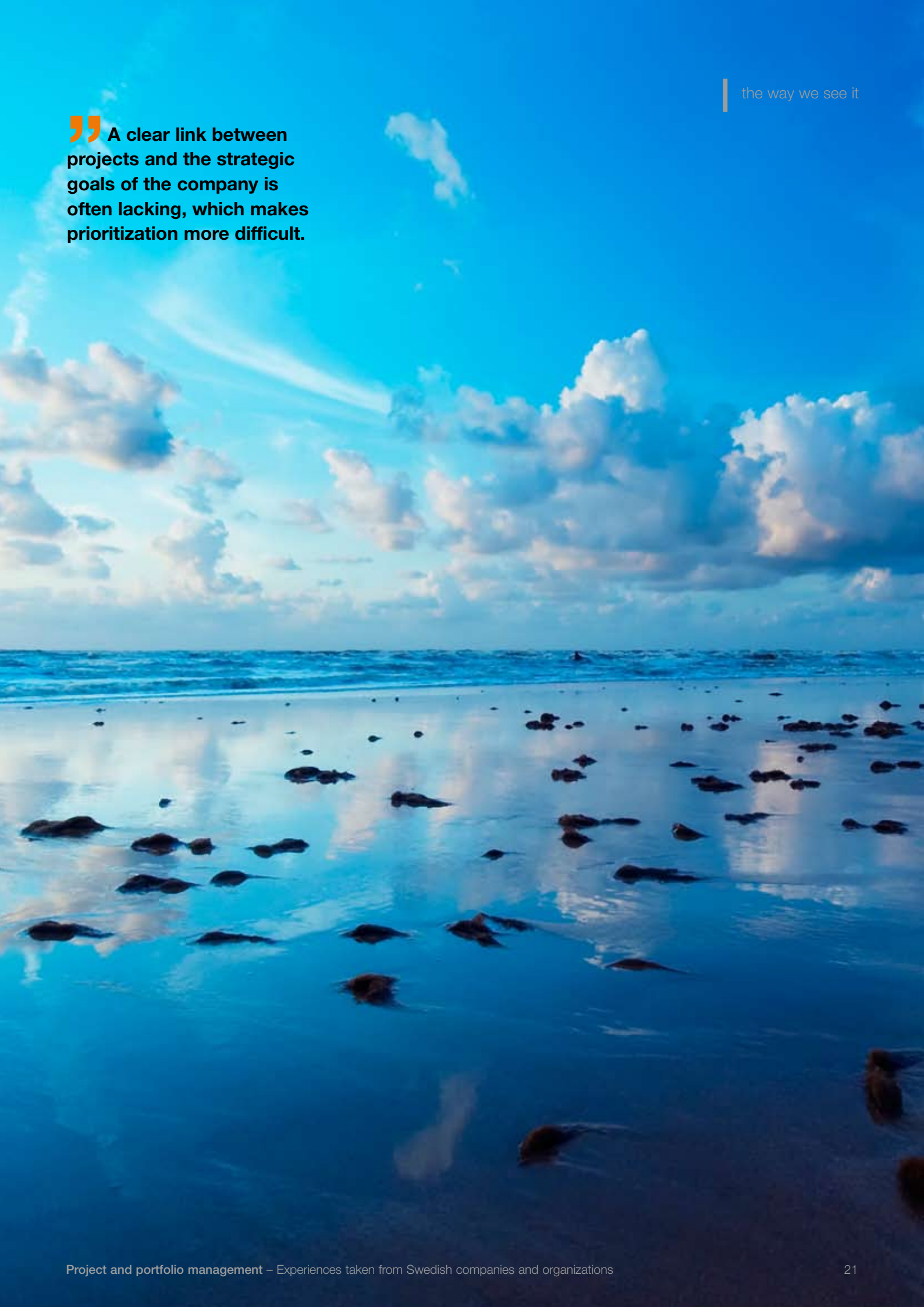
Following up results and effects in the business

The process for measuring and following up the results and effects of delivered projects is even worse. Most of the organizations say that they lack adequate methods and routines for this (80 %). A prerequisite for a satisfactory measurement is that the purpose/end results in the project directives are clearly defined, which often is not the case (71 %).

Figure 16 **Quality assessment of work practices in the companies' port folio and project phases**



A clear link between projects and the strategic goals of the company is often lacking, which makes prioritization more difficult.



In Capgemini's experience, Business Case drives the incentive to measure and follow up results and effects. Business Case is a supplement to an investment calculation in which also positive results of the investment are calculated. The aim is to create an assumption regarding what results can be achieved. Successful projects have created a balance where the given expectations are perceived as being credible and can subsequently be proven through measurement.

