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Abstract

Rising external competition and cost-pressures compel internal service providers to re-define their customer-service approach. Providing value propositions to the intra-firm end-users instead of provisioning technical resources becomes a necessity to facilitate transparency in costs and customer satisfaction. With that, the complexity of IT projects, particularly international ones, rises and changes in regards to impacts of inter-social and human factors. This paper uses a cross-case study method based on five cases to identify critical success factors for achieving IT-project success and the provision of the needed value propositions. Our analysis found that seven major factors are essential for the project success when coupled with a clear customer-oriented value proposition: one of the most important ones is to understand the customer's business and with it to identify the end-user's requirements. Furthermore, a close project collaboration, process alignment and trustful, clear communication as well the right choice of personnel emerge as important factors. Inter-social factors like support of the top-management and the early identification of stakeholders are equally crucial. Top management support acts as enabler for all these success factors. With the insight into requirements and impacts of each success factor, this cross-case study poses as operational guidance to achieve value propositions in IT-projects.

Keywords

IT-Project Management, Business-IT-Alignment, Customer Orientation, Productization, Cross-case analysis

INTRODUCTION

The IT industry's steady transformation into commoditized products (Carr 2004) has compelled producers to redefine their offer concept from technology-oriented project management and human resource allocation towards solutions with a distinct client-orientation (Böhmann et al. 2003; Zarnekow et al. 2006). Customer solutions comprise services and physical goods as integrated value propositions, regarding the IT-service as the underlying source of value creation in economics (Vargo and Lusch 2004; 2008). Accordingly, literature suggests the systematic alignment of IT service portfolios with the business processes of the customer (Nieminen and Auer 1998; Peppard 2003). Nevertheless, even strictly process-oriented service-portfolios of productized service-packages contain services that are realized as IT-projects (Brocke et al. 2010). As a result, not only the complexity of IT operations but also of the execution of IT-projects is enhanced. Their success depends increasingly on the human factor of customer interaction and inter-social factors like top management support while technological prowess alone has diminished in its power to guarantee success of IT projects. Tasks such as the harmonization of business platforms, the implementation of third-party electronic payment systems, and revenue assurance, while challenging enough at the level of one national unit, can multiply in complexity when carried out across borders. Language barriers, weak levels of trust, and deficiencies in the local knowledge / information can undermine the delivery of services to quality standards expected by the internal customer. Given these paramount challenges, we thus examine which critical success factors can drive successful IT projects involving internal customer service delivery. To this end, we employ a cross-case analysis with five units across an international telecommunications provider, which will be called BETA-services further on.

THE ROLE OF IT-PROJECTS IN PRODUCTIZED SERVICE OFFERINGS

Literature and practice predict IT-service providers to shift their service portfolio from resource- and project-based towards business process oriented and standardized services when speaking of the "industrialization" of IT Service Management (CapGemini 2008; Walter et al. 2007; Zarnekow et al. 2006). Concerning with IT-projects here, it seems appropriate to have a short look at their role when offering such an industrialized service portfolio in future. Doing so, we separate two characteristics of an industrialized portfolio:

Firstly, literature suggests aligning IT service portfolios with the business processes of the customer (Office of Government Commerce (OGC) 2007; Peppard 2003; Zarnekow et al. 2006). It shall not only reduce mismatches between customers' and producers' perceptions of services (Rands 1992) and their quality (Hradilak 2007; Pietsch 2005; Trienekens et al. 2004), but also enable a transparent cost accounting or charge-back (Drury 2000; Gomolski 2005; Heine 2006; Uebernickel 2008). Secondly, the "industrialization" drives the standardization and automation of IT service operations to achieve efficiency (Ebert et al. 2008; Zarnekow 2007). Along with standardized and structured work schedules in the IT-operations, a fixed Service Catalogue is one main requirement to achieve cost efficient and automated operations appropriate to the needs of the customer (Office of Government Commerce (OGC) 2007). Since the commitments and provision-processes of such orderable services are defined in advance – just like mass products in the traditional industry – we label these services 'IT Service Products' (Bullinger et al. 2003; Nieminen and Auer 1998; Salmi 2008).

