

## **Industrial Marketing Management**

The development of post-project buyer-seller interaction in service-intensive projects

Corresponding author: Ilkka Ojansivu

Oulu Business School, Department of Marketing

P.O. BOX 4600, 90014 University of Oulu, Finland

Tel. +35844-3072449

Fax: (08) 553 2906

E-mail: [ilkka.ojansivu@oulu.fi](mailto:ilkka.ojansivu@oulu.fi)

Kimmo Alajoutsijärvi

Jyväskylä University School of Business and Economics

Finland

Tel. +35840-5047418

E-mail: [kimmo.alajoutsijarvi@jyu.fi](mailto:kimmo.alajoutsijarvi@jyu.fi)

Jari Salo

Oulu Business School, Department of Marketing

P.O. BOX 4600, 90014 University of Oulu, Finland

and

Aalto University School of Business

Tel. +35844-3072449

E-mail: [jari.salo@oulu.fi](mailto:jari.salo@oulu.fi)

### **Abstract**

The purpose of this research is to enhance the understanding of post-project buyer-seller interaction, a topic previously studied mainly from the perspective of social exchange or sleeping relationships. With the advent of service-intensive projects, however, the dynamics of post-project interaction have changed, demanding a broader theorization. This research extends the scope of project marketing, by proposing a research framework illustrating interaction development in a longitudinal setting. We utilize the framework to analyze three projects, two of which continued for more than a decade, through a qualitative case study. The research provides empirical insight into the interaction orientations and development patterns arising in the post-project stage. It suggests that post-project interaction develops through three main orientations (cooperative development, buyer-led development, and seller-led maintenance) that vary over time, so creating unique development patterns. The study concludes with five practical recommendations for managers to deal with evolving post-project interaction.

*Key words:* Business relationships, interaction, post-project stage, service-intensive projects.

## 1. INTRODUCTION

There are three main research streams that have contributed to our understanding of post-project buyer-seller interaction. Each of the streams adds a specific perspective on the phenomenon that requires clarification before the knowledge on the research streams can be synthesized into a research framework in the next section.

Research into the social dimension of business relationships has dominated much of the project marketing discussion of post-project interaction over the last two decades. The key concept has been the discontinuity problem faced by project sellers (Hadjikhani, 1996). Accordingly, the main managerial challenge is seen to be maintaining social exchange in the absence of economic and structural bonds after completion of the project (Cova & Hoskins, 1997; Skaates, Tikkanen & Alajoutsijärvi, 2003). This has given rise to several concepts employed to describe interaction that extends beyond project delivery: examples include sleeping relationships (Hadjikhani, 1996); milieus (Cova, Mazet & Salle, 1996); the ritual approach (Cova & Salle, 2000); beautiful exits (Alajoutsijärvi, Tähtinen & Möller, 2000); and project networks (Mele, 2011; Owusu & Welch, 2007).

The studies of individual projects, including project management literature (Engwall, 2003; Lundin & Söderholm, 1995) and the earlier project marketing studies (Cova & Holstius, 1993; Cova, Mazet & Salle, 1994), have contributed to post-project interaction research by increasing our understanding of activities within projects. In these studies, the post-project stage is nevertheless not the main focus, as it is considered more or less peripheral to the sale of the

project (Mandják & Veres, 1998) or to the success of the project in terms of the “iron triangle” (see Atkinson, 1999).

The broadest view on post-project interaction is offered by researchers studying business relationships in the context of the project business, where projects are regarded as *episodes* in the long-term development of the project buyer-seller relationship (Anderson, Håkansson & Johanson, 1994; Ford, 1980; Håkansson, 1982). Those studies contribute to the development of various interaction concepts dealing with dyadic business relationships and networks, but the processes that emerge from the stages of individual projects have been largely ignored, since projects have primarily been scrutinized at the generic level in the midst of other episodes (Håkansson, 1982, p. 16; Vaaland & Håkansson, 2003). More importantly, discussion of the *bridge* from an individual project to a prospective sequential delivery has remained tenuous, as has the theoretical discussion of the post-project interaction.

The importance of social exchange and personal relations in post-project interaction are undeniable, as they enable trust and commitment between the parties. Since the emergence of service-intensive projects, however, interaction in the post-project stage has broadened to incorporate versatile exchange of services (Artto, Wikström, Hellström & Kujala, 2008; Davies, Brady & Hobday, 2007; Penttinen & Palmer, 2007), inevitably influencing the dynamics of post-project interaction. Indeed, as economic exchange rarely ends upon completion of a project, the focus of project marketing needs to be extended beyond the social exchange. So far, the main theorization of post-project interaction is the *sleeping relationship* (Hadjikhani, 1996), which calls for more variety when dealing with service-intensive projects. Clearly, we need more

research on post-project interaction in this emerging context and a framework combining the knowledge of the three research streams; the social dimension of exchange, the activities within the projects and the concepts of interaction. It can be assumed that the changeover from the delivery of the project to the continuous service exchange will influence the behavior of the parties and thus their interaction orientation. Understanding this change and the resulting development patterns is of paramount importance to the continuity of the business relationship.

