1 IT Governance – Creating the Organizational Framework for Value Enhancing IT

The cost and benefit potential of IT can only be fully developed if the IT department is aware of the needs and objectives of users and is able to make proactive proposals for meeting those needs. This requires active cooperation between the IT department and users, and this must be firmly anchored within the organization of the company. IT governance lays down the 'IT highway code' with the aim of managing the deployment of IT effectively and efficiently. Controlling IT begins on the demand or business side, which sets the priorities for IT investment in its role as a recipient or customer of IT services and as such reaps the benefit of the value enhancement, and ends on the supply side, usually the traditional IT department, responsible for providing services such as PC support, running data processing centers or developing software. Holistic IT governance integrates both perspectives and coordinates them perfectly with one another.

In practice, this is still not the case in many companies today: Our experience of the *demand side* shows that IT competencies and responsibilities are not assigned systematically and important strategic IT processes are often defined in an arbitrary manner or entirely by coincidence. One example of this is the following: In a survey of a large group, each of the subsidiaries was asked who, in their view, was responsible for the eminently important (in terms of its contribution to enhancing value) process of IT innovation management. The answer was as baffling as it was sobering: 42 percent considered that they themselves were responsible, one fifth considered it to be the CIO's job and one fifth thought it was the responsibility of top management, whilst some 16 percent thought that if fell to other units such as corporate planning, controlling and others. There could be no question of a homogeneous understanding of the role of IT within the company, let alone of concerted and controllable processes. This lack of concerted effort results in business units carrying out the same work in parallel and at best, with less than perfect results.

This example shows the typical dangers for conglomerate-type companies, where IT is in use in several business units in parallel, not only on the demand side but also on the *supply side*. In one large, international group, consisting of a management company and several regional subsidiaries and affiliated companies, there were more than ten internal IT service providers and three internal IT departments, all offering largely identical services at the same time, such as developing and maintaining complex individual software, introducing SAP, running data processing centers and providing network and frontend services – sometimes even competing with one another internally.

The repercussions for the whole group are clear:

■ Cost-intensive efforts to develop innovations are carried out more than once. Scare staff resources are not bundled but 'wasted' by doing the same work twice.

■ Upgrades or new versions of standard software are carried out twice and use a great deal more resources than coordinated or concerted procedures would.

■ As far as the data processing centers are concerned, the subsidiaries and affiliated companies do not achieve the critical mass so essential for efficiency. Concerted efforts would achieve considerable economies of scale.

■ Each IT company or department buys its own IT services separately and often uses the same supplier. By bundling volumes, significant savings could be made here.

The list of negative effects for all the subsidiaries is even longer. Effectively controlling IT as part of a comprehensive system of IT governance aims to prevent such erroneous developments, but to do this a number of structures and rules have to be developed so that IT can be managed in a comprehensive and balanced way. The following issues have to be clarified as a priority:

■ What are the *basic principles* of IT governance? This also involves defining how roles are assigned between the business units and the IT department.

■ How the basic areas of responsibility are assigned in IT governance and which *organizational units and committee*s play a role in managing and controlling IT? Based on each company's individual IT service portfolio, how are decision-making competencies and responsibilities for IT planning and controlling assigned within the group?

■ Which *processes* are used for IT governance? To answer this question we need to define suitable IT governance processes, lay down clear escalation procedures and distinct instructions for action.

Separating the organization of IT demand and IT supply

At the center of debates on IT governance these days is the question of how roles are to be allocated among the business units and the IT department: Should the so-called 'delivery units' (supply organizations that develop, run and maintain systems) also be responsible for controlling IT? Or should control be carried out by the business units, i.e. the business side of operations that points IT in the 'right' direction – a direction that supports the business? Neither alternative is ideal:

Controlling IT via supply organization leads to a conflict of interests, since we have noticed that in the majority of companies the IT department is managed in the interests of the supply organization and not in the interests of the core business of the company. Here is an example: The IT department of a mechanical engineering company (now divested and a company in its own right) was no longer working to full capacity following the completion of its Y2K project and currency conversion to the euro. The IT team, which had taken on more staff to cope with these two large-scale projects and in view of the e-business hype of the late 1990s, was suddenly 'unemployed' for a lot of the time. To keep his team occupied and prevent his team from being realigned, the inventive IT boss initiated a number of IT development projects, however without a business case. He also omitted to discuss with the business units whether his IT projects were relevant for the

core business of the company. After the software development was completed, the upgrades were announced and implemented. The consequences were obvious: The IT staff had plenty of work to do; the business units were provided with a new solution, whose purpose and relevance was unclear, and after the monthly overall costs were allocated, the units were burdened with high IT costs – a solution which suited the IT department fine.