The ultimate goal is to offer both business process-orientated and standardized Service Products that are pre-defined in a service catalogue and orderable by the Demand IT to be provisioned towards the user with the customer's business (see figure 1). However, IT-projects are still necessary at three points within that portfolio model (highlighted dark in figure 1). Firstly, applications and solutions like a payment solution, a traffic assurance tool or interface creations have to be developed before they can become a standardized business-process supporting IT service product or its prerequisite/resource respectively. Secondly, newly defined service products have to be deployed initially so that the IT-operations processes are well prepared for later orders (Zarnekow 2007). Such deployment-projects however are not in this focus since they do not require customer involvement. Thirdly, some activities to provision a standardized service product cannot be standardized in its IT-operations: even a pure business process-oriented service product portfolio would for example not only include service products to register a user or change his password, but also very complex tasks like supplying IT-service access to a location or replacing a solution in use with another one of the portfolio (Brocke et al. 2010). It is obvious that complex service products like the latter cannot be specified fully in advance and have to be executed as IT-projects. The pre-specified commitments of this kind of service product would be limited to typically needed data and obligations to co-operate in order to enhance the efficiency of the project's execution.

The need of IT-projects in order to offer standardized and customer-oriented IT service products underlines the relevance of further examining success factors when executing IT-projects – even for IT-providers that shift their focus towards "industrialized" IT-service portfolios.
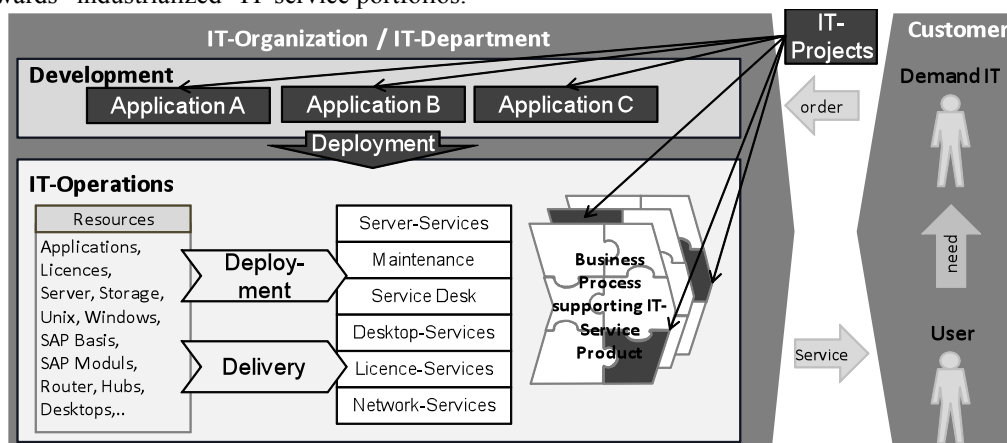

Figure 1: Positioning the role of IT-projects within a productized IT Service Management

RESEARCH METHOD AND LITERATURE REVIEW ON SUCCESS FACTORS

Dealing with the question of how to structure and define productized service offerings, we realized the ongoing important role of it-projects, which are still known for low success-rates (Standish Group Inc. 2009). One of the research questions that arose with our efforts to support the implementation of productized service offerings is not only relevant for this specific research context but refers to information technology projects in general: What are the success factors in IT-projects to provide customer value propositions? Research on IT project management is extensive, but to further evaluate the research of success factors in IT-projects, the qualitative

case study as method of inquiry (Yin 2008) allowed us to extrapolate practices from the first-hand experience of IT managers at BETA-Services. Choosing five units within BETA-Services undertaking service delivery projects, we aimed for diversity in IT service types and customer business functions. This enabled the collection of a wide range of opinions detailing the challenges involved in internal customer delivery. Each unit was selected for the investigation because of its participation in a complex internal IT service delivery project.