Consequently, we address the research gap by asking: What kinds of interaction orientations and development patterns can be recognized in the post-project stage? Our empirical research includes three cases, two of which spanned a time period of more than a decade. Using a longitudinal approach, we try to unravel the underlying dynamics of the post-project stage that play out over time. We argue that rich longitudinal research is needed to provide the details of how these processes actually occur (Siggelkow, 2007). We contribute to project marketing by focusing on post-project interaction in the context of *service-intensive* projects. The term service-intensive is used to describe projects where service exchange accounts for a significant part of the delivery.

## **2. INTERACTION BETWEEN PROJECT BUYERS AND SELLERS: CONSTRUCTION OF THE FRAMEWORK**

The activities in the project stages addressed by the project management and early project marketing research streams are influential throughout the later relationship development. Each stage is unique in terms of the professionals, organizational units, and organizational structures it

binds together (Blomquist & Wilson, 2007; Skaates, Tikkanen & Lindblom, 2002). We follow the reasoning of Engwall (2003) and split a project into three general periods: pre-project, project and post-project by focusing on the latter enduring from the initial delivery to replacement of the exchanged product. To understand the interaction development beyond a single project stage and to analyze the reasons behind it, we turn to the research stream dealing with project business relationships and exploit coordination and adaptation processes (Håkansson, 1982; Möller and Wilson, 1988, 1995; Wilson, 1995) as well as the concept of interaction orientation.

Interaction orientation indicates a firm's tendency to favor specific interaction behavior (Möller & Wilson, 1988, pp. 417–418) that can be competitive, cooperative, command or submission or something between those extremes (Alajoutsijärvi, Klint & Tikkanen, 2001; Campbell, 1985; Möller & Wilson, 1988, 1995). Given the abstract and intangible nature of services, a project buyer and seller may find it difficult to agree on the terms or the scope of the service exchange; and that may cause conflict (Mele, 2011; Vaaland & Håkansson, 2003). These can be resolved through a combination of formal and informal mechanisms (Heide & John, 1992; Ring & Van de Ven, 1992). More importantly, we acknowledge both the functional and dysfunctional dimension of conflicts (Gadde & Håkansson, 1993; Pondy, 1967).

Conflicts direct attention to the social dimension of business relationships, highlighted by the project marketing research stream, in which the concept of relationship atmosphere (Håkansson, 1982; Wilson, 1995) describes the power dependence, the tendency to cooperation or conflict, the overall closeness or distance between interacting parties and their mutual future expectations. We follow the reasoning of Dwyer (1980) and Wilkinson (1981) and recognize

coercive and non-coercive use of power equally. Figure 1 combines the four interaction orientations, atmosphere and interaction processes into a research framework.

Figure 1. A framework for the development of buyer-seller interaction in service-intensive projects.

The use of two continuums (competitive-cooperative and buyer's-seller's dominance) allows a more complete description of change than the traditional linear models (e.g., Dwyer, Schurr and Oh, 1987; Ford, 1980). This is because the change is not always described as a progression in predetermined relationship stages, but instead the change may move the relationship in any direction within the confines of the two continuums (highlighted by a shift on the surface of the diamond in Figure 1) resulting in a unique development pattern. To analyze the reasons behind the change, we pinpoint events influential (Holmlund & Törnroos, 1997) on the interaction along the project stages.

Starting from the conceptualization of Alajoutsijärvi, Möller, and Rosenbröijer (1999), we suggest four types of "extreme" interaction orientations: *cooperative*, *competitive*, *buyer's dominance* and *seller's dominance*. In Figure 1, each of these orientations embodies a certain interaction process and atmosphere characteristics, which are further elaborated on below. By describing these extreme orientations in detail, we are able to analyze post-project interaction development empirically between the extremes. Indeed, interactions are rarely extreme types, but usually a more mellow combination of the two continuums (Easton & Lundgren, 1992).

A *competitive* orientation is characterized by a type of exchange conducted at arm's length with infrequent social, short-term financial and superficial information exchange. Coordination is achieved by formal 'normative-based' governance mechanisms and adaptations are weak at best. The atmosphere is *reserved*, as mutual expectations are low and there is little social closeness. The potential conflicts can only concern a specific object of exchange and its contract, not a long-term relationship. Given the abstract and intangible nature of services, the project buyer and seller may find it difficult to agree on the terms or the concrete scope of the project, and therefore trust becomes a central issue.

*Cooperative orientation* entails a partnership type of exchange with frequent social, long-term financial and confidential information exchange. The atmosphere is reinforcing, marked by high mutual expectations and strong social bonds. In this situation, potential conflicts are not limited only to a specific product but the entire relationship and its history, present state, and future. However, there is also a chance that conflicts are functional and therefore mutually beneficial. Coordination is trust-based and informal, leading to strong adaptations and interdependency. Buyers and sellers possess equal power, which is used in a non-coercive manner to secure mutual atmosphere.

