Deriving business value from cost allocation and portfolio management

CONTENTS

P. 6
Cost allocation
How to structure a transparent and effective IT cost practice and ensure efficient demand management

P. 9
Portfolio management
How to manage your portfolio of projects and business applications and ensure a business value awareness

P. 15
Business process mapping
How to ensure IT resource effectiveness through efficient business processes

P. 20
Governance
How to ensure a company-wide IT cost dialogue
Table of contents

Introduction ........................................................................................................... 3

CHAPTERS
Cost allocation .................................................................................................. 6
Application portfolio management ................................................................. 9
Business process mapping ............................................................................... 15
Governance ....................................................................................................... 20

What is next? 5 actions for your organisation .................................................. 22

CASES
Case: A growth organisation ............................................................................ 24
Case: A large global organisation ..................................................................... 26
Case: A Nordic multi-affiliate organisation .................................................. 28

APPENDIX
Appendix 1: Pricing models ............................................................................ 30
Appendix 2: Project life cycle ............................................................................ 32

About the authors ............................................................................................... 34
Introduction

How to improve cost effectiveness and cost awareness through portfolio management and cost allocation
by Rasmus Ingemann and Michael Holm Larsen

**THE IDEA IN BRIEF**

**The problem**
Cost allocation drives procurement behaviour. Hence, lack of cost allocation may lead to suboptimal demand.

**The argument**
Effective control and execution of the cost allocation process pave the way for efficient demand management. Impact on a business level as well as on a behavioural level requires improvement of cost effectiveness and cost awareness through application portfolio and business process management as well as cost allocation practice.

**The solution**
It is critical to have the right governance and organisation in place to ensure cost-effective applications in a robust application portfolio that satisfies business needs. It is important to have an agile governance of the portfolio of application and process enhancement initiatives underway in the organisation to facilitate effective and fair chargeback (or showback) mechanisms.

Impact

In this Viewpoint, we invite you to follow our approach to create value in the areas of the business where sourcing, procurement, IT and financial management take place. The value creation is centred around cost allocation and hereby relating consumers, requisitioners and functional purchasers of products and services to the actual cost base that is imposed by the purchase.

When introducing a cost allocation initiative in an organisation, the purpose of this initiative should be stated clearly and be related to the value drivers creating the anticipated impact.

The initiative aims at improving IT cost effectiveness and facilitating the organisation’s capability and practices in relation to IT cost awareness.

This Viewpoint will examine how organisations can improve cost effectiveness, leading to a series of business and behavioural benefits (impacts).

**Business impact includes:**
1. Better control of IT costs and IT spend
2. Better use of IT resources
3. Proactive management and utilisation of the portfolio of IT applications

**Behavioural impact includes:**
1. A more comprehensive, fact-based and nuanced dialogue in the organisation on IT costs
2. A thorough understanding of the IT cost practice
3. A common IT cost awareness and understanding of what drives IT costs

![Figure 1: Impact case structure](image-url)
In the following section we will address the question:

**How do I introduce IT cost and business value awareness in the organisation?**

In order to emphasise the importance of change, we have elaborated the business and behavioural impact drivers.

**Desired business impact:**
- Control of IT costs to stabilise/reduce cost development
- IT resource effectiveness based on transparent and efficient KPI-driven IT cost allocation process through showback/chargeback of IT costs to top management and line of business
- Overview of the IT landscape and maturing of the IT landscape through application portfolio management, including application-specific development directions and prioritisation

**Desired behavioural impact:**
- Establish a culture of IT cost awareness due to understood and accepted cost allocation. The cost allocation will be based on a fair and transparent model, including change of business unit and affiliate behaviour with regard to ordering, maintaining and shut-down of applications/services due to cost focus
- Enhance IT cost dialogue based on business unit IT cost templates and adopt solid “explain or defend” rhetoric in reporting supporting a fact-based IT cost dialogue in the organisation

- Develop ongoing IT cost practice with regard to data management, allocation, analysis, decision-making and management

The value drivers of the cost allocation can be related to exact key performance indicators (KPIs), which may govern the cost allocation initiative.

**Co-creation – our preferred customer interaction form**

For more than a decade, we in Implement Consulting Group has gradually developed our customer engagement and project approach, moving from expert advice towards a higher degree of customer involvement, and now has an elaborated and widespread co-creation practice as the DNA of the consulting practice. Hence, the customer has become an active and knowledgeable participant in a common process leading the engagement of the surrounding business network.

Co-creation was originally coined by the scholars Prahalad and Ramaswamy in their 2000 Harvard Business Review article “Co-Opting Customer Competence”. This idea has been developed further in their 2004 book The Future of Competition. Several other authors have contributed in this area.

Co-creation is an approach to customer interaction which emphasises the generation and ongoing realisation of mutual consulting firm-customer knowledge and value creation. An approach where the consulting firm’s and the customer’s resources and capabilities are combined and renewed to create value through new forms of interaction, service and learning processes. In essence, co-created value arises from personalised unique experiences with and for the customer.

In a cost allocation project, co-creation is introduced as having the customer involved in all activities from business need definition, process mapping and requirements development to design of application portfolio, data requirements, financial and application data retrieval, allocation mechanisms and mock-ups, in addition to change management preparation, development, testing and implementation, change management and further roll-out, impacting the execution speed, quality and value.

**Structure of the Viewpoint**

We see a clear interrelation between cost allocation and cost awareness and the possibility to utilise the cost insight in strategic decisions on application portfolio management and application life cycle – including applications’ coverage of selected business processes – and the overall governance of the organisation.

Each subject matter will be covered in the following sections.

**Cost allocation** will provide the organisation with the needed cost awareness and transparency to identify the true cost profile of all applications within the organisation.
This will lead to a more comprehensive analysis of each application’s value vs. costs in the organisation that – together with an assessment of business value and IT-strategic fit – will enable the organisation to develop their unique application portfolio roadmap according to business process coverage and other factors. Finally, we will discuss key governance principles concerning business process and application design and development.

In the following section we will address the question:

How do I control IT costs?

This Viewpoint focusses on IT projects and costs, while the interrelation between cost allocation, application portfolio management, business process mapping and governance is applicable to all types of business projects and the related expenditure.

Three cases are described in this Viewpoint, detailing situation and complications, cost allocation focus areas, methodology and process, business and behavioural impact and specific learning points from concrete projects.
Cost allocation

IT organisations are increasingly required to communicate the value of IT and how to reduce costs while maintaining quality and agility. As a result, IT organisations need more visibility with regard to the full costs of IT services to understand the cost burden placed on IT by specific business units.

The IT organisation must be positioned as a valued supplier of solutions and services and motivate (internal) customers (such as business units and affiliates) to actively participate in improvement projects and initiatives.

By better understanding how IT is used by various functions and business units (BUs), IT solutions and services can be more precisely deployed to meet changing business needs.

Implementing a system to track IT resource usage can generate significant benefits to IT and the organisation in general.

Benefits include:
- Better prioritisation of IT resources
- Closer budgetary control for early recognition of problem areas
- Stronger business cases allowing for more informed decisions when introducing new solutions and services
- More effective IT business partnership if the business understands how resources are spent
- Increased perceived value of IT, since IT will be seen as a strategic component of the business instead of a (simple) cost centre

The potential pitfalls include IT cost allocation imprecision due to complex models and implementation as well as irrelevance of IT cost allocation data if the pricing metrics of the cost allocation model cannot be mapped to current cost issues.

In the following section we will address the question:

How do I structure an effective IT cost practice?

Cost allocation process

The process of analysis, development and implementation of cost allocation is described in this section.

The process contains eleven steps:
- Nine steps for analysis and development, and two steps for preparation of change approach and roll-out as well as implementation.

The process is not dependent on whether a chargeback, showback or a combined model is chosen.

In the following section the differences between chargeback and showback will be highlighted and cost categories and pricing models will be described.