At first glance, it would seem that *controlling IT via the business units* is a better solution because this ensures that IT departments must orient themselves towards the core business. However, the question is, just who exactly is supposed

Tips for setting up a demand organisation:

- Appoint decentral CIOs to the business units: Larger companies should establish decentral CIOs in addition to central CIO positions in order to provide a powerful counterpart to the supply side.

- Position the demand organisation towards the top of the hierarchy: To be able to work effectively with the supply side, the demand organisation should be positioned high enough up in the hierarchy.

to be responsible for it – a member of the board responsible for IT, or all the top managers interested in IT, or just a selection of them? This variant has often failed in practice on account of the member of the board and top managers frequently not having the necessary IT competence to effectively control the IT department. Furthermore, they also do not have the time or the interest to really get to grips with the IT issue.

How can we solve this dilemma? For most companies, the second option is generally the better solution. To tackle the problems outlined above, a 'demand organization' is set up on the business side, headed by a CIO, who usually reports directly to the CEO or an 'IT board'. The CIO's chief priority is to control and manage the IT department and also the supply organization.
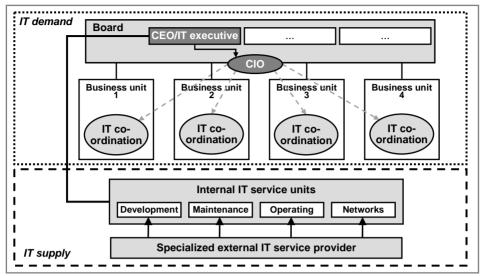
Figure 2.1:   IT demand and IT supply organization (example)

Depending on how large the company is, the CIO can fall back on decentral staff: In smaller companies, these are usually IT coordinators, who devote part of their duties in the business units to working under the CIO and controlling IT (figure 2.1). These IT coordinators are subordinate to their own supervisors for disciplinary and technical matters (see solid line), but for IT-related matters they also answer to the CIO (see dotted line).

Establishing centralized and decentralized areas of IT responsibility and IT control structures

In larger companies, especially those with group-like structures, i.e. with a central holding company and decentralized subsidiaries, there has always been the question of whether to centralized IT services or not. Opinions differ between the champions of a centralized control system, for instance via top management, and the champions of a decentralized system of control, for example, via the subsidiaries. The advantages of standardization (uniform solutions company-wide), harmonization (exploiting economies of scale) and efficiency all speak in favor of a centralized system of control. The champions of a decentralized system on the other hand maintain that IT might be more expensive this way, but it is a lot more effective, because 'local' IT units know what their business units need and can adapt IT better to local problems.

In practice it has proved sensible to neither central nor decentralize all the areas of responsibility. In fact, it is a good idea to weigh up the best approach for each IT service in turn. When doing so, both of the criteria applied when prioritizing IT services at group level are important (see also Part B, Chapter 2, IT Planning): (1) The strategic relevance of each IT service and (2) The synergy potential if coordinated company-wide. On one hand, IT services that strongly impact cost and quality of service or show a high potential to stabilize sales or boost turnover growth are of strategic importance. One example of this is the billing system of a telecoms company: its workability and flexibility when setting up new pricing models was a strong factor in the success of sales. On the other hand, high potential synergies are promised by IT services where the costs can be significantly reduced by bundling volumes, and where the required IT know-how can be bundled into supply centers company-wide. A typical example of this would be the data processing center services, whose costs can be primarily reduced using economies of scale whilst retaining the same standard of quality. Analyzing portfolios from the two perspectives of 'strategic importance' and 'potential synergies through company-wide bundling' produces three fields of action:

Tips for assigning responsibilities:

- *Open communication:* Centralizing areas of responsibility often leads to conflicts of interest. They must be dealt with and discussed openly.

- *Involve all those affected:* When deciding on responsibilities as part of IT governance, it is important to involve all those affected directly or indirectly.

- *'Strategically important' and 'synergistic company-wide':* IT services of high strategic importance and high synergy potential should be controlled centrally. Enterprise Resource Planning (ERP) or Customer Relationship Management (CRM) are often among these IT services. When introducing an ERP or CRM system in each of the decentralized subsidiaries of a group, up to 30 percent of launch costs can be saved as a result of 'template effects' during development and implementation .

- 'Non-synergistic': IT services that do not create synergies if coordinated company-wide should be decentralized – regardless of their strategic importance. These are often services developed by the subsidiaries themselves for individual purposes or applications that are only important for a specific area of the business. This is often the case with groups that include one or more 'untypical' companies amongst its standard subsidiaries. For instance, in a construction group that is made up of a number of building contractors and a construction subsidiary, the special construction systems are best left under the jurisdiction of the construction company. If however the IT service in question is of strategic significance for this business unit, the CIO of the holding company should be kept regularly informed by the CIO of the group management company and involved in key decision-making, for example, in the form of steering committee meetings.