In the *domination relationships*, adaptations are one-sided leading into a lock-in type of exchange (Grabher & Ibert, 2011) where the submissive party has no options. Coordination is achieved through formal maintenance contracts and the dominating party is willing to use its coercive power, which may create dysfunctional conflicts and a *repressive* atmosphere. In the service-intensive projects, sellers tend to have proprietary rights to the system, which creates



additional risks for the customer (Teece, 1986; West, 2003), while neither party knows precisely the amount or quality of services that will be needed at the end of the useful life of the system.

### **3. RESEARCH DESIGN AND METHODOLOGY**

The methodological choices made in the course of this research were guided by the intention to extend the existing knowledge of project buyer-seller interaction in the context of service-intensive projects. The research presents a case study with qualitative data, and the methodology follows abductive reasoning (Dubois & Gadde, 2002), where both theoretically deduced dimensions and empirical material are used. We recognize the importance of case selection and take into account the advice on the topic offered in the literature (Eisenhardt, 1989; Pettigrew, 1989) while following Romano (1989) in thinking that the decision on which particular cases to select is one for the researcher alone. This research uses case studies to provide the empirical setting (Yin, 1994, pp. 39–40). The three cases were selected based on theoretical sampling, where the cases are selected to represent the research issue, which in this instance is describing and explaining the interaction between project buyers and sellers.

Each of the cases reflects different aspects of the problem and is therefore necessary to the research. One seller (referred to throughout as Webtech) and its three customers were selected to support the research. Of the customers (City, Edu, and Tourism), the first two represent the public sector, which accounts for approximately half of Webtech's total turnover, and the third, Tourism, is a private firm, which is, however, mostly public owned. The customer firms were originally chosen because they were considered key customers of Webtech. The data

were collected specifically for the purpose of this research, originally from five cases, but to aid clarity and in-depth analysis, data from only three were ultimately incorporated. The main data source used to describe the interaction was semi-structured interviews (Kumar, Stern & Anderson 1993; Arksey & Knight, 1999) with twenty-six employees of the case firms (Table 1). In order to acquire longitudinal data spanning over a decade, the interviews were conducted over two separate periods: during 2006 and 2012. In addition, researchers supplemented the interviews with informal discussions with the informants to make sense of the phenomenon and to clarify the interview material. These conversations often provided new insights into the underlying managerial challenges.

*Table 1. Interview data*

The choice of informants was premised on the principle that information is best elicited from people who have knowledge of the phenomenon. Although other respondents working in the same firm could have offered additional viewpoints on the subject, we chose to use a key informant from each firm selected for their active involvement in the relationship under scrutiny and ability to provide explicit insights into it. All interviews were taped with the interviewee's permission and then transcribed and analyzed accordingly. Qualitative data analysis was employed to thematize the material (see Miles & Huberman, 1984). Researchers scrutinized documents, minutes of meetings, industry reports and firm visits to triangulate the respondents' answers, as suggested in the literature (Denzin, 1978; Patton, 1987). In practice, data triangulation was first used to compare the different perspectives presented by each of the interviewees and, subsequently, to compare the interviews with other sources, such as industry

reports, in order to validate our observations and interpretations. Other than that, critical findings were shared with subsequent interviewees, exposing them to repetitive dissection. The results are presented in the next section. To maintain confidentiality, the true identities neither of the firms nor of the respondents are revealed.

#### **4. ANALYZING POST-PROJECT INTERACTION IN WEBTECH'S THREE SERVICE-INTENSIVE CUSTOMER PROJECTS**

##### **4.1 From buyer-led development to seller-led maintenance: Webtech and City (1999–2012)**

All three cases share a common seller, Webtech, established in 1997. Its mission envisages developing web-technology based systems and digital user interface designs. The main product of Webtech, and the subject of exchange in the case relationships, is a content management system (CMS) available to customers under license, but for which Webtech retains the intellectual property rights. CMS projects often involve half the content being bespoke, making them rather complicated. Webtech is a typical example of a firm operating in the service-intensive project business, providing a variety of services ranging from basic maintenance to sophisticated development, education, and consultation services.

The first project concerns Webtech and its major public-sector customer, City, a medium-sized city in Finland. City was one of the pioneers of providing web-based services for its citizens. It launched its first web pages in 1995, and by late 2000 had launched a tender to renew its web pages with a more advanced CMS. Before doing so, City had already tested Webtech's reliability by ordering a web-based event calendar one year earlier. Successful

delivery of this trial project had shifted the interaction from one of competitive orientation to a more cooperative form (Figure 2), as successful deals tend to do. Webtech also had other factors in its favor, such as its location, Microsoft technology, and perhaps most importantly, the personal relationship between Webtech's CEO and City's IT project manager that had started two years earlier during a ticketing system project involving Webtech and the city's theater. City represented a perfect development partner as it had knowledge of public administration content management, connections to other public authorities and was a gateway to funding from the State and EU, all of which strengthened its bargaining position during the tendering stage (Figure 2).