Chargeback or showback

When embarking on a journey to define an IT cost chargeback model in an organisation, we need to clarify if a showback model or a chargeback model is required.

A showback model provides IT management, business units and group management with an analysis of the IT costs in each department without actually cross-charging the IT costs.

With a chargeback model, the IT department hands over a formal bill to their organisation’s functions and business units to recover IT costs.

The strengths and weaknesses of the chargeback and showback models are described in figure 4.
COST ALLOCATION

**Strengths**

**Chargeback**
- Comprehensive IT solutions and services analysis methodology and tool
- Improved cost responsibility in functions and BUs, since IT solutions and services are billed at period end. Chargeback is feasible if agreement is possible on metrics and pricing
- Clear to communicate price for IT solutions and services (e.g. per transaction, hourly rates per IT resource etc.). Each function and business unit gets a bill for allocated fees

**Showback**
- Comprehensive IT solutions and services analysis methodology and tool
- Establishes a culture of cost awareness to justify requests for introducing new IT solutions and services. Showback is feasible if no agreement is possible on metrics and pricing
- No involvement of the finance department in connection with intra-company billing

**Cautions**

**Chargeback**
- Fully implemented chargeback models are complex to define, agree on and implement in a growth company with many new business and IT initiatives
- It often proves difficult getting the functions, BUs and IT to agree on base metrics
- Difficult to find pricing metrics for common IT infrastructure or large solution build-and-deploy programmes that comprise multiple functions and BUs, since the customers can claim that they do not get their fair share of the expense
- Require integration with the finance department

**Showback**
- Risk that the functions and business units have limited effect due to no bottom-line effect in BUs. But awareness of the costs usually causes heads of departments and senior management to question why one department “spends” more than another on IT

Figure 4: Chargeback vs. showback models

*Sonia Lelii, 2012: “Showback vs chargeback: Showback new resource analysis tool of choice”, SearchCloudStorage TechTarget*
In practice, a combined approach often may be relevant. For example during roll-out of a chargeback, it might be beneficial to start with a showback in order to mature the measurements and ease the implementation and likely resistance towards the change for a period of time before adopting the actual chargeback in the business units. Another possibility is that underperforming entities or business units immediately could have chargeback imposed in order to correct behaviour.

Other rationales might also drive the decision to pursue a combined approach, for example cost allocation based on chargeback in operations and cost allocation based on showback in project development and implementation areas of the business.

In the following section we will focus on IT cost allocation.

**Cost allocation categories**

Different cost categories for allocating IT costs may be allocated differently. Hence, it is important to identify the relevant groups of costs with the same characteristics.

**Direct attribution.** Application-specific IT costs and applications used in one BU and affiliate. These application-specific costs will be directly attributed to the one BU and affiliate using the application. Business unit and affiliate-specific application costs will be directly attributed to the business unit and affiliate in question.

**Allocation model.** Application-specific IT costs and applications in scope for cost allocation used by multiple business units and affiliates. Cost allocation keys can be defined and assigned to specific applications according to:

- Cost trigger
- Characteristic of application usage
- Geographical coverage
- Application strategy

**Other business units and affiliate-specific costs.** These application-specific costs will be directly attributed to the business units and affiliates using the application.

**Remaining IT costs** can be allocated based on the share of application-specific IT costs.

**Designing chargeback models**

As long as IT has a solid understanding of its operating costs, it can use pricing as a strategic tool for improving alignment with the business by giving executives a better understanding and control of IT resources. Different models with different levels of service can be used for driving more cost-efficient consumption of IT and more effectively match services with business needs.

A number of different frameworks are publicly available to describe various pricing models. The standard base models for pricing IT value could be:

- Subscription pricing
- Peak-level pricing
- User-based pricing
- Ticket-based pricing

For more details on these four base models for pricing IT value, see appendix 1 (page 30).
Application portfolio management

Application portfolio management is the process of rationalising and evolving the organisation’s business application portfolio according to the organisation’s strategic destination. Application portfolio management involves applying structured processes to evaluate business applications, determine issues or variations for defined standards and implement appropriate actions to resolve these issues. The objective of application portfolio management is to maintain awareness of the portfolio and to optimise life-cycle costs, quality, risks and value creation across all applications and integration assets.

Application portfolio management is driven by:
• IT strategy and architecture
• Business value and capabilities
• Cost efficiency

In the following section we will address the question:

How to manage the portfolio of projects and business applications?

The objective for organisations initiating application portfolio management work includes integration of all available application information, development and implementation:

1. Transparency through standard application portfolio (by business function)
2. Governance and maintenance process of standard applications and clear decision rules
3. Approval process of non-standard development requests

in order to
• Reduce total cost of ownership (TCO) and optimise IT cost per user through application portfolio management
• Provide flexibility, allowing the business to seize new opportunities

Current challenges in many organisations
Beginning with the end in mind is a critical success factor in the execution of application portfolio management. Thus, clear objectives need to be set in order to deliver an executable roadmap. By keeping the application portfolio management objectives in mind during the analysis, focus can be aimed at the details needed to achieve these objectives.

To many organisations, the situation today is:
• Multiple locations with own IT organisation and application landscape
• No integrated overview of the applications at every location
• Limited overview of coverage of business processes by application portfolio
• IT strategy towards implementing group-wide solutions

There are several reasons for focusing on application portfolio management. Getting a clear understanding of the functionality of all applications in each business unit and affiliate compared to the group-wide processes is important in designing a roadmap for each business unit and affiliate to plan the transition from the current situation to future IT application landscape. This involves identifying “gaps” if current applications do not provide sufficient support, and intermediate solutions are required to close urgent business issues. Usually, this also involves providing solutions proactively to close the gaps. In order to be able to monitor this process, it is important to set up processes and KPIs.

The benefits of developing a clear application portfolio management strategy and roadmap include:

1. Better alignment of IT with the organisation’s business needs. It is critical for an organisation to have the “right technology at the right place at the right time”.
2. Improved maintenance and operations planning. A key focus for organisations is to increase the return on investments (ROI) in IT solutions and technologies. Furthermore, better planning will also provide a better transition from legacy applications and technologies, which can lead to a reduced technical environment complexity.
3. Enhanced enterprise application efforts. A clear application portfolio strategy and roadmap will provide a clear strategic view on all applications within the organisation and a clear understanding of current applications used in each business unit and affiliate in relation to group-wide functionality. A coherent view
of the application portfolio will ease the development of management, analysis and reporting capabilities, since the underlying data model and master data structures will be better mapped. Less duplication of work efforts will be a good side effect.

4. Establishment of data standards. The data standards defined across the organisation will lead to a reduction in costs for integration efforts in the long run and improved access to and sharing of data across applications.