Our research design captured some of the key dynamics of service delivery across borders and between cultures. The interaction between IT department and customer—the instrumental variable on which success level depends—served as a unit of analysis. For method of collection, we submitted questionnaires to key stakeholders including project managers, consultants, and employees at the customer end. We conducted interviews with leading information management practitioners serving in various roles at major European firms, including the Chief Operations Officer in Private Banking Operations of a major European financial services firm, the Head of the IT Department at a major machine and electrical components manufacturer, as well as a Project Leader in the Research Department at the same firm. Each interview was conducted and documented semi-formal and involved several researchers and informants to enhance confidence in the findings by convergence of observations according to Eisenhardt (1989).

Before having studied the cases, we base-lined our approach by performing an extensive literature review. It covers common scholarly work that identifies challenges in internal customer service delivery in order to extract critical success factors at the international IT project-level. The literature review is not exhaustive but aimed to help the researches to sharpen the focus when analysing the cases. As table 1 shows in an overview, the literature review reveals that top management support is one of the most important factors. In addition, close stakeholder communication and management of requirements also proved highly valuable to project participants.

Table 1: Results of broad literature review for critical success factors in IT projects

Success Factor / Reference	(Thite 2000)	(Hyväri 2006)	(Turner 2004)	(Collins 2007)	(Baccarini et al. 2004)	(Teo and Ang 1999)	(Ashrafi and Hartman 2002)	(Legris and Collerette 2006)	(Tesch et al. 2007)	(Kauppinen et al. 2004)	(Nah and Delgado 2006)	(Loonam and McDonagh 2005)	(Kappelmann et al. 2006)	(Fui-Hoon Nah and Lee-Shang Lau 2001)	(Mendoza et al. 2006)	(Plant and Willcocks 2007)	Sum
Top management support					x	x	x	x	x	x	x	x	x	x	x	x	12
Project management			x				x			x	x	x	x	x	x	x	9
Change management						x	x	x			x		x	x	x	x	8
Communication					x	x	x				x		x	x	x	x	8
Management of requirements								x	x	x	x			x	x	x	7
User training, education and support					x	x			x	x					x	x	6
Project team composition, skills, & commitment									x		x		x	x	x	x	6
Resources									x	x		x	x			x	5
Business process reengineering										x		x		x		x	4
Stakeholder involvement										x			x		x		3
Project champion												x	x			x	3
Management of expectations				x					x							x	3
Software development, prototyping and testing			x											x			2
Business plan and vision												x		x			2
Commitment		x														x	2
IT function capabilities								x				x					2
Technology and technical issues				x											x		2
Use of consultants												x				x	2
Cultural change											x						1
Leadership style	x																1
Cooperation																x	1
Vendor capabilities																x	1
Security strategy															x		1
Outsourcing management															x		1
Implementation strategy															x		1
Sum	1	1	2	2	3	4	4	4	6	7	7	8	8	9	12	15	

Based on this literature review, we analysed five cases of executed IT-projects and identified categorical practices for promoting the success of service delivery projects in an international setting. Our results show that both process-level factors and inter-social factors are decisive in promoting successful provider-customer relationships. At the process level, the identification of requirements, top management support, stakeholder involvement, and the harmonization of disparate approaches are effective practices for ensuring smooth service delivery. At the human level, close and iterative communication, involvement in consumer business processes, trust-building, the management of expectations, and overall cooperation were cited by respondents as major determinants of a successful project.

INTRODUCING THE CASE STUDIES

Each case deals with BETA-Services, a subsidiary of a large European telecommunications firm focused on the mobile communications market. BETA-Services began operations as a loose association of individual countries' mobile operators and has since evolved into an integrated and coordinated brand – a single body delivering a consistent level of service across the globe. The company has experienced multiple international IT projects running as a result of its targeted "one company approach". The BETA-Services case studies are a good example of the challenges posed by customer interaction in IT projects and show how and why projects can be successful or unsuccessful. The themes of the five cases are: (1) International Data Warehouse, (2) Billing Software, (3) E-Business, (4) Payment System (5) Traffic/Revenue Assurance. After short summaries of the case studies in this section, we describe each of the factors in the next and map each to challenges, measures and outcomes.