- *'Strategically unimportant' and 'synergistic company-wide':* Typically, commodities – such as managing PC workstations or running data processing centers – are not strategic, yet promise a high degree of company-wide synergy potential. In such case, the question is less one of responsibilities, and more one of finding the right vertical scope. These kinds of commodity services are often bundled and outsourced. If they are to stay within the group however, it makes sense to assign one subsidiary the responsibility of providing the service for the whole group.

If the areas of responsibility are clear within the supply organization, suitable committees should be set up to ensure smooth cooperation between the demand organizations themselves and between demand organizations and the IT supply organization side. It is their job to identify innovative, strategically relevant IT projects and to undertake planning and controlling IT. In practice, a three-tiered structure of responsibility has proven to be the best solution, ensuring that duties are carried out in a timely fashion and the necessary decisions can be taken:

- The *CIO circle* represents the interests of the demand side and is the committee for dealing with company-wide IT issues and those issues that need to be coordinated. In this circle, the company-wide 'IT development plan' is drawn up as part of IT strategy (see Part A, Chapter 1, IT Strategy) and the IT budget for each business unit discussed and consolidated. (see also Part B, Chapter 2, IT Planning).

- To keep the CIO circle workable, it is important to delegate content and operational issues, for example, evaluating business cases. *Working groups* are ideal for this, headed by representatives of the demand side and if need be, supplemented by representatives from the supply organization.

- CIOs often do not have enough decision-making powers to take far-reaching decisions such as adopting longer-term innovation portfolios. For this purpose, it is a good idea to set up an *IT decision-makers circle*, consisting of the board members responsible for IT in the holding company and also those in the subsidiaries/affiliated companies. In smaller companies, business unit heads from the main applications areas could also be included in this circle.

This multi-layered committee structure ensures the horizontal cooperation between the representatives of the demand organization. It also guarantees integration into the linear organization with relevant decision-makers at management level. In sum, it interlocks efficiently and effectively with the organization of the company.

It has proven to be a good idea to use the instruments of standard customer-supplier relationships for cooperation between the demand and IT supply organization, rather than setting up a separate body to do this. This also includes regular performance meetings, at which the Head of Supply demonstrates the quality of performance to the CIO using the ratios defined in the service level contracts, such as availability or response time beha-

vior. Another example would be setting up planning rounds which decide on project proposals and determine which resources are needed on the part of the IT supply organization.

Defining IT management processes

The basic areas of responsibility must be consistently anchored in the IT governance processes. The processes necessary for managing IT do not vary a great deal in practice. In our experience, the following IT governance processes need to be defined:

■ IT innovation management

■ IT project planning and project management

■ IT controlling

The aim of *innovation management* is to identify and evaluate innovative IT issues throughout the company that are relevant for implementing corporate strategy. This process is a cyclical one, generally occurring at intervals of one to three years. 'Best practice' is a process that investigates the IT requirements of the whole company by using the cross current process:

■ *From the top down, from the 'whole-company' perspective:* Coordinator and process owner is the CIO, who puts together relevant issues along with senior executives from the main management company and evaluates them in terms of their cost-benefit ratio as part of a 'mini' business case (see Part B, Chapter 3, IT Performance Management).

■ *From the bottom up, from the perspective of the subsidiaries and affiliated companies:* Coordinator and process owner are the decentral persons responsible in the demand organization, i.e. the IT coordinators or decentral CIOs. Accordingly, it is their job to put together relevant issues along with senior executives from the subsidiaries or business units and to evaluate them in terms of their cost-benefit ratio as part of a business case.

The outcome of both currents is an individual IT roadmap – these are then consolidated into company-wide IT roadmaps at joint workshops in the demand organization and passed on to the management body responsible for approval. Any new IT issues that emerge are integrated into the IT services portfolio in order to determine competencies and areas of responsibility.

The aim of *IT project planning and project management* is to anchor control mechanisms to ensure that any innovations planned are implemented and coordinated company-wide. But only when it makes sense:

■ For all 'universal' issues, joint projects are conceived for implementing innovation projects. It is the CIO's job to draw up a company-wide portfolio of group-wide projects on the basis of the innovation plan and to coordinate this with management. Project managers have to be stipulated for each of these projects to control the implementation of the projects and monitor their success. Control (not the operational management!) of the group-wide projects is usually carried out by the CIO, sometimes supported by the decentral representatives of the demand organization depending on the object of the project. The IT supply organization receives the order and is responsible for processing it. The control lies with the demand side.

■ For all 'individual' issues, no joint projects are conceived for implementing innovation projects. The decentral representative of the demand organization will integrate such projects in the project portfolio specific to his unit. Project processing on the supply side is controlled decentrally only. The central CIO is only informed on the status and progress of the project in exceptional cases.