The difficulty in calculating and following up a Business Case can be attributed to a number of pitfalls. An arbitrary selection of the calculation model, double accounting of results and unrealizable process streamlining are examples of such pitfalls. The risk for starting the wrong project increases with Business Cases that are incorrect and too optimistic. For those projects that cannot be motivated with a Business Case, the supporting reasons are often based on risk aspects as well as laws and statutes to start the project.

IT tools

IT is used to guarantee the quality of information and to create more effective processes. Almost all the companies in the study have introduced IT for project and portfolio management in some form, but the study shows that this does not work that well. Just as with processes, methods and models, the way IT functions, varies in the different portfolio phases. IT in project implementation is considered to function best. On the other hand, there are indications that IT involvement in prioritizing and balancing projects does not work well. The same can be said for measuring and following up results and effects in the business (see Figure 17).

One consequence of a poorly functioning IT is that the processes become manual. A large amount of manual work gives rise to inefficiency and poor quality of information with the risk that decisions are delayed or poor decisions are made.

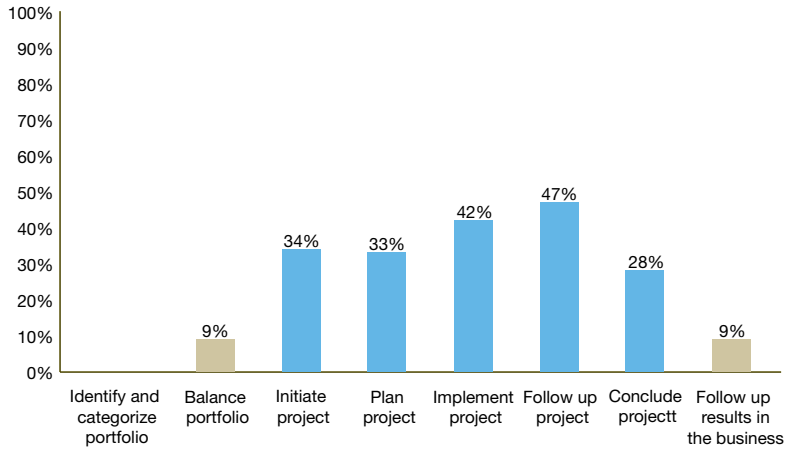
In the study, a number of obstacles have been identified as an explanation for why IT is not used or provides correct support for work methods. Essentially the study shows that IT is perceived as far too expensive and complicated or that it does not support the work methods (see Figure 18). If IT is essentially used for administrative jobs, not enough value is created and the benefit of using IT is perceived as low (2 %). Thus, it is often up to the individual to decide which tools are to be used.

In this day and age, when almost all activity is supported with IT, it is somewhat surprising to ascertain that IT is not better developed and is not used more with project and portfolio management, especially at the portfolio level. The IT system used today is the Office package, primarily Excel as it is deemed to be simple to use, is inexpensive and readily available.

Capgemini's observations and recommendations

In order to avoid unnecessary internal politics and "acoustic steering" where the person with the greatest power pushes through his initiatives/projects, the basis for the decision-making process must be improved. By introducing models for mutual prioritization of the company's strategic goals and by subsequently linking initiatives and project to these, improved conditions will be created for prioritization based on rational grounds; where necessary, carry out constructive "what-if" analyses, e.g. based on demands for reduced development budgets or a resource bottleneck.

Figure 17 Quality assessment of IT in the companies' portfolio and project phases



Capgemini's observations and recommendations

The purpose of an IT system is to simplify, automate and streamline processes and guarantee the quality of information. In order to get around the difficulty of deciding whether to introduce extensive IT solutions, it is proposed that IT be introduced progressively starting with those areas where it is most needed. Therefore, the solutions should be introduced for the prioritization and balancing of initiatives/projects as well as the returns creating a direct benefit for the management of the company. With increased commitment from the management, improved conditions for the implementation of IT solutions will be facilitated within other areas.

However, do not implement an IT system without first evaluating how it is to be used and make sure that necessary structures are already in place. Future development needs (volume, project interdependencies and implications for requirements of resources), processes and work methods for management and implementation, access to in-house versus external competence, roles and responsibility, the need for a project office, are all areas that affect the choice of solution and rate of implementation.

Resources and Competence (HR)

Resources and competence include the supply of resource and competence at both the operative and strategic level. The operative level refers to staffing of projects and programs. The strategic level refers to the supply of internal and external resources over time and how these resources should be procured. The area even includes capacity building and career paths.

- Projects and programs refer to all relevant instances such as steering group, project management and project group and where appropriate, programs and project offices etc.
- The supply of resources refers to how the projects and programs should be planned, i.e. the number of resources with a specific competence.
- Competence refers to the combination of knowledge and experience as well as ambition and attitude.