Figure 2. Relationship development between Webtech and City.

An initially formal style of interaction, marked by the dominance of City, was replaced by a more cooperative and informal orientation after Webtech was awarded the contract in spring 2001. In the project stage, Webtech set up a project team including software developers, graphic designers and a project manager in charge of implementation, which proved problematic owing to the size of the City organization. The CMS allowed content management in City's independent units, such as social services, education, and land surveying to be decentralized. The challenge that came with decentralization was educating the hundreds of people responsible for updating content to use the system. The project team was very prominent during system implementation; providing Webtech with the opportunity to demonstrate its competence. That equalized the power balance in the relationship (Figure 2).

In 2002, once the CMS had been implemented and the project team dissolved, the post-project stage commenced. At that time, the individual departments of the City organization acted as a *living lab* providing feedback on the particular needs of the public sector. Webtech and City tailored the CMS to handle heavy usage by 40,000 citizens of the region and created state of the art Internet services to replace traditional face-to-face service counters. As a result, City's website was ranked the fourth best public web service in Finland by an EU-sponsored development project in 2002. Interaction during this stage was intensive, informal, and widespread. The interaction assumed a cooperative orientation with a mutual interest and reinforcing atmosphere (Figure 2). Inspired by its success, City increased its investment in development activities and the cooperative orientation continued. City had access to considerable EU funding and also an enthusiasm for product development that persuaded Webtech to adapt its work schedules to suit its demanding customer. Consequently, City's dominance in the project steadily increased (Figure 2). As City's IT project manager said:

*We could pay a visit to Webtech at any time, talk things through on the phone and make rapid adjustments or updates...and when we had an emergency they would speed up their processes.*

Despite the previous successes, development activities started to decline at the end of 2005. Occasionally, City needed a new user interface or a new application from Webtech but it was routine work, which did not require much interaction. Further development was seen as problematic, because the technology was not developing enough fast to enhance the usability of

the system. Gradually intensive development activities were replaced by maintenance services; as Webtech's project manager, B put it:

*The nature of the relationship has changed dramatically since 2005. It has become more of a maintenance type of relationship. Once in a while, they send us an order for a user interface or something similar. So it's pretty much like, well passive is not the right term, but earlier we had way more active product development going on.*

At the same time, there was an influential interpersonal conflict occurring. City's IT project manager and the head of the communication department, who was the senior of the two, disagreed on the way to utilize Webtech. The IT project manager advocated opening up the CMS to tender and finding a more technologically capable seller. The head of the communication department, however, felt that it was more important to sustain the cooperation between the public CMS users in the region, which had been a strategic priority of City from the beginning. The disagreement led to the resignation of the IT project manager, who had been the driver behind the development, a situation explained by the chief information officer of City:

*There are different people in charge of different organizational units at City and things start to happen when the ecosystem is working. This ecosystem is extremely sensitive. She had a central role in this, as she was the driver and the innovator who made things progress.*

City's IT project manager had a central and strong role in a personal network that included members of the national public electronic services development program, the Ministry of Finance and the Regional Council, not to mention a close relationship with the City's mayor.

Those connections had undoubtedly furthered cooperative development activities with Webtech. Her resignation partly disconnected City's communication department from this network and indirectly influenced the development activities between the parties. Around this time, the pivotal account manager of Webtech resigned as well. With the departure of these two key figures, a crucial part of the technological expertise and relationship experience was lost to both firms. Interestingly, a member of the IT project team from City switched to Webtech to take over the relationship management role.

In late 2007, the IT unit of the local university, which was using the same CMS, discovered a data protection leak in the system. Investigations by Webtech established that the leak could only be resolved temporarily. This left City with two options in principle; it could either change the seller, or adopt a new system recently developed by Webtech. However, the decision to upgrade data protection had to be made quickly. By this stage, City had become structurally dependent on Webtech because of its relationship-specific investments and could not use the applications developed by Webtech if it worked with competing sellers. This made open tendering an unattractive option as noted by Webtech's project manager B:

*The more developmental work they have done, the more dependent on the product they have become. They have custom built functions in their CMS that no one else has. If City wishes to change its CMS seller, it has to include these functions in the tender invitation and develop the same function again with the new seller, which would (in practical terms) be a waste of money.*

In a bid to restore customer confidence, Webtech made a rather bold decision to hire a well-known local politician, and City town councilor, as a project manager. This worked in Webtech's favor and after four months of negotiations, City acquired the new CMS from Webtech in 2008, but it was described as an upgrade to avoid the requirement for open tendering. City purchased the new CMS as a turnkey solution, which gave Webtech a free hand to execute the project with all the necessary service augmentations. Once the new CMS had been implemented, exchange continued in the form of passive maintenance activity as it had in the past. In the summer of 2012, City began negotiations over new Internet service concepts with Webtech, which brought the parties closer together (Figure 2). City was wary of increasing its dependence on Webtech, but at the same time was aware it could not rest on its laurels. City saw a need to improve its own capabilities relating to the CMS and emerging Internet services. This technology had been City's strength in the past, but by this stage had become the primary source of its dependence on Webtech. The head of City's communication department elaborated:

