How to Set Up the IT Function for Cost Optimisation

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While previously found in the peripheral parts of organisations, IT now enjoys an increasingly important role in corporate central management. Consequently, the ever-growing costs of IT need to be properly managed and expressed in terms that business leaders understand. Issues around how to effectively structure the IT function are prominent and scholars debate and theorise around the virtues of a pragmatic and well aligned IT governance model.

Researchers have extensively covered individual topics relating to IT costs and their financial viability, such as investments in cloud services or the financial impact of IT outsourcing. Likewise, the organisational setup of the IT function, and its challenges in connection with emerging technologies have too been investigated. In recent years, there has also been an influx of research into the business value of IT and how businesses should cope with the increasing alignment of business and IT. Nevertheless, there are few scientific studies which take a holistic approach in connecting these topics to one another.

In industries where IT has a strong connection to the companies’ delivery (e.g. finance or insurance), the alignment of business and IT differs from industries where the business does not depend on IT to the same extent. In manufacturing, the idea of having an IT function which contributes to the top-line growth of the company is rare. Instead, IT is primarily seen as a cost centre that is the frequent target of cost reduction programmes. Therefore, having control of IT costs is fundamental and a prerequisite to be able to adapt to future IT trends.

Adding to extant research in the field of IT cost optimisation by connecting individual topics such as IT governance, IT outsourcing and IT chargeback, the author of the master’s thesis How Should IT Be Set Up? proposes a framework (see figure 1) which places the major topics relevant to IT cost optimisation in their managerial context. Thereby providing a generic overview of the current IT landscape in a manufacturing company and the dimensions in which it affects overall IT spend management.

The idea is that to control costs, and eventually be able to optimise them, an analysis of the lifetime of the costs is needed. Therefore, the origin of the framework is set at the very emergence of the cost and it ends at the cost’s final ‘decommission’. The discussion is structured around the four major areas (highlighted in black in the framework): demand organisation, supply organisation, chargeback and evaluation.

IT Cost Optimisation Framework

The growing importance of the role of the IT function has drawn the attention of managers and executives, not to mention that of CFOs. Consequently, the previous idea of a black box of IT costs has become increasingly scrutinised – specifically in the wake of events such as the burst of the dot-com bubble and the financial crisis of the late 2000s. Decentralised IT structures are costly and inefficient therefore rationalisation opportunities have been recognised by companies. Through centralisation and consolidation of IT infrastructure and services, costs can be reduced.

In the efforts to achieve these, often speedy, cost reductions through centralisation, the processes of identifying and prioritising investment opportunities have become more complex. At the same time, a centralised IT structure that spans over every business unit necessitates, more than ever, an efficient development of systems. In short, there is a growing pressure on the central IT function to be running lean and efficiently.
It is the challenge to balance the desire to achieve both effectiveness (making sure the IT function is doing the right things) and efficiency (making sure the IT function is doing these right things at a low cost and with a high output) that motivates the separation of the first two areas of the framework: IT demand and IT supply.

**Demand Organisation**

Demand is identified in the line business and when it enters the IT function in the form of projects that have been filtered through an investment prioritisation function, their connection to an individual business unit is translated into a connection to the process organisation. The responsibility of the demand organisation is therefore to translate the business needs into projects and services that can be delivered by the supply function. The author highlights six areas of specific importance in setting up the demand organisation, as well as practical guidance in each of them, of which a selection will be presented here.

Centralisation of the IT function has led to questions about how to categorise investments into different groups. Three groups are proposed: Run, Develop and Innovate. The Run category concerns costs for running the current systems, Develop concerns costs for developing new capabilities and Innovate concerns projects with business cases that show great potential but less certainty of success. A budget cap should be set per process and investment category rather than per division or business unit. In other words, instead of saying that division A or business unit B is allowed to spend a certain amount on each category, the discussion should be around how much a process, such as sales or marketing, is allowed to spend on each category.