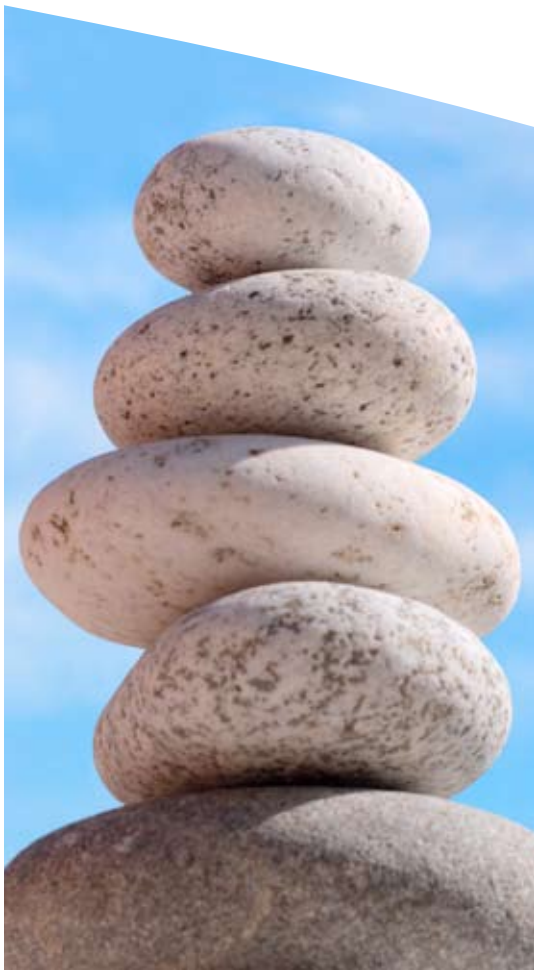
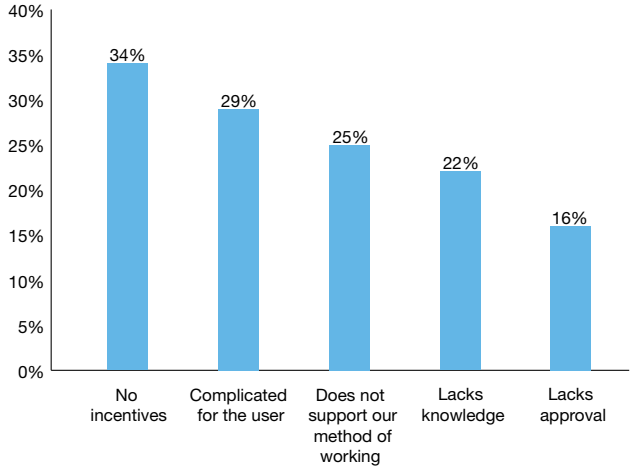


Figure 18 **Obstacles for using IT**



”The companies need to recruit external project manager competence.

Supply of resources

The study shows that companies need to recruit external project managers, partly to gain access to the right number of resources and expertise, partly to limit the risk of having under utilized resources (see Figure 19).

The external expertise that is normally in demand is linked to specific methods and models as well as experience in delivering projects. Expertise relating to the business is largely handled by the company's own staff. The study shows that there is a need for combining both internal and external resources in order to increase the total competence level. The study shows the purpose of external resources is to add competence in order to structure thoughts and ideas as well as package solutions (strategies, control models, processes, requirements specifications, organization, architecture, etc.).

Historically, projects have been used to a relatively small extent and then with temporary resources from the business. As the number of projects increases, there is a greater need for clarification with regard to roles, competence requirements and career paths even within this area.

Capgemini's observations and recommendations

By introducing tools for project and portfolio management, conditions are created for successfully analyzing not only the current situation but also forecasting future resource and competence needs. In this way, the right conditions are created for introducing strategic resource planning based on what the internal resource structure should look like and which resources should be procured externally.

Project staffing

According to the study few companies staff their projects based on documented competence (32 %). Rather, staffing is based on personal and subjective opinions about the capability of the individual. Formal competence of the company's own resources is less important, highlighted by the relatively low frequency of certification of the company's own project managers (25 %). As there are risks for the internal project manager to run "negative projects", and it is not considered a good career move to work in projects (64 %), there is no incentive for acquiring or developing the best employees to run the project. Thus, the increased need for competence is managed by contracting external resources with documented experience where requirements for certification are in demand. As a supplement to certification, knowledge and experience pertaining to the customer's culture, should weigh heavily as well as trade knowledge and experience from similar projects[1].

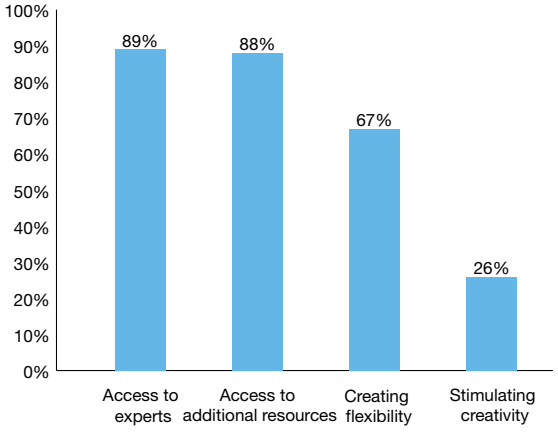
A consequence of staff being selected based on subjective criteria, is that there is an increased risk that the project will include individuals that do not have the ability to carry out the tasks. Gartner, who points out that usually the selection of project managers will be based on the availability of internal resources rather than competence[2], also supports this conclusion.