Case 1 - One Company Integration: Establishment of a European Data Warehouse Platform

BETA-Services International declared the goal of establishing a "one company" approach toward integrating the disparate data warehouses of national companies under one European platform. BETA-Services' internal warehouse units were beset by a lack of alignment in areas like organizational set-up, processes, and international collaboration. The information was maintained in disparate application platforms and across various data warehouses.

The project's principal goal was to create a unified and consistent interface for customer and product-related data, enabling quick inquires about customers, a higher volume of data from the national companies, and a better combination of information from national and international applications. From the outset, the major challenge was to define and elaborate requirements. Owing to changes in the marketing strategy, the steering committee amended the project and found new business support. IT had taken the initiative to approach the national companies on different levels (IS and business) in order to assist them in finding out what each party had wanted and hence enabling them to learn from one another. Through open communication, adjustment loops and prototyping, communication between all stakeholders was improved and the project was set back on track two years after project-start.

Case 2– Billing: Implementing New Standard Software for Third Partner Billing (Software Replacement)

BETA-Services Germany experienced considerable trouble with its billing software, an application found to lack flexibility and to deliver insufficient support of software. This is why BETA-Services began a replacement project which would offer the same functionality while based on standard software.

Both provider and customer encountered several structural and communication-related problems during implementation. Firstly, the IT department was only rudimentarily involved in the specification process, and the outcome had no influence on the requirements specifications. Secondly, the contract with the supplier was based on version 1.0 of the requirements specification document—the same which was used for the development of the insufficient initial solution. Marketing, sales and finance revised version 1.0 completely and released it to the IT department. The release may have been successful were it not for one shortcoming: the new release was not communicated to the supplier. This was the result of the third structural problem: faulty organizational design. From the beginning of the project, the IT department was effectively "sandwiched" between vendor and the business side; vendor and actual customer (the business side) had no direct contact with one another other.

To resolve the communications conundrum, project management initiated a stakeholder workshop at the headquarters of the supplier. Following the workshop the IT department built up the necessary know how, hired external experts, and experienced a higher level of motivation to experiment with the system. For the next release BETA-Services built up internal knowledge and opted for an internal solution, with the new contract leading to a strong commitment at the IT side and the customer tightly integrated through regular team meetings and workshops.

Case 3 – SOA: Technical Architecture and Sales Processes Alignment to SOA

BETA-Services began a campaign to harmonise e-Business platforms across several national companies, aligning each company's technical architecture and sales processes to the new service-oriented architecture based (SOA) CRM platform. The aim was to achieve synergies and consolidation by aligning the e-Shop platform with the SOA CRM platform. The second project step aimed to re-design the e-shop of BETA-Services, promoting more cross/up selling.

The project started by defining a common business architecture. To this end, the IT department approached the national companies in order to understand the sales processes as well as identify the requirements. An initial eighty were reduced to thirty, which led to frustration on the part of national companies because of missing

requirements in their respective roadmaps. Strong resistance by the companies appeared against the alignment of the e-sales processes, resulting in the project's termination. In its place, the development of a corporate wide e-business platform based on SOA was furthered. The project would support the individual business processes of the national companies through achieving synergies among the invisible parts of the system.

Coordination between projects was critical for mediating the different needs of the national companies. To fulfil this role, the IT department had to act as a process enabler rather than a dictator. As a result of this successful prototyping and user-testing, the technical solution fulfilled the expectations of the companies. Today, the solution is implemented, albeit nearly exclusively on architecture level. If the plan succeeds, the CRM-platform could become a breakthrough solution by providing flexibility and achieving synergies.