In order to correctly prioritise and evaluate investment decisions, the IT demand organisation needs to consist of business stakeholders, e.g. the process owners, and not IT employees.

The author also discusses the importance of clear and complete cost registration, different methods of quantifying non-financial benefits in business cases and success and failure criteria in the evaluation of investments.

The last of the six parts is dedicated to the sourcing environment and how companies, after having struck the large single-sourcing deals that followed initial centralisation efforts, now are experiencing a shift towards multi-sourcing environments. The risk of an erosion of the retained IT function as well as technological lock-in of single-sourcing deals is discussed in relation, first, to the management complexity of a multi-sourcing strategy and, second, to the challenge of the increased labour cost of an in-sourcing strategy (i.e. opting for a large internal IT function).

**Supply Organisation**

The responsibility of the supply organisation is to deliver projects and IT services to the company. Contrary to the demand organisation, which is the interface to the business line, the supply organisation may be structured around competencies or business processes in order to take decisions which are in the best interest of the organisation as a whole rather than a single business unit.
The supply organisation is responsible for designing, building and running the IT services in the organisation. In order for it to effectively be able to do this, it is a prerequisite that IT infrastructure strategy decisions remain in this organisation.

Application management concerns the support, maintenance, change and enhancement of the applications in the application portfolio and should also be under the responsibility of the supply organisation since the applications are the interface between the processes and the IT infrastructure. Different applications may need to be integrated and if an application portfolio rationalisation project needs to be undertaken, this function plays a key role. The importance of this function is specifically emphasised in companies with a highly federated structure.

**Chargeback**

If the demand organisation has the responsibility of encoding line business requests into process services that are then delivered by the supply organisation, the chargeback system is the way in which these services are decoded into a financial impact for the line business organisation. Without a chargeback system, there is no way to connect requests to the IT department with accountability for the operating costs of running them. Unquestionably, it is the centrepiece in the effort to provide financial transparency in terms of IT costs throughout the organisation.

An IT department which reports all IT costs as overhead to the business organisation is the extreme example of an immature chargeback system. Conversely, the aim should be to measure the majority of service consumption with a metered usage approach. This provides a host of benefits such as providing incentives for users to reduce their consumption of IT resources (and in doing so reduces overall IT spending) and establishing a basis for performance measurement and administration of services.

**Evaluation**

Business cases need to be followed up on, both on the financial and non-financial aspects, and there have to be defined standards for how to conduct these follow-ups. Budgets need also be followed up on, not only yearly and quarterly but over the whole lifetime of the project or application. If budgets for applications are not made for their entire lifecycle, the risk of ending up with large unexpected expenses becomes greater. Even if budgets for the development of applications are made yearly, the investments are often concentrated around specific times.

**Conclusions**

This research makes a contribution to the body of research concerning IT cost optimisation in large manufacturing firms by providing empirically validated theories on how to holistically approach IT cost optimisation. The findings suggest that companies need to detach IT activities concerned with running the current systems from the need to invest in new technology – both on the delivery side and the demand identification side.

The first managerial implication is to set up a centralised demand organisation which translates requests from business units to the process organisation. Prioritisation of projects should be discussed in terms of whether they are running or developing the business and their budget caps set per process, not per business unit. A partial decentralisation of the IT governance, where a slice of the budget is owned by the business units, is also proposed to promote rapid adoption of new technological solutions.

The second managerial implication requires the central supply organisation to be set up to mirror the process organisation. In order to be an efficient provider of internal services, IT infrastructure strategies should be in the hands of the supply organisation. IT services need to be priced at competitive rates which necessitates a chargeback model of the type metered usage to be implemented – a model which is also a prerequisite to achieve cost transparency and accountability for IT costs.

Managers are recommended to assess their company’s approach to IT cost optimisation holistically and to use the framework presented as guidance. A substantial increase in cost control can be achieved with significant cost reductions in overall IT spending as a result. The major implications are outlined in the conceptual framework.