Capgemini's observations and recommendations

Have a requirement for the certification and structured documentation of staff competence in order to make a rational assessment when staffing projects. This applies not only to project managers but also other project resources.

When staffing project resources, it is important to understand what type of project or program is to be executed as competence requirements vary. For example, downsizing projects have completely different competence requirements and know-how than an IT development project.

Figure 19 Motive for utilizing external resources in projects



[1] Gartner Research 2008-12-04, ID Number G00163351,[2] Gartner Research 2008-12-04, ID Number G00163351

Knowledge of project models within the companies is reasonably good however they have difficulty in actually employing them.

Competence in project offices

In order to run project offices, the study shows that the companies' project offices do not have the right prerequisites to carry out the work due to shortcomings in competence (50 %) as well as access to resources (73 %). As mentioned in the section about organization (see page 14), there is an ambition to change the commission and role of the project offices to be more strategic and advisory. This commission also includes the task of developing the company's project culture, which requires an understanding of processes and project models. In Capgemini's experience, knowledge of project models within the companies is relatively good but there are difficulties in actually using them.

Capgemini's observations and recommendations

The task of developing the competence of the project manager and other project-related roles must be handled in the same way as for other roles in the business. The project manager role requires specific competencies and should be treated as its own professional guild, preferably including the function of running the development of an area of the business as well as the individual.

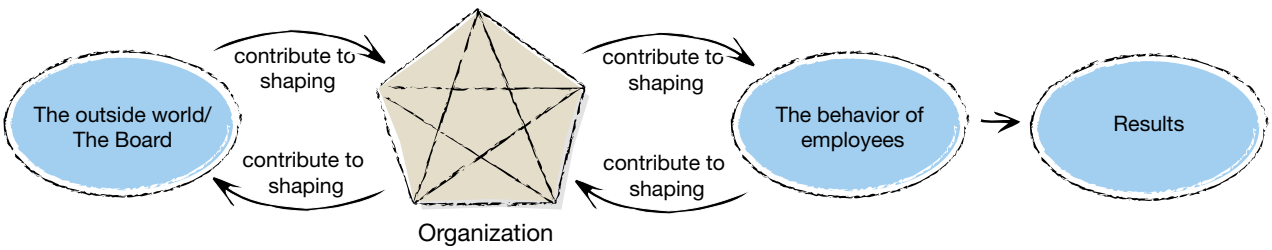
Project culture

Culture is defined as the deeper level of basic assumptions and beliefs that are shared by members of an organization, that operate unconsciously and define in a basic taken-for-granted fashion an organization's view of itself and its environment. Culture is what is "ingrained" within the organization and governs the behavior and the actions of employees through not only visible but also invisible rules concerning what is right or wrong in different situations. In this study, we limit ourselves to the culture that can be linked to a project and portfolio management.

The culture that exists in a company can be traced back through its business history, including employees and managers, processes and work methods, strategies etc. By analyzing the components in "Star Model" from a holistic perspective, the culture can to a large extent be understood and explained.

Those businesses that succeed in bringing about accepted ways of working have created their own organizational components, based on ideal values so that they support each other and are in line with the strategy. For example, companies that set a value on collaboration in order to maintain a high degree of efficiency in production

Figure 20 **Model of explanation for Star Model**



should shape their processes so that it is clear and distinct how different roles should interact.

Furthermore, reward systems should not focus on individual performance but on the group performance. During recruitment, team players should be selected in preference to individualists etc.

Much of the work carried on in the companies takes place in the form of projects without a clear and conscious project culture. The study shows that there are a number of cultural aspects that can explain the companies' current view of its project activities:

1. Power structures
2. Control systems
3. Organizational structure.

Power structures

In Capgemini's experience, power is a strong driving force for most individuals, not least for those in a managerial and decision-making position. Power is manifested through power of action and making decisions. Therefore it is important that managers are those who start projects, and take part in decision-making forums such as steering groups.

Mandate and responsibility are linked to the line organization, making it more difficult to take responsibility and feel commitment for inter-departmental projects. It is not unreasonable to assume that the line organization's operative issues often receive greater attention and greater priority due to their short-term focus.

A consequence of this is that members of a steering group do not always have time for making necessary preparations and the risk for making incorrect decisions or no decision at all increases. By far the greatest reason for failed projects, in addition to unclear project goals, is a lack of commitment from the members of the steering group (67 %).