Case 4 – Payment Enabler: Upgrade of Payment Solution to International Level

The aim of this project was to introduce a payment system featuring technological advancements such as location-based services and ID management. At first, the project's scope was limited to BETA-Services Germany. A hired consultant acted as a mediator between business and IT during the phase of requirement gathering, thus improving the understanding between the two sides. After one year, the first version of the solution was put into operation for BETA-Services Germany.

Following the rollout in Germany, requirements for a similar solution emerged in other national companies. This led to an upgrading of the project scope to an international level, compounding the major challenge of coordinating requirements and changes. Although the international version 2.0 was finished half a year later, the roll-out required another level of effort. As the local IT departments were reluctant to use the central solution, management pressure was brought to bear.

To fortify connections between international IT and local staff, BETA-Services introduced a bridgehead concept. Bridgeheads are employees in the local national companies, dividing their time equally between working on local projects and working for the central organization. In regularly held meetings, the bridgeheads identified the potential for common international solutions and proved valuable in collecting and coordinating international business requirements.

The bridgehead concept proved highly effective during the expansion of functionalities to the solution. With a very small project team working in close collaboration, requirement gathering and development were finished in a short time. Similarly to the preceding solution, promoting the new one was more difficult than imagined. In articles, regular international marketing meetings, and through the bridgehead team, the benefits of the enabler solution were emphasized to the national companies. The perseverance paid off: currently, there are several solutions which use the functionalities of both the current and the new solution running in the national companies.

Case 5 - Traffic Tools Revenue Assurance: Automation and Quality Control for Revenue Monitoring

BETA-Services' traffic assurance team, charged with monitoring revenue flows between systems, experienced continuing delays to the receipt of information, and consequently could not react to incidents quickly. BETA-Services' traffic assurance project aimed to resolve this problem. Its main goal was to extend and improve existing traffic assurance, automating manual activities and minimizing the risk of human error. Also, data gathering delays needed to be minimized, and additional functionalities for tasks such as incident management and monitoring had to be implemented.

The UK company began the project by initiating an informal vendor selection process and delivering a business case able to prove the necessity of such a project. Realising that only a common approach would maximize the benefits of such a system, BETA-Services UK officially started the communication process by stressing the importance of the system to all national companies. All parties quickly established a common framework on how traffic assurance could be realized. With a solution already underway in Germany, an international UK-Germany team was formed to estimate the feasibility of applying the Germany-based solution to other national companies. A business case helped to convince the German side to replace the existing system.

The success of the project depended largely on reaching an understanding between business and IT on both a process and cultural level. The IT team communicated the benefits of a traffic tool in accessible language to the traffic assurance team. Similarly, team-building between German and British branches bridged trust gaps and enabled the project to progress further.

FINDINGS OF THE CROSS-CASE ANALYSIS: CRITICAL SUCCESS FACTORS

Our case analysis identified several critical factors that proved instrumental in creating successful international IT projects. It turns out that most of them are closely linked to the understanding of the needs within the customer's processes. The factors, learned from observing project dynamics before, during, and after implementation, frequently feature in an IT team's approach to managing interaction with customers at the process, inter-social, and psychological level. Table 2 outlines the success factors presence by case, highlighting the very important factors through a darker colour and capital X and showing low factor involvement through absence of character and colour. The factors are sorted by quantitative coverage in cases.

Top Management Support: Promoting a Supportive Environment

Psychological factors such as a supportive environment significantly enhance a project's chance of success. It has to be emphasized that top management support acts as enabler for the other success factors, as the cross-case

Table 2: Success Factor Presence by Case

Success Factors	Case 1: Integration	Case 2: Billing	Case 3: SOA	Case 4: Payment	Case 5: Revenue Assurance
Top management support	X	X	X	X	x
Understanding the Business	X	X	X	x	x
Close Collaboration	X	X	x	x	X
Successful Communication	X	X	x	X	x
Alignment: Approaches to Processes	x		x		X
Personnel Selection			X	x	
Early Identification of Stakeholders		x		X	

study reveals. To promote the understanding of the business, top management will have to delegate requirements definition authority to the lowest end users in the organization. To promote close collaboration and successful communication, it will have to abandon unity of command and allow end users to report both to a functional superior and a project superior. Furthermore, to promote personal selection, top management will have to pay for project leaders and lead systems analysts who are conversant with both functional and technical minutiae.