*The challenge for us is to get an independent position, so that we are able to run a tender at some stage, but most importantly, we need to increase our own knowledge, because the world is getting more complex and therefore we need to become more active if we want to keep up with it.*

#### 4.2 From seller-led maintenance to relationship dissolution: Webtech and Tourism (2001–2005)

Tourism is a non-profit marketing agency specializing in tourism that was jointly founded by several private firms and city administrations with the goal of increasing tourism in a region of Finland. Tourism has more than 150 Internet service customers and its Internet database holds



information from approximately 800 firms. The first contact between the parties dates back to the late 1990s, when Webtech became interested in the tourism sector. In 2001, an IT-manager with experience of competitive tenders for the delivery of a CMS joined Tourism from Webtech. The two organizations did not collaborate at the time, but there were social connections between the staffs that later affected tendering (Figure 3).

Figure 3. Relationship development between Webtech and Tourism.

When Tourism issued a request to tender for a CMS and auxiliary services, Webtech was clearly the preferred seller. Not surprisingly, Webtech's bid secured the project, which began in 2002. The start of the project marked a period when the relationship was more cooperative (Figure 3). Development activities to match the special needs of Tourism began after the CMS had been implemented, and resulted in an innovative service application, which later became a standard for small businesses offering tourism services. The CMS application connected tourism service providers in Northern Finland, forming an innovative joint value-creating network. This made Tourism the gatekeeper of the network and the intermediary between Webtech and the end customers.

The immediate post-project phase lasted two years until the fall of 2003, and interaction in that period was very collaborative and marked by a reinforcing atmosphere (Figure 3). Eventually routine orders, which did not require much social interaction, replaced development activities and the social distance between two firms increased as noted by Tourism's web-designer:

*Communication between us was not like it used to be... when we would have meetings frequently. We were in contact with Webtech only if we encountered problems or had work requirements.*

Tourism sold on the CMS application to its clients, but at less than market price. Webtech only benefited from a fee charged for implementing the system. Tourism had bought the CMS and planned to manage everything on its own, rejecting the option of a maintenance contract with Webtech. As a result, Tourism's version of the CMS was denied annual upgrades, which caused further issues for Webtech. In fact, Tourism tried boldly to capture revenues from Webtech as Tourism's ICT coordinator put it:

*To be frank, our business has been completely built on this system, which means further commercialization of the CMS. It is a business critical platform for us because we develop it for our clients.*

At this stage, satisfaction had slowly eroded and the interaction orientation shifted towards a competitive form, at the same time increasing Webtech's dominance (Figure 3). Webtech did not prioritize Tourism's unprofitable and unpredictable orders, which created delays for Tourism and again dissatisfied end customers, and the atmosphere gradually became repressive. During the period of development activity, interaction had been very informal, issues were resolved by project team members meeting face-to-face and agreements remained verbal. By the time the full potential of the application became evident, the key contributors to the relationship had already been reassigned to other projects, leaving it for others to step in and agree on the maintenance activities and revenue logic. As a last resort, Webtech appointed a new

project manager in the winter of 2005 to address the problems within the relationship, but the situation did not improve, as maintenance was still an issue. This resulted in hasty interpretations of the behavior of counterparts and the interaction spiraled into a vicious circle increasing the social distance degree by degree, gradually causing their interaction to drift apart (Figure 3).

In the spring of 2005, despite the costs involved, Tourism decided to end the relationship (Figure 3) and find a seller to replace Webtech. The costs involved were not limited to the relationship-specific investments already made in the CMS, but included more indirect ones. For instance, Tourism would need to persuade all of its end customers in Northern Finland to change their system and to train them to use its successor. That would incur extremely expensive training consultancy fees. Tourism would need to purchase training hours from the seller for each of its end customers, or alternatively offer training in-house, which would require a far larger organization and hundreds of working hours. As Tourism's ICT coordinator put it:

*We are doing this as an EU project, so we have to run a tender invitation every three years. Therefore, I compared different systems some while ago and found out that expenses would increase fivefold if we changed the system.*

It seems that the parties were too greedy to benefit from the jointly developed service application and therefore the interaction deteriorated to the point where it became unsalvageable. Neither set of managers was capable of anticipating the scale of change in the post-project interaction. In short, managers failed to handle the transition from development activities to maintenance. As a result, Webtech was not able to capitalize on the innovative service application jointly created with Tourism and it lost its access to the tourism service-provider

network in Northern Finland. However, the situation was far worse for Tourism, which not only compromised future potential, but also the whole value delivery logic of its business.