In Sweden there is a decision-making culture that is driven by consensus and reluctance to end up in a conflict situation. The study shows the number of projects that appear to be adapted to their own mandate. By limiting the scope of a project, the risk for personal conflicts with managerial colleagues is reduced and there is no need for adaptation to other parts of the business. A consequence of this is that more projects are started with numerous interdependencies rendering portfolio control more difficult.

Capgemini's observations and recommendations

By implementing standing decision-making or steering groups alternatively a joint steering group for interdependent projects, greater responsibility and commitment is created. This guarantees greater commitment, more dedicated support for the projects and less risk for incorrect decisions.

"Companies that value collaboration should shape their processes so that it is obvious how different roles should interact.

Control systems

The companies' control systems are primarily designed to follow up individual projects and their deliveries with a focus on the budget and what is utilized. The benefits of the project's deliveries, which often come after the projects have been concluded and often occur during several phases of the project, are not followed up to the same extent. In most companies, the process for identifying, verifying and realizing benefits does not seem to be an integral part of the control system.

- Identifying a benefit involves identifying not only financial but also non-financial aspects and describing them in a so-called Business Case.
- Verifying benefits requires continuous monitoring and evaluating that the planned and ongoing measures/projects will provide the desired results and at the same time signaling when there is a need to re-examine the project portfolio.
- Realizing benefits requires guaranteeing that the benefits actually occur.

By using the management system to monitor what is comprehensible, i.e. the individual project (budget follow-up) and not the business benefits, creates problems not only before and during but also after the execution of the project. There is a risk that the wrong project is started, shut down too late and that the costs escalate.

Capgemini's observations and recommendations

By keeping an eye on results it can be ascertained if goals will be achieved within the allocated budget for ongoing and planned projects or if additional measures are required. It is just as important to introduce systems and processes in order to obtain early warning signals so that corrective measures can be taken in time.

One example is to supplement traditional time reporting with an estimation of time remaining.

Organisational structure

Besides the setting up of the project or program, there must be a recognized network for all participants, either formal or informal, e.g. a project manager network. If there is no recognized network for project managers and project-related resources, competence development and the establishment of a common project culture will be more difficult to establish.

The study shows that project managers are not perceived as a professional group; project work does not promote careers and it is not obvious to bring project managers together to facilitate their competence development and exchange of experience.

Capgemini's observations and recommendations

Staff with similar competencies working on the same processes, should work in the same organization in order to get the best out of them. Discussions and exchange of experience is facilitated if there are natural meeting places, forums, databases or a geographic proximity.

The companies' control systems are primarily designed to follow up individual projects and their deliveries focusing on the budget and what is utilized.

Summary of observations and recommendations

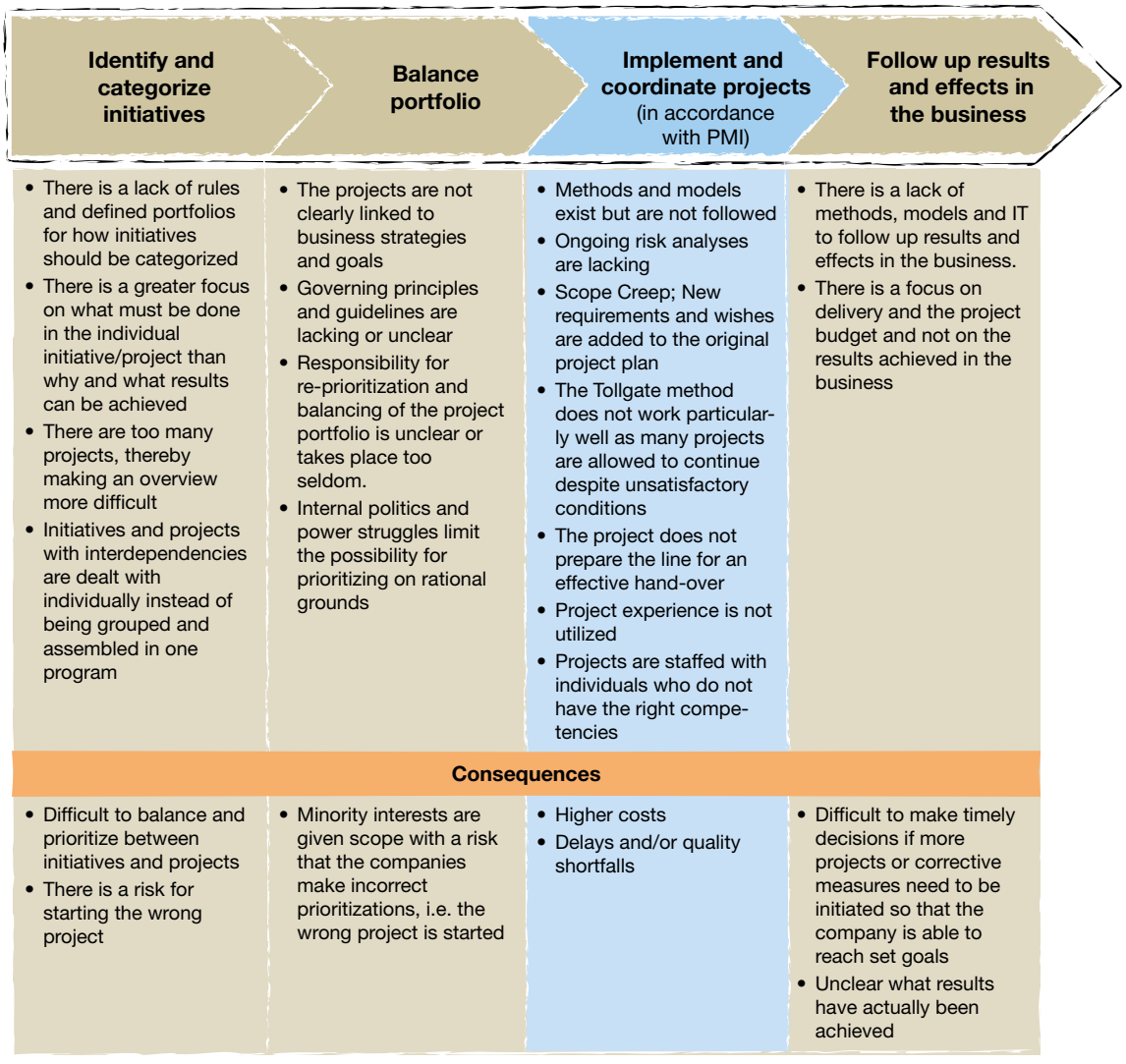
Keep an eye on the shortcomings and do the right thing from the beginning.