5. Increased visibility of IT spending. The application portfolio management effort will lead to a detailed analysis of the IT spend. A detailed cost view will lead to improved investment management decision-making, and an application

---

**Figure 6: Application classification parameters and criteria**

<table>
<thead>
<tr>
<th>BUSINESS VALUE</th>
<th>Competitive advantage</th>
<th>Support for decision-making</th>
<th>Operational risks of failure*</th>
<th>Create value**</th>
<th>IT STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process coverage</td>
<td>1 = Supports parts of a single process</td>
<td>1 = Commodity or no competitive advantage</td>
<td>1 = Not relevant to decision-making</td>
<td>1 = Limited effect on operations. Workaround available</td>
<td>1 = Supports outdated processes, very rarely used by a small number of users, other application (Excel) can do the job</td>
</tr>
<tr>
<td>1 = Supports parts of a single process</td>
<td>1 = Commodity or no competitive advantage</td>
<td>1 = Not relevant to decision-making</td>
<td>1 = Limited effect on operations. Workaround available</td>
<td>1 = Supports outdated processes, very rarely used by a small number of users, other application (Excel) can do the job</td>
<td></td>
</tr>
<tr>
<td>3 = Fully supports one process or more than one subprocess across different processes</td>
<td>3 = Fast follower. Systems which provide competitive advantage by improving service, cutting costs and increasing the effectiveness of decision-making or the efficiency of operations</td>
<td>3 = Supports long-term decision-making or other sources available</td>
<td>3 = Business will stop within 2 to 5 days. Workaround available but cannot be sustained for a longer period of time</td>
<td>3 = Supports critical processes, delivers moderate cost savings/ improvement of productivity</td>
<td></td>
</tr>
<tr>
<td>3 = Fully supports one process or more than one subprocess across different processes</td>
<td>3 = Fast follower. Systems which provide competitive advantage by improving service, cutting costs and increasing the effectiveness of decision-making or the efficiency of operations</td>
<td>3 = Supports long-term decision-making or other sources available</td>
<td>3 = Business will stop within 2 to 5 days. Workaround available but cannot be sustained for a longer period of time</td>
<td>3 = Supports critical processes, delivers moderate cost savings/ improvement of productivity</td>
<td></td>
</tr>
<tr>
<td>5 = Supports two or more operational processes</td>
<td>5 = First mover advantage. Systems which deliver competitive advantages by creating new and unique products or services or by generating a significant cost or performance advantage</td>
<td>5 = Provides key input/support for strategical/tactical/operational decision-making process</td>
<td>5 = Business will stop within 1 day or will cause reputational damage</td>
<td>5 = Business immediately stops if the application is not available or provides competitive advantage/new revenue for the organisation or critical legal requirement</td>
<td></td>
</tr>
<tr>
<td>5 = Supports two or more operational processes</td>
<td>5 = First mover advantage. Systems which deliver competitive advantages by creating new and unique products or services or by generating a significant cost or performance advantage</td>
<td>5 = Provides key input/support for strategical/tactical/operational decision-making process</td>
<td>5 = Business will stop within 1 day or will cause reputational damage</td>
<td>5 = Business immediately stops if the application is not available or provides competitive advantage/new revenue for the organisation or critical legal requirement</td>
<td></td>
</tr>
</tbody>
</table>

Figure 6: Application classification parameters and criteria

* If periodic procedure (monthly/quarterly/yearly), consider worst-case scenario, i.e. failure at period end

** Evaluated by CXO and key users
consolidation as defined in a roadmap can lead to an overall significant reduction in IT costs.

6. An IT governance and demand management model for managing all IT resources in the organisation needs to be developed.

7. Improved engagement with business units and affiliates in addressing all business requirements, irrespective of current installed base.

**Portfolio evaluation dimensions**

- **IT strategy and architecture fit:**
  - IT strategy alignment
  - IT architecture alignment
  - Technical efficiency (scalability, modularity, stability)
  - IT security

- **Business value:**
  - Value related to business objectives
  - Ability to execute
  - Business urgency
  - Risks

- **Total cost of ownership (TCO):**
  - Application life-cycle costs

**Portfolio actions:**

- Exploit
- Integrate
- Tolerate
- Migrate
- Eliminate

<table>
<thead>
<tr>
<th>Application strategy</th>
<th>The application is classified within the following strategic categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploit</td>
<td>Leverage fully on the application. Candidate for group standard</td>
</tr>
<tr>
<td>Integrate</td>
<td>Integrate/interface application with a group standard</td>
</tr>
<tr>
<td>Tolerate</td>
<td>Keep application in portfolio - only minor changes allowed</td>
</tr>
<tr>
<td>Migrate</td>
<td>Migrate application to a group standard</td>
</tr>
<tr>
<td>Eliminate</td>
<td>Application to be discontinued</td>
</tr>
</tbody>
</table>

Figure 7: Application portfolio management and evaluation – balancing the choices
In order to be able to prepare a proper application portfolio analysis and roadmap, preparation of an inventory of all applications in use in the organisation is required (including key attributes per application). It is important that all applications are evaluated in order to determine:

1. The application’s business value
2. How the application fits the organisation’s IT-strategic position
3. The application’s total cost of ownership (TCO)

The application’s business value could be evaluated from a group perspective (see figure 6, page 10) based on:

1) process coverage, 2) competitive advantage, 3) decision-making support, 4) operational risks of failure, and 5) the application’s business value evaluated from a business unit or affiliate perspective.

Furthermore, the application’s fit to the organisation’s IT strategic position is used for evaluating the technical platform, solution stability as well as the local and central support skills available.

Based on the application’s business value, IT strategic position and the application’s running costs (internal and external), it is possible to assess the application’s development in the application portfolio.

**PHASE 1**

1–3 months

- Inventory of applications in use and their key attributes
- Assessment of applications from business and technology perspectives
- Shortterm/midterm classification related to application life cycle: exploit, integrate, tolerate, migrate, eliminate, leading to a focus on group-wide processes
- Roadmap that outlines application portfolio rationalisation as a result of group-wide programme
- Establishment of governance model for managing IT resources in the organisation
- Improve engagement with BUs and affiliates in addressing all business requirements

**PHASE 2**

6–9 months

- Implement an application portfolio management tool
- Update application portfolio roadmap reflecting new group-wide programme schedule
- Complete the assessment of the standard application portfolio from the business, technology and financial perspectives
- Support the implementation of controls
- Make the standard portfolio information available to BUs and affiliates for managing demands and identifying improvement opportunities
- Identify application gaps, overlaps and improvement opportunities outside the group-wide scope
- Recommended actions for each application (or application group) to realise improvement opportunities, leading to strategic focus areas
- A future-state application portfolio, application architecture and portfolio metrics against which to manage over time
- Roadmap that outlines and prioritises application improvement programmes (a multi-year schedule of initiatives to rationalise, reduce costs and increase overall value)
- Ongoing assessment of financial, staffing and process implications of completed projects

**PHASE 3**

18–24 months

Figure 8: Deliverables from application portfolio management
These analysis activities lead to a short-term/midterm classification related to the application life cycle: exploit, integrate, tolerate, migrate, eliminate.

**Exploit.** Applications with high business value, high IT strategic position and medium to low TCO could be leveraged in the organisation and be exploited as the group standard candidate for covering the business processes in question.

**Integrate.** Applications with high business value and low to medium IT strategic position could be considered for integration or interfacing with a group standard application. If the business value is lower, the applications could be considered for migration to a group standard application and the application could be eliminated.

**Tolerate.** Applications with medium business value that provides a high IT strategic position (reliable and stable solution that can be used several years into the future) could be tolerated, and the application could be kept in the application portfolio (with only minor changes allowed).

**Migrate.** Applications with medium business value and low strategic IT strategic fit could be considered for migration to a group standard application.

**Eliminate.** Applications with low business value, low IT strategic position and medium to high TCO could be considered for elimination. A plan for discontinuing the application should be prepared.

The implications are significant in case of e.g. acquiring a new business, since the IT merger activities to some extent will be dictated by the application roadmap of the acquiring organisation. The buying organisation will have a clear view of what solutions to offer newly acquired organisations.

When all applications have been classified according to the application life cycle, it is possible to start an evaluation of the rationalisation opportunities for the applications. A detailed roadmap can be prepared, outlining the plan for application portfolio rationalisation (see example in figure 18).

What are the deliverables from a well-managed application portfolio management programme? As illustrated in figure 8, a series of outcomes are possible within the first 1–3 months, especially in relation to establishing a governance model for managing IT resources in the organisation, improving the engagement with business units/affiliates in addressing all business requirements and establishing application standards.

In the medium-to-long term (6–24 months), the application portfolio management programme can provide better alignment of IT with the organisation’s business needs, increased visibility of IT spending and improved maintenance and operations planning due to the identification and exploitation of group-wide standard applications.

**Project and application life cycle – and business unit/affiliate-desired motivation**

A comprehensive understanding of the applications’ costs also provides valuable insight into the life-cycle costs and the effect on business unit and affiliate motivation for transitioning to/from applications.