Case 2 showed the impact of management support in overcoming strong department-level thinking and low motivation due to unknown project goals and missing knowledge. Managers focused on end-users, empowering them through communication, education, and consistent assurance of support. This led to a more team-oriented collaboration that enabled the pursuit of goals, resulting in a supportive environment for further research and prototype-development. As evidenced by case 1, top management can be central in breaking resistance at the national level when implementing cross-border projects. Strong leaders engaged in alliance-building helped bring the project forward across national levels, leading to a higher level of cooperation and the shared pursuit of goals. Management can also mitigate the effects of crisis. Case 3 demonstrates that a project can survive a crisis thanks to top management support, which has the knowledge and power to match projects. Additionally, case 4 showed that sometimes for an international roll-out, finely calibrated management pressure can be necessary in addition to normal project marketing. A supportive management also improves the customer-IT interaction down the chain of implementation since the knowledge and experience of these stakeholders can be of direct benefit for the project. Furthermore, the management's tendency to view the project as a part of the whole project portfolio can be helpful in detecting synergies between projects.

Understanding of the business of the customer

The IT department's mission is to support the customer in its daily work by supporting it through IT. Consequently, the IT department as a supplier needs to understand the processes and challenges of the business in order to demonstrate the possibilities and restraints of IT solutions to the customer (Zarnekow et al. 2006). Case 1 indicates that when an IT department accurately knows the needs of the business, support at the customer end is boosted commensurately. Similarly, the business side knows its own processes and its methodology best, and if the business side is able to comprehend basic IT functions, it will be easier for them to define requirements and communicate with the IT department. As a result it is able to understand decisions of the IT department and experience higher levels of motivation for further improvements or improved/new applications.

The IT department therefore is charged with a few critical tasks: building up a solid knowledge of the market, knowing about existing solutions, and understanding the business of the customer. Workshops, discussions and documents are useful tools for the IT department's knowledge mandate. For example, in case 1 the one-company integration project team went to BETA-Services Austria to discuss and capture requirements. Such practices can

be further advanced by close collaboration and workshops to give the customer insight into the technical problems requirements cause.

The operational meaning of understanding the business of the customer is the investigation of user requirements which became crucial in all cases: case 1 shows the major challenge of defining them while case 2 came into major problems because of an incurrent requirement specification. Furthermore, requirements reduction resulted in frustration in case 3 while the further cases show similar significance of user requirements definition.

Close collaboration

The most direct approach to achieving a high degree of business-IT alignment, at least in theory, is a close collaboration of representatives on both sides in the project. To this end, the 'bridgehead' concept - employees in the local national companies diving their time 50-50 between local projects and the central IT organization - prove extremely valuable. Bridgeheads enable stakeholder dialogue on the potential for common solutions and aid the requirement consolidation process for running projects. An environment of frequent dialogue on challenges, requirements, and restrictions helps stakeholders focus their goals and economize resources during the implementation, resulting in a small but useful community.

The bridgehead mechanism helps mitigate cross-cultural trust and communication challenges. Case 5 demonstrated that trust-building—a foundational element of close collaboration—enables employees across borders to establish mutual trust, without which project implementation may have stagnated. The language barrier and the distance between project members initially made communication difficult, however, frequent communication and regular meetings helped offset cross-cultural challenges. The important factor here was personal contact between the project members, which could only develop through personal meetings. If the concept is established early on in the project before the unnecessary expenditure of resources, stakeholders significantly improve the chances for a successful project and successful IT-customer interaction.