The study can be summarized in a number of shortcomings that can be linked to the different portfolio phases. The problems that arise during the implementation of the project can often be traced to the introductory portfolio phases (see Figure 21).

Doing the right thing from the beginning and following up afterwards will lower the total costs for implementing projects and for guaranteeing that the benefits are achieved. In order to succeed, the management team will have to take on greater responsibility for:

- Starting the right project
- Increasing the focus on achieving efficiency goals
- Creating a project culture
- Changing the balance of power between the line and projects.

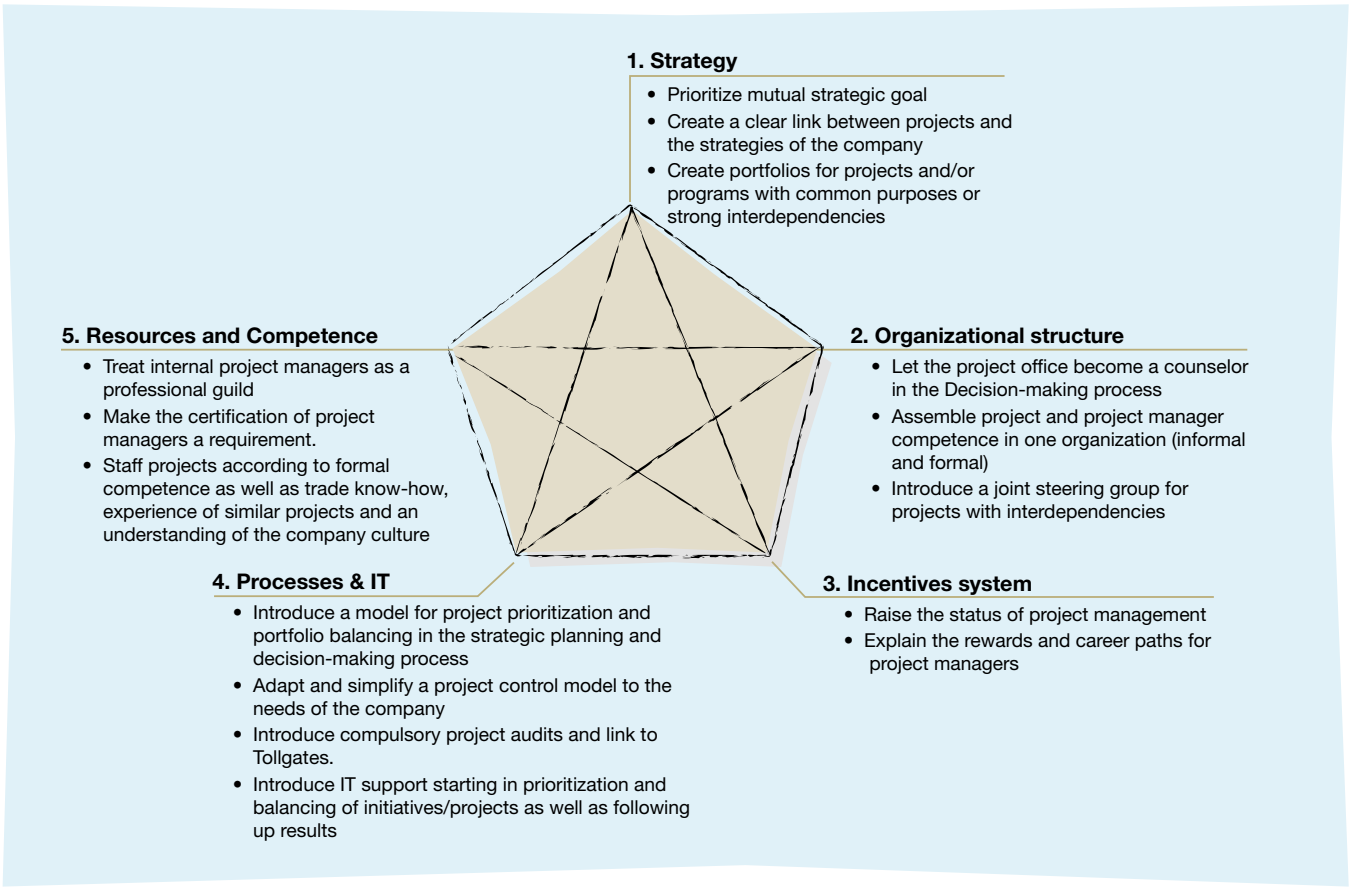
Figure 21 **Observations linked to each portfolio phase**