Figure 9 (page 14) describes a typical cost profile for an application: starting out as a project with template development costs followed by business unit and affiliate-specific development and deployment costs and with yearly running and maintenance costs.

In order to ensure that the business units/affiliate have the right motivation to adhere to the group-wide application standards and follow their respective application portfolio roadmaps over time, an IT cost allocation methodology can be developed that motivates the desired behaviour of decision-makers.

**Project phases and associated IT cost allocation methodology**

Depending on the stage of the life cycle of the project and application, the following actions are likely to be taken:

1. All business units and affiliates should be actively involved in building a comprehensive group-wide template solution with integrated processes, master data standards and documentation
2. The pilot business unit and affiliate should adhere to the developed template functionality and limit the requests for affiliate-specific requirements (except country legal requirements)
3. Deployment business units and affiliates should adhere to the developed template functionality and limit the requests for affiliate-specific requirements (except country legal requirements).

4. All business units and affiliates should focus on the efficient performance of the standard solution and limit the requests for affiliate-specific requirements (except country legal requirements).

5. Ensure that business units, affiliates and IT are focused on a fast transition to the new solution. For further details on project phases and associated IT cost allocation methodology, see appendix 2 (page 32).

Figure 9: Project and application life cycle

Figure 10: Light development approach

**COST ALLOCATION – LIGHT APPROACH**
- Determine total cost pool in scope (Read from page 6)
- Allocate total costs according to total revenue split per BU (Read from page 6)
- Establish governance processes for application demand (Read from page 20)

**APPLICATION PORTFOLIO MANAGEMENT – LIGHT APPROACH**
- Prepare application inventory and determine strategic attributes (Read from page 9)
- Prepare IT roadmap for strategic applications per business process (Read from page 9 and 15)
Business process mapping

In order to ensure a systematic analysis of business applications and their business process coverage, we propose performing a comprehensive mapping of all business applications for the business process/processes they currently support.

In the following section we will address the question:

How do I assure IT resource effectiveness through efficient business processes?

Business process mapping refers to activities involved in defining what a business unit or affiliate does, who is responsible, to what standard a business process could be completed and how the success of a business process can be determined.

The main purpose behind business process mapping is to assist organisations in becoming more efficient. A clear and detailed business process map allows the organisation to easier identify improvement opportunities for the current processes.

To ensure a full view of the entire organisation’s business process scope as well as all involved business applications, it is recommended to proceed systematically:

• Prepare the organisation’s application portfolio inventory (list of current applications)
• Map existing applications for all group-wide business processes.

The applications’ business process coverage could reach across all organisational dimensions, incl. business units, group functions, affiliates and countries

• Identify internal (business unit and affiliate) or external best practices to set a goal for future high-performing organisations
• Assign business process owner (from within the organisation) to all business processes
• Evaluate (and confirm) the group standard applications and the developed application roadmaps per business process
• Empower the demand management role (in the yearly budget process and ad hoc requests during the year) to guide requesters from group functions, affiliates and countries to request process and IT solutions from the portfolio of applications. This is to avoid “mushrooming” of non-standard applications. Follow a strict approval and governance process to ensure a well-founded business case

A complete and clear mapping of all business applications for the business process model will provide the organisation with insight into the following:

• Plan deployment of group standard application in business unit and affiliate.

If a business unit and affiliate currently do not have a business application supporting the execution of a business process, a deployment (exploit) of the group standard business application could be performed to ensure a broadened use of the application (to become truly group-wide for the business application) (see letter A in figure 12, pages 18–19).

• Plan implementation of new group-wide solution.

If a group standard application is currently not in use in the organisation (see letter B in figure 12, pages 18–19) – or if the business process currently is not supported by a business application (only supported by Microsoft Office tools) (see letter C in figure 12, pages 18–19) – the organisation could plan for a new group-wide solution to be developed.

• Plan continuous exploitation.

When a group standard application is being used group-wide in the organisation to execute the designated business processes, a clear plan for process and performance enhancements must be formulated and executed (see letter D in figure 12, pages 18–19). A drive towards world-class business processes and business applications is never-ending.
BUSINESS PROCESS MAPPING

Figure 11: Business process model (BPM)
BUSINESS PROCESS MAPPING

Finance management

Treasury cash management

Financial accounting

Controlling

Period-end closing

Promotion evaluation
Field sales monitoring
Survey monitoring
Customer profitability
Country and operational reporting/KPI
Group reporting/KPI

Finance management

MTC Market-to-cash BU1 BU2 BU3
MTC-010 Channel and category planning ✓ ✓ ✓
MTC-020 Key account management ✓ ✓ ✓
MTC-030 Promotion management ✓ ✓ ✓
MTC-040 Strategic sales and distribution route planning ✓ ✓ ✓
MTC-050 Field sales management ✓ ✓ ✓
MTC-060 Integrated order management ✓ ✓ ✓
MTC-070 Distribution management ✓ ✓ ✓
MTC-080 Pricing management ✓ ✓ ✓
MTC-090 Settlement and billing ✓ ✓ ✓
MTC-100 Customer asset management ✓ ✓ ✓

FTD Forecast-to-deploy
FTD-010 Business planning (3-year BP, ABP) ✓ ✓ ✓
FTD-020 Monthly planning – rolling estimate ✓ ✓ ✓
FTD-030 Integrated weekly demand & supply management ✓ ✓
FTD-040 Production execution ✓ ✓ ✓
FTD-050 Plant maintenance ✓ ✓
FTD-060 Ensure product quality ✓ ✓
FTD-070 Warehouse management ✓ ✓
FTD-080 Haulage ✓ ✓ ✓
FTD-090 Fleet maintenance ✓ ✓

PTP Procure-to-pay
PTP-010 Vendor management ✓ ✓ ✓
PTP-020 Procurement management ✓ ✓ ✓
PTP-030 Receiving management ✓ ✓ ✓
PTP-040 Accounts payable ✓ ✓ ✓

FM Finance management
FM-010 Financial accounting ✓ ✓ ✓
FM-020 Controlling ✓ ✓ ✓
FM-030 Treasury ✓ ✓ ✓
FM-040 Period end closing ✓ ✓ ✓
FM-050 Corporate and management reporting ✓ ✓ ✓

HRM Human resource management
HRM-010 Organisational management ✓ ✓
HRM-020 eRecruitment ✓ ✓
HRM-030 Personnel administration ✓ ✓
HRM-040 Training and events management ✓ ✓
HRM-050 Compensation management ✓ ✓ ✓
HRM-060 Objectives setting and performance management ✓ ✓
HRM-070 Personnel cost planning ✓ ✓
HRM-080 Time management ✓ ✓
HRM-090 Payroll ✓ ✓
HRM-100 Manager self-service ✓ ✓ ✓
HRM-110 Leadership pipeline (for example TOP 300) ✓ ✓

MDM Master data and data standards management
MDM-010 Data standards management ✓ ✓
MDM-020 Master data maintenance ✓ ✓ ✓
MDM-030 Data distribution management ✓ ✓

MRK Management reporting and KPI
MRK-010 Corporate management ✓ ✓ ✓
MRK-020 Country management ✓ ✓ ✓
MRK-030 Operational ✓ ✓
BUSINESS PROCESS MAPPING