#### 4.3 From seller-led maintenance towards independence: Webtech and Edu (2002–2012)

This case concerns the interaction between Webtech and Edu. The latter is an educational federation of municipalities founded by four cities in order to organize and maintain their vocational and polytechnic education offerings. In the late 1990s, Edu was using a decentralized information system policy, which meant that each of its units was responsible for its own Internet services. The first contacts between Webtech and Edu date back to that time; when one of the latter's units approached the seller independently and purchased a maintenance contract. This marked the initial shift of interaction towards cooperation (Figure 4).

In 2002, Edu decided to centralize its information systems, with a single seller. By this time, many other educational federations had acquired a CMS from Webtech, making it a relevant seller, and guaranteeing compatibility of the new and existing information systems between educational federations. Since Edu was both a powerful and attractive customer for potential sellers, it instigated a formal bidding process to demonstrate its power (Figure 4).

Figure 4. Relationship development between Webtech and Edu.

Webtech won the tender primarily because of its references and previous maintenance activities. Implementing a CMS in a large organization like Edu was a demanding task because

the platform had to function flawlessly between several units. To meet the challenge, Webtech set up a project team cooperating with a project group, working group and an automatic data processing (ADP) designer from Edu. During the project stage, interaction became more cooperative but Webtech simultaneously gained more power through possessing expertise in such complex projects (Figure 4).

After the CMS had been implemented, Edu began to work with other CMS users in the education sector who had already done developmental work with Webtech. That work included new functions and customer interfaces requiring very cooperative interaction as reflected in Figure 4. The post-project development phase lasted three years (until 2004), and was characterized by intensive interaction, a close and personal relationship between the parties and a reinforcing atmosphere. Hence, the borders between buyer and seller organizations became blurred, as Edu's development manager commented:

*Of course, in the development phase and during the system implementation we knew all the software developers who were working for us and we almost acted like...well, we didn't give them direct assignments, but nevertheless they were present in meetings so we could communicate with them directly about problems in hand and guidelines for product development.*

At the end of 2004, interaction started to become less frequent. The CMS had been tailored to the special needs of Edu and the required functions had been developed, negating the need for further consultation. At this point, Webtech's project manager, who had been involved in the relationship from the start, resigned and a young manager replaced him at short notice. The

development manager of Edu did not directly admit his disappointment over this matter, but it was evident that he had been accustomed to a different kind of interaction with the previous project manager. The leading application designer of Webtech also highlighted the problem of changing the project manager during the post-project stage, because this threatened the continuity of the relationship and further service sales.

*It is a part of our unwritten guidelines and success that project managers know their customer's situation perfectly. So, they have been able to offer services, such as development services and acted as a consultant...It has been our strength, as it builds the size of the delivery, and then we are no longer just selling licenses.*

It is difficult to say whether or not the development activities were dependent on the knowledge of the previous project manager, but soon after his resignation, interaction began to decline further towards passive maintenance. Regular meetings, phone calls, and e-mails were replaced by occasional encounters and the interaction orientation shifted to a more competitive one as the social distance between the parties increased (Figure 4).

In the fall of 2005, the parties begin to negotiate over the possible change to new a CMS system, despite the constant churn among Webtech's contact persons. This dialogue, however, did not lead to any concrete agreement before the aforementioned data protection leak was discovered in the CMS in late autumn 2007. At this point, City set up a joint initiative with the local university and Edu to resolve the problem with Webtech. This collaboration proceeded swiftly and by the spring of 2008, there was a blanket agreement in place to jointly purchase an upgraded CMS from Webtech. During the negotiations, it became clear that the new Webtech

project manager (the City town councilor) did not inspire trust. Edu's data administration manager expressed it thus:

*He was the type of person, who promises the moon, but afterwards, you could just forget all that, I mean the promises.*

Cooperation came to an abrupt end, as the local university and Edu were absorbed into a new organization, which integrated the regional university and polytechnic into a single legal unit (here labeled *Consortium*). All members of Consortium were using Webtech's CMS and therefore the data protection leak became a wider issue. To address the problem Consortium hired a data administration specialist in the spring of 2009 who was tasked with evaluating the capability of Webtech and the alternative solutions. While having reservations about Webtech, the specialist judged that the pressure to resolve the data protection leak issue made instigating an open tender unfeasible at that time. Edu's development manager commented:

*When you begin procurement like a CMS, it ...develops to a point, where one cannot purchase from other sellers anymore, even if (an alternative system) might be more functional or cheaper.*

The decision to upgrade to a new system from Webtech, however, triggered a completely different development path than seen in the City case. Consortium commissioned an internal project to update its CMS's handling capability and to restructure its entire IT architecture. It rejected the turnkey solution offered by Webtech and decided to transfer all the data between the systems itself and, further, to abandon the tailored elements of the system that were the greatest cause of dependence on the seller.