Based on the above observations, consequences and requirements, Capgemini's overall recommendation is to increase the focus on program and portfolio management instead of on the individual project.

The following proposals have their inception in the general picture that emerges from the analysis and can be perceived as a "smorgasbord" of larger and smaller measures (see Figure 22). The measures that are relevant in the individual case and how they should be introduced depend on the company's individual situation and requirements.

Figure 22 **Possible measures for improving the professionalism of the company's project and portfolio management**



The set-up and methodology of the study

Definition and planning of project information acquisition – Analysis and production

The acquisition of information was based on a questionnaire with standardized questions and statements, partly to make it easier and quicker to answer the questionnaire, partly to serve as a basis for a quantitative analysis. The questions were based on available litterature and Capgemini's experience within the area. In order to enhance the quality of the analysis, there was also an opportunity to include personal views in regard to each question/statement.

The questionnaire comprised several questions within different areas such as:

- How are initiatives and project prioritized and by whom
- How is the project, program and portfolio work prioritized
- What rewards exist to stimulate desired behavior in projects, programs and portfolios
- How do common processes, methods and work procedures function
- How do planning and the procurement of resources and competence function
- What is the project culture like.

The analysis has been carried out in collaboration with JIBS (Jönköping International Business School), which has taken place in varying degrees during the three stages of the study. The first stage was run by JIBS and consisted of a descriptive analysis of the responses to each question. Stage two involved interpreting the answers and compiling observations based on a selected analysis model – the Star Model. This work took place in collaboration between JIBS and Capgemini and resulted in a published Master's thesis. Capgemini was responsible for the final stage involving a more detailed analysis, pitting different questions and answers against each other in order to see new contexts and creating a better understanding of the causes of the problems in question. The analysis has subsequently been verified by comparing it with experiences not only from the academic world but also practical experience from Capgemini's global network for project and portfolio control.

Figure 23 **Work phases**

About Capgemini

Capgemini is a global company listed on the Stock Exchange with headquarters in Paris. Shares are quoted on the Paris Stock Exchange. Capgemini's services are divided up within four disciplines; Capgemini Consulting, Technology Services and Outsourcing Services as well as Local Professional Services (Sogeti).

We offer advice and support in changing and developing the business of our customers, including from strategy development to the implementation of processes, organization and IT.

We offer innovative solutions through our expertise within different functional areas and in combination with our in-depth industrial know-how.

Capgemini has a quality system, DELIVER, which is based on "Best Practice" comprising processes, methods and models within all areas within which Capgemini is active. Within the area of project management, DELIVER contains models adapted to manage not only IT projects but even business development projects as well as programs. These models are based on PMI and Capgemini's vast experience of running projects. Capgemini has linked a certification program to these models at four certification levels where know-how, in combination with Capgemini's experience and the size of the task, form the basis for an evaluation of the level of certification. Capgemini has a "Centre of Excellence" in the Netherlands that runs and develops Capgemini's joint concept pertaining to project and portfolio control.

The centre also runs training courses for the use of applications and project methodology that are conducted on a regular basis in England and the Netherlands for both customers and for Capgemini's project managers. Capgemini is not tied to any particular package, and has competence in a number of different packages for project and portfolio management.

In order to fulfil the increased demands and requirements of our customers to introduce standards in their business, certifications of a number of other models such as Prince 2 (project management) and MSP (program management) also take place. These models are even linked to each other and to other known standards such as ITIL etc.