Figure 12: Business process mapping

<table>
<thead>
<tr>
<th>MTC</th>
<th>Market-to-cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTC-010</td>
<td>Channel and category planning</td>
</tr>
<tr>
<td>MTC-020</td>
<td>Key account management</td>
</tr>
<tr>
<td>MTC-030</td>
<td>Promotion management</td>
</tr>
<tr>
<td>MTC-040</td>
<td>Strategic sales and distribution route planning</td>
</tr>
<tr>
<td>MTC-050</td>
<td>Field sales management</td>
</tr>
<tr>
<td>MTC-060</td>
<td>Integrated order management</td>
</tr>
<tr>
<td>MTC-070</td>
<td>Distribution management</td>
</tr>
<tr>
<td>MTC-080</td>
<td>Pricing management</td>
</tr>
<tr>
<td>MTC-090</td>
<td>Settlement and billing</td>
</tr>
<tr>
<td>MTC-100</td>
<td>Customer asset management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FTD</th>
<th>Forecast-to-deploy</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTD-010</td>
<td>Business planning (3-year BP, ABP)</td>
</tr>
<tr>
<td>FTD-020</td>
<td>Monthly planning – rolling estimate</td>
</tr>
<tr>
<td>FTD-030</td>
<td>Integrated weekly demand &amp; supply management</td>
</tr>
<tr>
<td>FTD-040</td>
<td>Production execution</td>
</tr>
<tr>
<td>FTD-050</td>
<td>Plant maintenance</td>
</tr>
<tr>
<td>FTD-060</td>
<td>Ensure product quality</td>
</tr>
<tr>
<td>FTD-070</td>
<td>Warehouse management</td>
</tr>
<tr>
<td>FTD-080</td>
<td>Haulage</td>
</tr>
<tr>
<td>FTD-090</td>
<td>Fleet maintenance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PTP</th>
<th>Procure-to-pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTP-010</td>
<td>Vendor management</td>
</tr>
<tr>
<td>PTP-020</td>
<td>Procurement management</td>
</tr>
<tr>
<td>PTP-030</td>
<td>Receiving management</td>
</tr>
<tr>
<td>PTP-040</td>
<td>Accounts payable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FM</th>
<th>Finance management</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM-010</td>
<td>Financial accounting</td>
</tr>
<tr>
<td>FM-020</td>
<td>Controlling</td>
</tr>
<tr>
<td>FM-030</td>
<td>Treasury</td>
</tr>
<tr>
<td>FM-040</td>
<td>Period end closing</td>
</tr>
<tr>
<td>FM-050</td>
<td>Corporate and management reporting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HRM</th>
<th>Human resource management</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM-010</td>
<td>Organisational management</td>
</tr>
<tr>
<td>HRM-020</td>
<td>eRecruitment</td>
</tr>
<tr>
<td>HRM-030</td>
<td>Personnel administration</td>
</tr>
<tr>
<td>HRM-040</td>
<td>Training and events management</td>
</tr>
<tr>
<td>HRM-050</td>
<td>Compensation management</td>
</tr>
<tr>
<td>HRM-060</td>
<td>Objectives setting and performance management</td>
</tr>
<tr>
<td>HRM-070</td>
<td>Personnel cost planning</td>
</tr>
<tr>
<td>HRM-080</td>
<td>Time management</td>
</tr>
<tr>
<td>HRM-090</td>
<td>Payroll</td>
</tr>
<tr>
<td>HRM-100</td>
<td>Manager self-service</td>
</tr>
<tr>
<td>HRM-110</td>
<td>Leadership pipeline (for example TOP 300)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MDM</th>
<th>Master data and data standards management</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM-010</td>
<td>Data standards management</td>
</tr>
<tr>
<td>MDM-020</td>
<td>Master data maintenance</td>
</tr>
<tr>
<td>MDM-030</td>
<td>Data distribution management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MRK</th>
<th>Management reporting and KPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRK-010</td>
<td>Corporate management</td>
</tr>
<tr>
<td>MRK-020</td>
<td>Country management</td>
</tr>
<tr>
<td>MRK-030</td>
<td>Operational</td>
</tr>
</tbody>
</table>
B. TOLERATE & PLAN

A. EXPLOIT

D. EXPLOIT & ENHANCE

A. EXPLOIT

D. EXPLOIT & ENHANCE

A. EXPLOIT

C. TOLERATE & PLAN

A. EXPLOIT

D. EXPLOIT & ENHANCE

A. EXPLOIT

Application strategy
Governance

As investments grow and become a larger share of an organisation’s capital expenditure, IT management is required by senior management to demonstrate the business value and alignment of their investments as well as the reliability, availability, security, continuity and integrity of the information and supporting services.

In the following section we will address the question:

*How do I ensure a company-wide IT cost dialogue?*

Governing cost allocation is often set in the context of the organisation’s general performance management and management control system.

Principles for achieving performance management and management control may include:

- Identification of critical success factors for the business and IT and identification of the KPIs linked to these factors
- Building KPIs into the organisation’s performance evaluation system, starting at the top and permeating to all positions that can influence those KPIs
- Making KPIs relevant, simple, comparable, easy to report and focused on goals and objectives
- Defining and issuing a management control policy and related procedures which identify all of the areas requiring management controls
- Monitoring, auditing and ensuring that IT operations are in accordance with the approved controls
- Developing a risk management and integration plan, policy and process
- Developing a business/IT continuity and disaster recovery plan and policy
- Developing a clear performance review, escalation and issues resolution policy and process with clear accountability and responsibilities

Several management control systems are available.

The Balanced Scorecard system, developed by Kaplan and Norton, is a management system that provides a clear prescription as to what companies should measure to clarify their vision and strategy and subsequently translate them into action with respect to four areas: financial, customers, internal business processes and learning and growth. The scorecard objectives, measures, targets and initiatives could be cascaded down to business units, departments, processes and employees.

Control OBjectives for Information and related Technology (COBIT) is a model designed to control and help audit the IT function. The framework has four domains, i.e. plan and organise, acquire and implement, deliver and support and monitor and evaluate, and the IT processes and controls are part of each domain.

The COSO model (Committee Of Sponsoring Organizations of the Treadway Commission) may be considered an enterprise risk management process with the purpose of being ready for the unknown. It is effected by an organisation’s board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of the objectives of the entity.

In order to govern new business activities, an effective definition and delivery cycles on a project portfolio, programme and project level have to be established. Such a setup will ensure establishment of a structure for selecting the right programmes and projects for the organisation, ensuring ongoing alignment of programmes and projects with strategic objectives, assessing whether new requirements can be accommodated within the existing organisational capability, capacity and maturity, relate cost allocation to sourcing process for CAPEX and allocate the right resources to the right programmes and projects to ensure ongoing delivery.

The governance of a cost allocation project is very similar to a traditional project with regard to project owner, steering committee, reference group etc.

However, in setting up the organisation for the project and the operational team, certain roles and tasks ought to be considered.

In figure 13, the governance roles that are relevant to the organisation are listed.
<table>
<thead>
<tr>
<th>What/role</th>
<th>How/task</th>
<th>When/frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocation model owner</td>
<td>Determine year plan.</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>Coordinate with stakeholders.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Determine KPIs.</td>
<td></td>
</tr>
<tr>
<td>Maintenance responsibility</td>
<td>Update costs from budget/actual cost splits and market dialogue.</td>
<td>Quarterly (or more frequently, if necessary)</td>
</tr>
<tr>
<td></td>
<td>Update allocation keys.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Future enhancement of the IT cost allocation model.</td>
<td></td>
</tr>
<tr>
<td>Responsible for application portfolio management</td>
<td>Update application portfolio and details relative to IT landscape and operations.</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>Set application portfolio actions and roll-out scope.</td>
<td></td>
</tr>
<tr>
<td>Demand manager</td>
<td>Facilitate the annual/ad hoc requests for new applications and solutions.</td>
<td>Annual/ad hoc</td>
</tr>
<tr>
<td>Responsible for business process</td>
<td>Engage in dialogue with requesting functional department for identification of ideal application/solution to address business needs.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Responsible for business system</td>
<td>Partner with business process responsible and Group IT to ensure the identification and implementation of the ideal application/solution to address business needs.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>System enthusiast</td>
<td>Apply allocation model.</td>
<td>Quarterly (or more frequently, if necessary)</td>
</tr>
<tr>
<td></td>
<td>Update/create graphical presentations.</td>
<td></td>
</tr>
<tr>
<td>Challenger</td>
<td>Analysis of allocation results and pose questions to challenge the status quo.</td>
<td>Quarterly (or more frequently, if necessary)</td>
</tr>
<tr>
<td>Responsible for relationship</td>
<td>Demand management dialogue with internal stakeholders.</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

Figure 13: Governance roles
What is next?
5 actions for your organisation

There is a clear relationship between cost allocation and cost awareness, application portfolio management and business process mapping. Furthermore, it is critical to have the right governance and organisation in place to ensure cost-effective applications in a robust and future-safe application portfolio that satisfies business needs as well as an agile governance of the portfolio of application and process enhancement initiatives underway in the organisation.