■ For issues that need to be coordinated, case-by-case decisions are made on whether an individual or a coordinated solution is needed.

The benefit of this step-by-step procedure means that a project can then be developed individually if it does not make any sense to coordinate it for corporate reasons or on account of efficiency. On the other hand, the projects that are truly worthwhile from a corporate perspective can then be controlled centrally. By coordinating these development services, we can avoid the wheel being reinvented in several places simultaneously.

IT controlling involves controlling IT from two perspectives – cost and performance.

■ On the cost side, budgets are planned from the bottom up in the business units, and then consolidated and checked by the CIO. Budget items for measures suitable for group-wide coordination are recognized, discussed and can then be implemented jointly if need be. The budget is reflected back into the business units where it must be approved by the person responsible for the outcome or the budget (see Part B, Chapter 2, IT Planning). After budgeting is complete, the CIO cost controls the overall budget, the central units in the demand organization monitor their own specific budgets and if there are discrepancies then counter measures can be taken.

■ On the performance side, indicators that provide information on the quality of IT need to be defined as part of a universal IT control system. Ideally, this would be carried out as part of IT performance management (see Part B, Chapter 3, IT Performance Management).

Via the performance side, the demand organization is fully informed of the status of IT at all times and has a valid information base for controlling performance through the supply side.

Designing and implementing an IT governance concept in an international group

A major international group with a typical group structure, consisting of one management company and several hundred subsidiaries at home and abroad, was looking to develop and implement a group-wide IT governance concept. IT was structured very differently in each of the subsidiaries: Some of the subsidiaries had their own, internal IT. Others had disincorporated their IT into a separate company. All in all, the group had over ten of its own IT service providers, a large number of internal IT departments and also worked together with nearly all of the key IT vendors. In the group holding, there was a corporate CIO for controlling IT from the group perspective and in the subsidiaries there were decentral CIOs for controlling IT from their own company perspectives.

The group was faced with the challenge of developing a group-wide model of governance that clarified the roles of the subsidiaries and institutionalized them in processes and a suitable structure of management committees. The aim was to:

■ reorganize IT group-wide in accordance with universal rules and standards,

■ establish cooperation between the subsidiaries on the one hand, and the subsidiaries and the management holding on the other,

■ consolidate and optimize the organization of the service providers, and

■ identify potential for optimization and bundling in the cooperation with external IT vendors.

Specialists from the holding company and staff from representative subsidiaries were involved in developing the system of IT governance. The remaining subsidiaries were involved in the coordination workshops. Thus, the new group-wide IT governance concept was created with the involvement of all those responsible and all those affected and could therefore make a considerable contribution to improving IT effectiveness and efficiency:

■ By carrying out a differentiated IT performance analysis, the central and decentral areas of responsibility in the demand organization were clearly defined.

■ The responsibilities were anchored in the IT governance processes. The various process variants were designed according to whether an IT service was under local or group responsibility, and anchored in an organizational guideline.

■ To coordinate all universal IT issues at group level, a CIO circle was set up, consisting of the CIO of the holding company and the CIOs of the subsidiaries, which met monthly or if any special matters arose.

■ The top decision-making body for all strategic IT issues was made up of all the members of the board responsible for IT in the holding company and in the subsidiaries.

- On the basis of the newly defined responsibilities, coordinated development initiatives were implemented, which amongst other things were able to contribute to using standard templates to reduce project costs.

- The strategic IT service provider was selected from amongst several internal IT service providers, and the IT services were stipulated which were to be bought exclusively from the strategic provider. In addition, a consolidation roadmap was set up to clean up the IT provider landscape.

Key to the success of the successful introduction of the new IT governance was the intensive integration of all those involved. A sober, emotion-free discussion based on cost-benefit ratios and the distribution of attainable effects lead to the decision-makers giving their much sought-after approval of the decisions made.

Checklist: Does your company have a value-oriented system of IT governance?

Yes

- Is there a coherent and universal concept on IT management with a clear distinction between IT demand and IT supply? ❑

- As the demand side of your company, do the business units possess the required competencies and powers of decision to manage IT? ❑

- Does the demand side have the last word on IT investments? ❑

- Are the areas of responsibility between the supply and demand sides clearly differentiated and are there a 'proper', formalized customer-supplier relationship? ❑

- Are decisions to centralize or decentralize taken carefully in your company and based on fact and not taken simply on principle? ❑

- Have clear processes been defined for IT innovation management, IT project planning and project management, and IT controlling and have these been clearly communicated? ❑

- Do the IT governance processes really work in practice? ❑

- Does cooperation between the business units function well in relation to IT? ❑

- Do the demand and supply sides work together smoothly and without problems? ❑