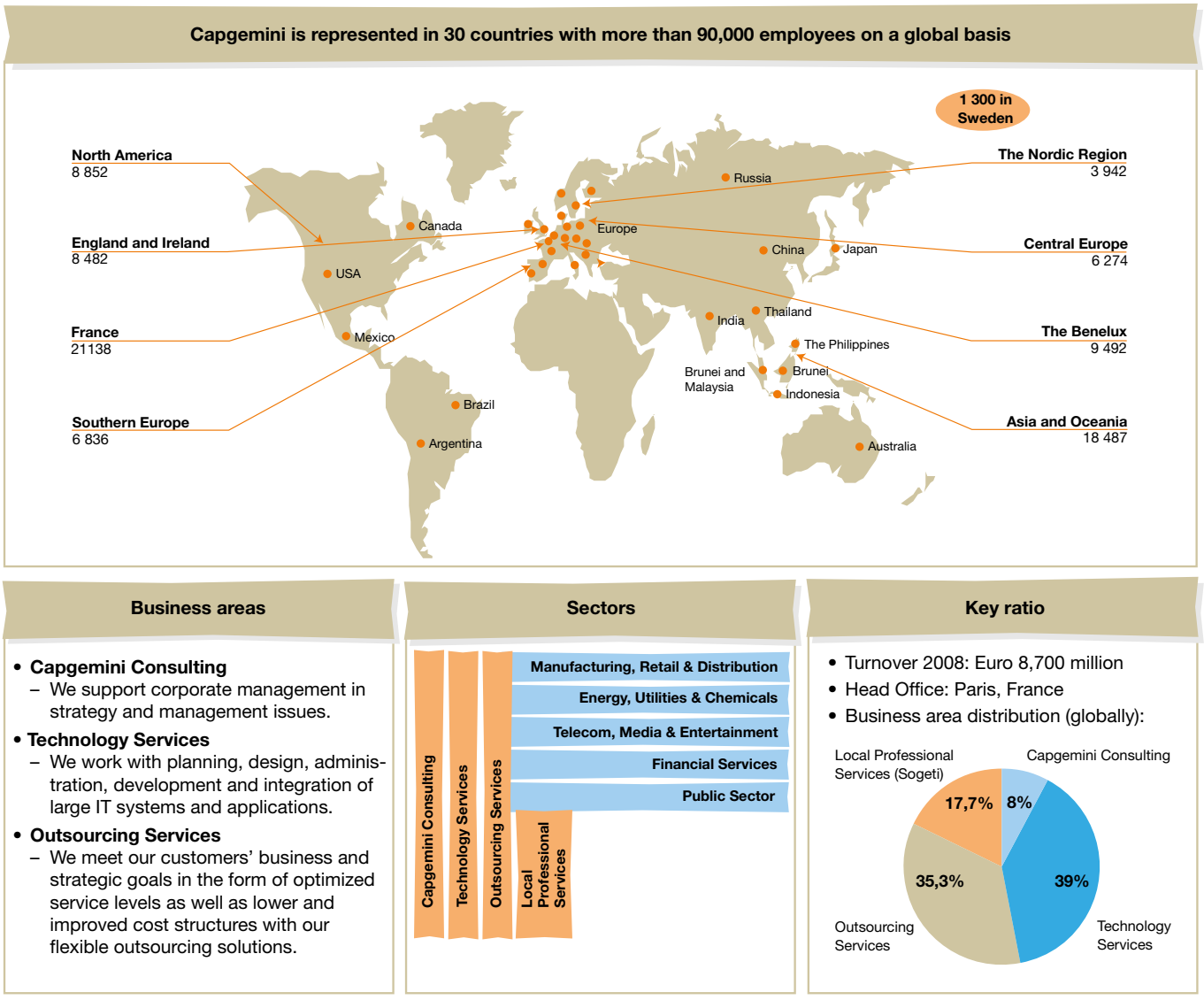
Through Capgemini requiring certification of professional project managers, a high level of competence is achieved. Capgemini Sweden, has a business called B-Tech with consultants that have deep experience of working at all levels – project, program and portfolio – and have mastered established project models that are commonly in use such as Prince2, Props and PPS at the project level and MSP at the program level.

About Capgemini and Collaborative Business Experience

Capgemini is one of the world's foremost suppliers of consultancy, technology and outsourcing services. We make it possible for our customers to change their business activities and achieve outstanding results with the help of technology. Our customers will be able to achieve freedom in the marketplace through our unique way of collaborating - Collaborative Business Experience – and through our global delivery model, Rightshore®, offering the right resources in the right place at a competitive price. Capgemini has offices in more than 30 countries with over 90,000 employees globally, of which approx. 1,200 are in Sweden. In 2008 we had a turnover of Euro 8,700 million.

More information can be found at **www.se.capgemini.com**

Figure 24 **Company facts about Capgemini**



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