In order to ensure an effective cost allocation, definition of an optimal application portfolio roadmap for your business applications and establishment of a proper governance structure and procedures in your organisation, you need to consider the following five actions:

1. See cost allocation, application portfolio management, business process mapping and governance as an integral part of good management principles and make sure that all initiatives are coordinated and interrelations are properly planned (see figure 15).
2. Review the organisation’s current cost allocation practices and evaluate if the required cost transparency is in place and all group functions and affiliates have the desired level of information to guide their desired behaviour.
3. Create inventory of all business applications to conduct a complete review of the application portfolio and stay true to the application roadmap in all budget cycles and all demands from the business for new processes and IT solutions.
4. Establish a demand management role to govern all future demands for new processes and IT solutions to ensure that all requests are in line with the application roadmap and with a solid business value.
5. Decide on showback or chargeback cost allocation model. Plan and initiate project.

Summing up, the overall structure and logic of this Viewpoint has been incorporated into figure 14:
- Effective control and execution of the cost allocation process provide cost transparency for a comprehensive application portfolio management and definition of a clear application strategy and roadmap for all business applications.
- The application roadmap and strategy will lead to improved business process execution and a continuous focus on process improvements, application consolidation and a reduction in total cost of ownership.
- Efficient demand management is instrumental in realising the improvement of cost effectiveness and cost awareness.

Figure 14: The cost allocation model

- Cost allocation
  - Cost transparency
  - Total cost of ownership (TCO)
  - Allocation principles on entities (BU and affiliate)
  - Allocation keys
  - Consumption distribution
  - Desired behaviour
  - SLAs

- Governance and organisation
  - Organisation
  - KPIs
  - Enterprise architecture
  - Incentives
  - Impact case

- Application portfolio management
  - Application strategy
  - Business value
  - Application roadmap
  - Application life cycle
  - Cost efficiency

- Business process mapping
  - Business process model
  - Business process mapping
### DERIVING BUSINESS VALUE FROM COST ALLOCATION AND PORTFOLIO MANAGEMENT

#### Figure 15: Detailed phase planning

<table>
<thead>
<tr>
<th>W01</th>
<th>W02</th>
<th>W03</th>
<th>W04</th>
<th>W05</th>
<th>W06</th>
<th>W07</th>
<th>W08</th>
<th>W09</th>
<th>W10</th>
<th>W11</th>
<th>W12</th>
<th>W13</th>
<th>W14</th>
<th>W15</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT cost allocation modelling</td>
<td>IT cost allocation modelling</td>
<td>IT cost allocation modelling</td>
<td>IT cost allocation modelling</td>
<td>Prepare for IT cost allocation from 20XX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPRINT 1: IT cost allocation model (best practice model)</td>
<td>SPRINT 2: IT cost allocation model (mock-up model with 20XX budget data)</td>
<td>SPRINT 3: IT cost allocation model (finalised model with 20XX budget data)</td>
<td>IT cost data gathering and cleansing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project plan</td>
<td>Best practice IT cost allocation model</td>
<td>Detailed IT cost allocation and pricing model, incl. mock-up</td>
<td>Application portfolio management principles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application portfolio management principles</td>
<td>Cost allocation principles</td>
<td>Detailed IT cost analysis for 20XX budget</td>
<td>IT costing principles/items</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data cleaning</td>
<td>Detailed IT cost allocation and pricing model (projects/CAPEX)</td>
<td>Updated IT cost allocation model with initial SLA alignment (a few KPIs)</td>
<td>Continuous data gathering for 20XX actual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HQ and HQ/local IT high-level cost data for 20XX budget</td>
<td>HQ and HQ/local IT application level cost data for 20XX budget</td>
<td>Detailed IT cost allocation model</td>
<td>Benchmarking approach internal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application portfolio management (APM)</td>
<td>Country IT cost data for 20XX budget</td>
<td>Finalised IT cost allocation model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APM - definition</td>
<td>APM - design</td>
<td>APM - implementation preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classification of application portfolio (categories)</td>
<td>Application strategy mapping to APM categories and specific applications</td>
<td>Application portfolio roadmaps for all applications/BUs and HQ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APM - implementation preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application portfolio management data gathering by countries and HQ</td>
<td>Detailed analysis of application portfolio and validate results</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business process mapping</td>
<td>Gap analysis and action plan</td>
<td>Implementation of business process changes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As-Is business process mapping</td>
<td>To-Be business process mapping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All applications mapped to business processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Define and implement governance and organisation</td>
<td>Governance model design and development</td>
<td>Implement governance and organisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governance model</td>
<td>Go-live of governance model and organisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 15: Detailed phase planning

**Activities**

**Deliverables**
Case: A growth organisation

**Situation and complications**
The organisation is a fast-growing organisation which successfully has expanded its presence in key markets such as the US and the UK. In spite of several years of strong growth, the organisation has recently experienced a slowdown in growth. Hence, the organisation is realigning global strategies to counter this.

In the process of changing focus from top line to bottom line, the IT department, Group IT, is consolidating the IT landscape and optimising the cost structure.

Traditionally, a large proportion of the IT spend was requisitioned locally and paid for centrally. It was assumed that this asymmetric cost structure between the centralised IT function and the local business units could be optimised.

**Cost allocation focus area**
The cost allocation focus area was on verifying and visualising the business impact of cost allocation efforts.

The project aimed at improving IT cost effectiveness and facilitating the organisation’s capability and practices on IT cost awareness.

**Methodology and process**
To a large extent, the project followed the process illustrated in figure 15.

As part of an IT business unit cost allocation project, Implement identified a series of KPIs to provide insight into the analysis of current IT costs for Group IT and affiliates. These KPIs were calculated based on provided data.

**Business and behavioural impact**
The project identified business as well as behavioural impact elements as proposed by the impact case concept (see figure 16).

<table>
<thead>
<tr>
<th>Impact map</th>
<th>Impact objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT cost effectiveness</td>
<td><strong>Business impacts:</strong></td>
</tr>
<tr>
<td>Control of IT costs</td>
<td>IT cost effectiveness</td>
</tr>
<tr>
<td>IT resource effectiveness</td>
<td>Control of IT costs</td>
</tr>
<tr>
<td>Application portfolio management</td>
<td>IT resource effectiveness</td>
</tr>
<tr>
<td>IT cost dialogue</td>
<td>Application portfolio management</td>
</tr>
<tr>
<td>IT cost practice</td>
<td><strong>Behavioural impacts:</strong></td>
</tr>
<tr>
<td>IT cost awareness</td>
<td>IT cost awareness</td>
</tr>
<tr>
<td></td>
<td>IT cost practice</td>
</tr>
<tr>
<td></td>
<td>IT cost dialogue</td>
</tr>
</tbody>
</table>

**Figure 16: Visual impact board**
DERIVING BUSINESS VALUE FROM COST ALLOCATION AND PORTFOLIO MANAGEMENT

For future continuous analyses of IT costs, additional KPIs can be added to provide insight into the desired behavioural aspects of the IT cost awareness and reporting.

Furthermore, there are significant advantages in building easy-to-use reporting for further automated data mining.