Close collaboration also improves the requirement gathering process. Frequent cooperation from the outset ensures that all stakeholders are involved, minimizing iterations, redundancies, and amendments. It helps to involve the business side as an active participant rather than passive recipient of services. Case 2 and case 5 demonstrated that a sloppy requirements process with multiple iterations can create both friction and waste. The definition and elaboration of requirements is often a challenge due to a lack of IT knowledge on the business side and a deficit in business knowledge on the IT department side. However, as case 1 illustrates, close collaboration with the business side on various levels—adjustment loops—brings the requirements closer to the needs of the business side. Adjustment loops lead to integration. This occurs not only on the functional level, but also on process and methodological level, resulting in a smoother project development, more efficiency and effectiveness as well as higher customer satisfaction.

Successful Communication

Communication - distinct from collaboration in that it deals with the accurate conveyance of information - can be seen as a key factor of IT and business alignment. Effective communication directly determines mutual understanding, and consequently, project success. The case studies showed that goals of an efficient communication include communicating often and openly with a high measure of transparency, integration of stakeholders, and relationship built on trust.

Case 2 demonstrates the pitfalls of communication barriers. The IT-department, in a "sandwiched" position, acted as a central communication hub between the software vendor and the business department as the final customer. As a result the IT-department obstructed communications between the customer and vendor, and in some instances failed to communicate relevant facts to the customer, leading to a crisis in the project. The crisis was finally overcome by a three-week stakeholder workshop, where all stakeholders collaborated and reached a mutual decision to move forward with the project. When using business cases to pitch project approaches, IT departments are required to acquire in-depth understanding of the case and the challenges of the business. This must be communicated and discussed with the customer so that a trusting relationship can be established. It involves bringing all stakeholders together, listening carefully and mediating differences between them. Case 2 evidences that all parties have the impression that IT seeks to find the best possible solution, if this is archived.

When negotiating the difficult terrain of project implementation, stakeholders attempted to conceal their mistakes and caused a more serious crisis later on. Regular stakeholder meetings and an open communication culture could have prevented such problems arising from an environment of suspicion and confusion. As a result, stakeholders should be immediately informed of upcoming problems, which could in turn be resolved through collaboration. Unrealistic expectations can be avoided with regular open communication: our cases showed that mechanisms like the bridgehead concept and regular forum consultation are effective instruments.

Critical to effective communication is timing of the message. The IT organization has several layers of responsibility: firstly, to convince and inform the business side of the opportunities of new solutions, support innovation, and then to sell the corporate standards to the business side. To do so, each stage of communication must match the moment that suits the customer; hasty or delayed messages can fall flat if the customer is not ready to receive the information. Hence, a balance between push and pull communication has to be found.

Our cases show the effect of tailored communication strategies. Varying communication strategies for different business levels, using selective emphasis for different opportunities, are especially effective. The challenge for the IT organization in this regard is to identify the different information needs and reasons for decisions/support. The communication must in turn be tailored to the customer profile. In case 4, the IT department had to convince customers of the benefits of the new solution by product demonstrations. In case 1, the IT department applied management pressure to establish the corporate IT policy required to establish economies of scales through a common warehouse project. Alternatively, as case 2 demonstrated, customized communication can convince various business levels to implement standard software. Each case showed that customized communication strategies lead to a more convincing communication and help improve project support all over the company.

Alignment of Approaches and Processes

Owing to the fact that customers have different approaches to handling tasks and consequently different processes, a solution for one customer may not be suitable for another. Only a common understanding of a task can set the cornerstone of a re-usable solution. Because of its ripple effect through the implementation phase, process alignment must be considered as early as the requirement gathering phase.

Case 5 shows that multiple approaches to a task can be valid, but have repercussions for the implementation of a solution. Cross-national trust-building across German and English language barriers showed that despite international project complexity, alignment can be achieved through iterative alignment of processes, made operational through workshop form. The subsequent establishment of a "best practice" for Revenue Assurance, which was accepted by the national companies, was done independently of the development of the IT solution. Differences in philosophies and group processes often preclude the use of a solution without a major adaptation. A commitment to realising common processes helps mitigate the challenge of these differences.