Edu estimated that up until 2009, additional services had meant the actual cost of Webtech's CMS was double the original projection. As a result, it was decided to limit Webtech's role to aspects involving the original technology, and to purchase all remaining services from third parties. Consortium's new policy was to attain an independent position, increase its own capabilities, and resolve issues internally. Consequently, in the fall of 2011, Consortium proposed a detailed maintenance contract in response to a vague version offered by Webtech. However, Webtech was reluctant to yield, acting in a manner that compounded the already repressive atmosphere, as explained by Consortium's data administration specialist:

*I got really angry over their way of managing customer relations...so I wrote an e-mail to the CEO of Webtech and reminded him about our verbal maintenance agreement and that it was cancelled with six months' notice.*

At this point, the CEO of Webtech intervened to restore trust and forestall open conflict. However, the informality that had characterized the interaction in the past was gone. One of the sources of distrust arose from Webtech's new pricing, which had increased since the introduction of the Consortium. Webtech charged Consortium's members the same amount for its services regardless of their size, which Edu's main CMS user thought inequitable:

*The price for new interfaces has gone up almost tenfold in the new CMS. To fully grasp what happened...Webtech partly took advantage of Consortium's disorder and the coercive situation.*



Later, the pricing question escalated in another subproject between the parties, which led to Consortium using another seller on that occasion. In July 2012, the maintenance contract between the parties was still unsigned but the parties were on the verge of agreement. Meanwhile, Consortium was considering opening up parts of Webtech's CMS to open tendering as revealed by Edu's main CMS user:

*It has been decided in the Consortium that a CMS will not be used for the new intranet.*

*This is partly because; well, maybe one day, we will be able to get rid of Webtech.*

## 5. SUMMARY OF FINDINGS

Our empirical findings indicate that the form of interaction between a buyer and seller tends to vary remarkably from one project stage to another. However, in the pre-project and project stages, interaction was rather predictable (Figures 2-4); the buyer was able to dominate and play the competing sellers off against each other until the contract was signed. Afterwards, during the project stage, the seller's power increased and the interaction became more cooperative. Interestingly, in the post-project stage the development pattern diverged. More precisely, our case studies show that interaction tends to vary between the three identified orientations: *cooperative development, buyer-led development and seller-led maintenance* (Table 2).

*Table 2. Summary of the findings: interaction characteristics aligned with project stages.*

*Cooperative development* interaction is very informal and based on trust. Exchange comprises development services, which create opportunities for additional revenues, enhancing the mutuality of the relationship and hence offering a potential platform for future projects. The atmosphere is reinforcing, which further supports the continuity of the project. The risks include blurred organizational borders and what Ford termed “side-changing” (1980, p. 73); where a seller compromises on its own strategic direction in order to please the buyer. This was evident in the City case, where interaction evolved into *buyer-led development*, making the seller the submissive party.

The *seller-led maintenance* orientation is characterized by formal interaction based on a maintenance contract rather than trust. It can best be described as coepetitive (Bengtsson & Kock, 2000), a state referring to a simultaneous combination of cooperation and competition. The atmosphere is repressive as customers are locked into the relationship and both parties’ expectations are uncertain. Maintenance services generate stable income with low cost, and therefore the seller might become tempted to exploit its coercive power and consequently could jeopardize the business relationship. Webtech’s stubbornness and overconfidence during the maintenance contract negotiations lead to the dissolution of its relationship with Tourism, and to a partial unravelling of the structural ties it had established with Edu.

We believe that understanding *how* and *why* interaction evolves between these orientations is at the heart of managing service-intensive projects. First, we address the *how* question and try to see whether or not a pattern emerges in the development. In each of the three cases, interaction began to unfold in a broadly similar way; the post-project stage started with a

*cooperative development* orientation and transformed into *seller-led maintenance*. The only exception was the case involving City, where a period of *buyer-led development* occurred. After the interaction had turned into *seller-led maintenance*, each relationship developed in its own unique fashion (Figures 2–4). However, the three post-project orientations identified offer a roadmap for development; interaction tends to vary between these orientations until the continuity of the relationship becomes compromised.

This opens up the *why* question; as there were several events in the City and Edu cases that could have compromised the continuity of the relationship, but ultimately only the Tourism case degenerated into competitive tendering. Interestingly, the data protection leak evoked completely different behavior in the City and Edu cases. The local politician hired by Webtech was able to restore City's trust in the relationship, but in the Edu case, had the opposite effect. The main reason for this may have been that the data administration specialist hired by Consortium in 2009 did not share a history with Webtech and had not developed a level of interpersonal trust with any of its staff, and so could probably evaluate the relationship more rationally. In contrast, the head of City's communication department, who had been involved in the relationship since its inception and was the main decision-maker for CMS purchasing, continued to support Webtech irrespective of its previous shortcomings.