The gross list of KPIs, which was later limited to a handful of KPIs, is illustrated in figure 16.

Moreover, follow-up and update frequency was determined as quarterly.

**Learning points**

This case provides several clear learning points:

- By actually introducing a cost allocation model in the cost control and reporting structure, Implement ensured that the topic was debated in the organisation.
- KPIs have to be balanced and chosen carefully. The visual impact board figure highlights some of the considerations that need to be discussed before selecting specific KPIs.
- The costs of a new IT user, when considering the full allocation, might be significantly higher than the internal pricing of a new IT user.
- Business units related to market support and production functions are not necessarily directly comparable to the revenue-generating business units.
- Headquarter costs (IT costs per IT user) are likely higher than average due to 1) centralisation of activities and 2) a high number of ERP users.

<table>
<thead>
<tr>
<th>KPI/measure</th>
<th>Baseline</th>
<th>Target</th>
<th>Q1–Q4 20XX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total IT costs as percentage of total revenue</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total IT costs per IT user</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IT wages and employee costs as percentage of total IT costs</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IT costs as percentage of total administrative costs</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Number of applications per portfolio action</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Number of applications in use from APM list</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Application and country-specific IT costs as a percentage of total IT costs</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Percentage of applications with full TCO details</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Percentage of IT costs in affiliate budget vs. Group IT (“showback percentage”)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Percentage of country IT costs compared to share of total revenue</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Case: A large global organisation

Situation and complications
The organisation had a very complex IT landscape with multiple ERP systems, other business applications (> 1,000 applications) and a geographically dispersed application portfolio (> 25 countries). The organisation decided to implement a full ERP (SAP) solution to cover nearly all business processes and all geographical locations.

Furthermore, in an effort to consolidate the application coverage of all business processes, the organisation decided to undertake an application portfolio management effort to drive down application costs.

Cost allocation focus area
The analysis of total costs was performed during the evaluation of each application’s business value estimation and IT-strategic fit. The cost analysis included both:
• Development
• Maintenance and running costs

A full application portfolio management review and implementation in concrete initiatives were performed in the organisation, and a strict governance process (through demand manager, business process and business systems leadership) was implemented.

Methodology and process
The organisation defined a clear approach involving Group IT’s strategy department, affiliate IT representatives and Group Finance to ensure inventory, evaluation and strategic decision-making for all business applications in group and/or affiliate use.

Specific evaluation criteria to determine business value and IT-strategic fit were agreed, and comprehensive strategies per group function and affiliate were developed in the form of application roadmaps (see figure 18).

All future application demands will be handled by Group IT’s strategy department’s demand manager and will be treated in accordance with the application portfolio management methodology, application life cycle and based on a detailed business case.

The organisation established specific roles for business process and business system leaders that had clear ownership of the process and system aspects and could provide the guidance to the business for the right solution to be implemented to satisfy specific demands.

Business and behavioural impact
The focus on business process coverage, strategic IT fit and total costs of applications had a positive effect on the organisation’s performance on the KPI “Total IT costs as percentage of total revenue”, indicating that IT costs diminished relative to total revenue over the years in question. The organisation also performed well on this parameter compared to the industry (benchmarking).

Furthermore, the clear approach to endorsing group-wide solutions with high business fit and best strategic IT fit has resulted in more requests for applications among the accepted group-wide applications and less demand for non-standard solutions. This enforces the IT strategy of the organisation to limit the total number of applications and avoid “mushrooming” of non-standard applications.

The application portfolio management approach also had the considerable benefit that all group functions and countries had easy access to information on all group and affiliate applications and had a clear recipe for requesting new solutions in accordance with the organisation standard.

The organisation focused on cost effectiveness and application portfolio optimisation for several years prior to this initiative, but the organisation needed time for the integrated concept to mature and settle. What made the step change in the organisation – and what proved that the methodology was effective:
• Organisation was in place – business process and business system leaders, demand manager etc.
• Strict cost control
• Business case mentality for all application acquisitions and enhancements
• Senior management focus
Learning points
Several clear learning points can be drawn from this case:
• Development of detailed application portfolio review and the setup of application roadmaps for all group functions and affiliates
• Central review of all application costs (TCO perspective) and tracking over time of all cost variations
• Overall application life-cycle management responsibility within Group IT’s strategic services function
• Establishment of demand manager, business process and business system ownership to provide optimal guidance and leadership on all business process and system application solutions in the demand management process (in the yearly budget process and ad-hoc during the year)
• The initiative was not a quick implementation with quick short-term wins. It is a process that will lead to other changes in the organisation.

![Application portfolio roadmap (example)](image_url)

Figure 18: Application portfolio roadmap (example)
Case: A Nordic multi-affiliate organisation

**Situation and complications**
The requirements of the organisation were to:
1. Define and implement a comprehensive cost allocation model for collecting and allocating all IT related costs
2. Prepare detailed invoicing to all group functions and affiliates utilising the Group IT services
3. Provide full cost insight into all application costs for IT cost optimisation purposes
4. Document all processes for internal audit and ensure cost transparency through the entire model (from initial registration through cost pooling to system owner in group functions or affiliate)

**Cost allocation focus area**
The development and implementation of a full cost allocation model had the primary focus to provide the invoicing base and justification of allocating all the organisation’s IT costs to the system owners.

The overall owners of the IT cost allocation model is Group Finance, while users of the cost allocation model includes Group Finance, Group IT – and for reporting purposes also the group functions and affiliates.

**Methodology and process**
Before initiating any build activities, a detailed analysis of all registrations, required information flow, potential allocation keys as well as the desired end result and invoicing details were developed in flow charts in collaboration with Group Finance, Group IT, stakeholders and the project team.

Based on the detailed information flow (see figure 19) required for the complete and correct allocation of IT costs, a detailed, integrated process flow was developed to provide insight into the roles and responsibilities and interconnected processes between Group Finance, Group IT and the group functions and affiliates.

A key element in the cost allocation modelling was to exclude actual measurable consumption levels from the allocation logic. An example was server usage by specific solutions. Instead of allocating a large total cost of servers across all server-using applications, it was decided – in collaboration with the organisation’s hosting partner (third party) – to provide detailed server usage information. In this way only solutions using the specific individual servers should cover the costs of the specific servers.

A governance structure was implemented to ensure the correct processing and approval of the allocated IT costs and to ensure adherence to internal audit requirements.

**Business and behavioural impact**
The IT cost allocation model has a series of significant business and behavioural inputs in the organisation:
- One common costing model to be used by multiple business units and stakeholders providing “a single version of the truth”
- Total transparency in cost allocation basis, allocation logic and invoicing value towards internal audit
- Total cost view of all business applications for better decision-making
- Better day-to-day collaboration between Group Finance and Group IT
- Higher degree of acceptance from the group functions and affiliates regarding the invoicing details and amount provided by Group Finance
- A clear separation of cost allocation and customer-specific consumption of IT services and solutions
Learning points
The learning points from the organisation are the following:
• Design with the end in mind – and build only when all information flows, user interfaces, data sources and reporting/invoicing details are known and cleared with all stakeholders and approved by the governing body.