Personnel Selection: "Transformers"

Having emphasized that the understanding of customer needs is the key to IT project success, it is not astonishing that the cases also highlight the importance of "transformers" within a project-team. Similar to "bridgeheads" as link between local and central IT organizations, there is a need for "transformers" who can translate end users' functional requirements to IT specific specifications. Case 3 serves to illustrate the point: it proved that the right mix of people in a project, including "transformers" with a basic understanding of the business and IT world, is crucial. They can mediate between two parties and strengthen communication between differing languages of technology and business. These intermediaries can understand the views and issues of the various stakeholders and can talk to them using accessible language. Case 3 featured a business-side industrial engineer with solid technical understanding, who proved instrumental in explaining the target features in a way that business could understand them. Furthermore, he knew what kind of information the IT department needed and could communicate those requirements easily with the specialists from the IT department. Such interactions demonstrated that "transformers" in the project team lead to improved mutual understanding, fewer conflicts and a higher customer satisfaction.

Choosing transformative personnel can also help to consolidate requirements to pre-empt crises that emerge from conflicts during implementation. Specifically, consolidation can make mediation tools and rules operational for handling those conflicts. Defining a process which efficiently gathers and consolidates change requests is an important factor for project success and leads to higher customer satisfaction. Furthermore, the consolidation of disparate and sometimes contradictory change requests is very complex, leading to conflicts between stakeholders. Bridgehead concepts are instrumental in this consolidation process, facilitating the continuous development of a solution without generating a "functionality jungle" in the company.

Early Identification of Stakeholders

The identification of the real needs of IT support on the customer side is challenged by the complexity of all IT customers' interaction as well as some personal goals of individuals unrelated to company success. Consequently, the project manager must know which entities/customers could be interested in what output of a project and then obtain their commitment to the project without losing the main scope to support the customer in its business through the IT solution. While too few stakeholders endanger the economical efficiency of the

project, too many might unnecessarily lead to a drastic increase in complexity and an unintentional shift of the project scope towards a solution not fully aligned to supporting company success.

In case 4, the need for stakeholder inclusion was underscored. The payment solution initially met resistance during the international roll-out because local IT departments would rather have developed their own solutions than adapting one which had been centrally-developed. An international approach from project inception would have smoothed the project's implementation. After developing the follow-on to case 4, the help of project marketing was still needed to achieve multiple international roll-outs.

CONCLUSION AND LIMITATIONS

Even standardized service portfolios do not get by without the need of successful IT-projects when providing solutions as integrated value propositions to customers. Our research findings fortify literature that interpersonal and human capital factors are decisive in steering an international IT project to fruition. We find that a project's success is highly correlated with efforts to understand the customer's business and its real need of IT-support. The course of a project can significantly be influenced through the IT team by using a set of mechanisms to improve overall customer engagement. Relational nodes such as "bridgeheads" and "transformers" prove invaluable in counteracting poor communication and enhance close collaboration and trust between parties through regular dialogue and consultation on challenges, requirements, and goals. On the interpersonal level, the right selection of personnel and the identification of stakeholders are crucial for the project success. All these factors have to be supported by the top management, as the cases reveal in detail. With that insight into the requirements and impacts of each success factor, this research provides much more operational guidance than our literature review could provide.

However, our small sample of five cases within the same company group provides only a one-time snapshot of company practice and is far too small to be representative. An extension of this research would be a voluminous and longitudinal look at IT service providers to further evaluate the success factors of projects in practice. This would also include to further evaluate the rank of importance per success factor, which is poor in quantitative score because of the small sample size. Besides acting on that, practitioners and researchers alike may elaborate on the findings in this study by seeking out those contextual factors that are decisive in shaping a successful environment to provide value propositions to the customer. As shown, the relevance of this aim does not decline with the offer of standardized service portfolios. Those offerings are going to be our further subject of research in matters of commitment descriptions and possibilities of customization.

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