Cost allocation models can be very flexible to develop – but very difficult to alter if new requirements are identified during the development phase
• Work collaboratively with all key stakeholders. Co-creation ensures a more comprehensive and detailed analysis of cost allocation needs and a more complete fit with the requirements
• Ensure a close cooperation and dialogue with internal audit to ensure that the cost allocation model follows all rules and regulations, incl. rules covering transfer pricing and transparency
### APPENDIX 1: Pricing models

#### PRICING MODELS

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscription pricing</td>
<td>Subscription pricing is a pay-per-use model in which pricing is per unit of time, which is much easier to monitor and measure than consumption-based pricing. The operational cost of the IT facilities is calculated and amortised across a subscription period (e.g. one year) and then divided between all the users of the service. Depending on the operating profitability goals applied to the IT organisation by the business as a whole, an element of gross margin may be added – perhaps to create a pool to fund future projects.</td>
<td>Simple: If e.g. 5 BUs were subscribing to a service that costs 600,000 per month to provide, the subscription charge (assuming a break-even business model) would be 600,000/5 = 120,000 per business unit per month.</td>
<td>No usage monitoring or penalties: It assumes that all parts of the business will use the service at the same level on a constant basis with no penalties for excessive consumption or peak-time usage. No cost justification: There are not any metrics by which the actual level of consumption can be measured, calculated and justified to sceptical consumers.</td>
</tr>
<tr>
<td>Peak-level pricing</td>
<td>The peak-level approach takes the subscription model and adds a mechanism to monitor and record peak consumption. Consumers are billed according to their peak use, not according to their average use.</td>
<td>Simple to meter: Only peak-level usage needs to be monitored and recorded. Clear cost justification: Easy to show when consumers are using more than the base level resources.</td>
<td>Penalises variability: If there are just a few peaks of usage during a given period of time, the scheme can seem unfair. But shortening the analysis period (e.g. from six months to one year) and the measurement intervals (e.g. from weekly to daily basis) can solve the problem.</td>
</tr>
</tbody>
</table>

---

Figure 20: Pricing models examples

*Source: Mark J. Denne, 2007: “Chargeback demonstrates IT value in the enterprise”, CIO.COM*
## PRICING MODELS

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User-based pricing</strong></td>
<td>If user management is a bigger cost issue for IT than hardware usage, it makes more sense to meter IT by the person rather than the device. If users are connected to their computers for fairly similar periods of time and have relatively well-understood transactional profiles (e.g. bank customer service representatives who work on web portals), this can be a fair and easy way to charge for usage.</td>
<td>Easy to implement: Tracking the authentication of individual users to IT services is relatively simple, especially if a single sign-on system is in place. Clear cost justification: The authentication records provide the basis for cost justification.</td>
<td>Ignores system load: If users make heavy demands on systems when they log on, this model short-changes IT.</td>
</tr>
<tr>
<td><strong>Ticket-based pricing</strong></td>
<td>In IT environments where quality of service is critical, IT can meter and control usage very tightly using electronic “tickets” that use a short validity period (e.g. 4 hours).</td>
<td>Consumption regulation: Ticket-based pricing lets IT control system load to a fine degree, helping to eliminate usage peaks and ensure business continuity. Simple: All that is required to monitor ticket pricing is a ticket portal. Strongest cost justification: Of all the models, ticket-based pricing is the most powerful in terms of cost justification. Pinpoint monitoring: Tickets can be very specific, allowing both sides to monitor exact usage down to the specific application level.</td>
<td>Ticket hoarding: For the ticket-based model to operate effectively, it is often necessary to implement “use-by” dates on tickets to avoid stockpiling.</td>
</tr>
</tbody>
</table>
APPENDIX 2: Project life cycle

Figure 21: Project phases and associated IT cost allocation methodology
APPENDIX 2: Project life cycle

1. Definition and design phase
   - **template development (not affiliate-specific)**
     • A detailed business case should be developed, estimating total analysis, definition and design effort for the solution template according to solution scope
     • All intended affiliates should participate in the business case template solution development
     • **Cost allocation:**
       - Template development: Cost allocation based on number of estimated application users per BU and affiliate in full operations state

2. Pilot affiliate deployment
   • The pilot deployment will lead to affiliate-specific legal/local requirements development as well as improvements to the solution template
   • **Cost allocation:**
     - Affiliate-specific developments: Increased cost allocation fully attributed to requesting affiliate
     - Template enhancements: Cost allocation based on number of estimated application users per BU and affiliate in full operations state

3. Full deployment to all intended affiliates
   • The full deployment will lead to affiliate-specific legal/local requirements development as well as improvements to the solution template
   • **Cost allocation:**
     - Affiliate-specific development: Increased cost allocation fully attributed to requesting affiliate
     - Template enhancements: Cost allocation based on number of application users per affiliate in full operations state

4. Operations (run) phase for all intended affiliates
   • The solution is fully deployed and maintenance releases are implemented with regular releases
   • **Cost allocation:**
     - Run elements: Cost allocation according to application’s cost trigger (i.e. number of IT users, user licences, transactions, etc.)
     - Enhancements: 1) enhancements to the template solution (with functionality that benefits all affiliates), all IT costs should be included in the total cost pool for allocation according to cost trigger, 2) affiliate-specific enhancements to be fully attributed to requesting affiliate.

5. Retirement
   • When a new strategic solution – that will replace the retiring solution – has been developed and stabilised, it is vital that all affiliates plan a fast transition. The result of slow-moving behaviour from the affiliates side is that the remaining affiliates will bear a higher portion of IT costs. In case of slow-moving action from IT, it is fair to assume that Group IT will cover the IT costs not specific to the remaining affiliates (i.e. the remaining affiliates keep paying as in phase 4 “operations (run) phase”
   • **Cost allocation:**
     - If indecision by affiliate, run elements: Cost allocation according to application’s cost trigger (i.e. number of IT users, user licences, transactions, etc.)
     - If indecision by IT, run elements: Cost allocation towards BU’s and affiliate equal to fee in phase 4 “operations (run) phase”
     - Enhancements: Affiliate-specific enhancements to be fully attributed to requesting affiliate.
DERIVING BUSINESS VALUE FROM COST ALLOCATION AND PORTFOLIO MANAGEMENT

About the author

Rasmus Ingemann

Rasmus Ingemann is a director at Implement Consulting Group. He has worked for more than 18 years with management consulting and within the FMCG industry and has extensive business transformation experience.

Rasmus has worked closely with corporate finance, enterprise IT, CFOs and business planners across multiple industries and companies with developing and implementing finance strategy and solutions that support operational efficiency and reporting accuracy. Rasmus has extensive experience with international companies on large-scale finance and IT transformation and ERP implementation.

Rasmus has functional experience with high-performance finance operations and business planning, enterprise performance management, process optimisation, governance, high-performance teams, implementation, management reporting solutions and change management.

Rasmus has industrial experience within consumer goods, retail, industrial equipment, transport and logistics, financial service (banking and insurance), tobacco, building and construction, life science and pharmaceutical, telecommunication, affordable luxury and jewellery, automotive and the public sector.

Rasmus has an M.Sc. in Economics and Business Administration (strategy, organisation and leadership) from Copenhagen Business School and Programme for Management Excellence from IMD in Lausanne, Switzerland.

Contact details
Email: rin@implement.dk
Tel. +45 2338 0016

Michael Holm Larsen

Michael Holm Larsen is a director at Implement Consulting Group. He has worked for more than 15 years with management consulting in private companies and public organisations.

Michael has a pragmatic and holistic approach, involving stakeholders in fulfilment of project tasks and obtaining project goals. Michael is very focused on leading and co-creating change with impact with his clients.

Michael has functional experience within programme and project management, sourcing and procurement, IT management, IT governance, process optimisation and reengineering, economic appraisals, high-performance teams, implementation and change management. Michael has industrial experience within transport and logistics, financial services, health care, medical devices and technology, fashion accessories, energy and the public sector.

Customer engagement responsibility and programme management of strategically important IT development and implementation programmes are currently in focus.

Michael holds an M.Sc. in Engineering Management (planning and technology management) and a Ph.D. from the Technical University of Denmark, in addition to an Executive MBA from Copenhagen Business School. Michael is a PRINCE2® and MSP® Practitioner, Stanford Portfolio Project Management certified, SCRUM master and SCRUM product owner.

Contact details
Email: mhl@implement.dk
Tel. +45 3085 8047
Notes
Implement Consulting Group is a Scandinavian consulting company with more than 550 employees in Denmark, Sweden, Norway, Finland and Switzerland.

We help private and public sector companies implement strategic change with impact.