## 6. CONCLUSIONS

The current study has explored post-project buyer-seller interaction in the context of service-intensive projects, a topic ignored to date. Our aim was to address the question: What

kinds of interaction orientations and development patterns can be recognized in the post-project stage? We approached the issue by devising a research framework (Figure 1), in which interaction orientation was deconstructed through the interaction processes (exchange, coordination and adaptation) and the relationship atmosphere, whereas a development pattern was seen to result from a shift in the interaction orientation over time. We used the research framework to analyze three longitudinal cases (CMS projects), two of which spanned more than a decade. The development of each case was scrutinized in detail (Figures 2–4), and the similarities found in the cases were combined to describe interaction characteristics along the project stages, especially in the post-project stage (Table 2). Our empirical illustrations indicate that interaction develops in the post-project stage through three main orientations (cooperative development, buyer-led development and seller-led maintenance), which vary over time, so creating unique development patterns (Figures 2–4). This variation was most obvious during the period of *seller-led maintenance*, an orientation that led to the dissolution of the relationship in the Tourism case, a more independent power distribution between Edu and Webtech, and to a gradual return to a *cooperative development* orientation in the City case. However, the *cooperative development* orientation seems to precede the other two, and consequently to be a prerequisite for establishing long-lasting projects, as illustrated in the City and Edu cases (Figure 2, 4) where nine years of interaction resulted.

Our key conclusions are as follows. First, service-intensive projects create a unique foundation for post-project interaction to develop upon, as discontinuity is not a limiting factor. Second, none of the identified orientations resembled the sleeping relationship (Hadjikhani, 1996) considered the probable form of post-project interaction. Third, the future of the

relationship becomes dependent not only on social relationships but also on the seller's ability to offer versatile services. These services, especially development services, are the source of relationship-specific investments (Lohtia & Krapfel, 1994) that have the potential to create structural ties (Holmlund & Törnroos, 1997) and bind firms together. This is often referred as *scope creep* (Grabher & Ibert, 2011) in software projects, meaning that the original projections of the investments required are considerably exceeded in the quest to enhance the usefulness and life cycle of the product.

The results contribute to the recent project marketing (Cova & Salle, 2011; Jalkala et al., 2010) and project management research (see Söderlund, 2011) emphasizing project afterlife, by describing the evolution of post-project interaction. Our findings should be interesting to researchers of discontinuity (Hadjikhani, Lindh & Thilenous, 2012) as service-intensive projects embrace characteristics of both discontinuous and continuous business relationships: Exchange continues but the content varies (Table 2) and interaction becomes vulnerable (the Tourism case). Moreover, our findings overlap with the recent research on the downstream movements of project sellers (Davies et al., 2007; Penttinen & Palmer, 2007) as we describe the post-project service exchange in detail.

Our findings challenge the traditional view of the project as having a clear end: Projects do cease to exist but not because of inherent discontinuity, but for the lack of managerial far-sightedness. Services have the potential to promote continuity and stabilize revenue streams otherwise reliant on irregular project sales, but without an understanding of post-project interaction, projects might not develop into long-term business relationships. Hence, our

recommendations are fivefold. First, management should acknowledge the rewards and risks associated with each of the three post-project orientations as explained in the summary of findings. Second, management should develop the sensitivity to recognize change in the three post-project orientations. This is especially important, when introducing younger managers lacking experience of a project's history and therefore probably sensitivity about the business relationship (the Edu case). Third and relating to the previous note, changing project managers in the post-project stage should be avoided whenever possible. Fourth, management needs to bridge transitions between the orientations. Managers involved with projects moving towards maintenance, could learn from the Tourism case, where neither set of managers were capable of anticipating such a change and the relationship came to sudden end. Finally, trust is critical in service-intensive projects as it promotes continuity. Managers tend to ignore shortcomings, when the long-term commitment and trust is strong (the City case). Therefore, using power in a coercive manner is best avoided, as this could strike at the root of trust (the Edu case).

The current research is qualitative in nature and provides insights into service-intensive projects, and especially CMS projects. Accordingly, scholars should apply caution before generalizing the results to other types of projects, while future research would be needed to validate the findings in a broader context. Forthcoming research could include themes such as post-project relationship coordination or the variation in interaction between two sequential project deliveries to the same buyer, both of which were beyond the scope of the current research.

**REFERENCES**

- Alajoutsijärvi, K., Klint, M. B., & Tikkanen, H. (2001). Customer relationship strategies and the smoothing of industry-specific business cycles. *Industrial Marketing Management*, 30(6), 487-497.
- Alajoutsijärvi, K., Möller, K., & Rosenbröijer, C. J. (1999). Relevance of focal nets in understanding the dynamics of business relationships. *Journal of Business-to-Business Marketing*, 6(3), 3-35.
- Alajoutsijärvi, K., Möller, K., & Tähtinen, J. (2000). Beautiful exit: how to leave your business partner. *European Journal of Marketing*, 34(11/12), 1270-1290.
- Anderson, J. C., Håkansson, H., & Johanson, J. (1994). Dyadic business relationships within a business network context. *The Journal of Marketing*, 58(4), 1-15.
- Atkinson, R. (1999). Project management: Cost, time and quality, two best guesses and a phenomenon, it's time to accept other success criteria. *International Journal of Project Management*, 17(6), 337-342.
- Arksey, H., & Knight, P. (1999). *Interviewing for Social Scientists*. London: Sage.
- Artto, K. A., Wikström, K., Hellström, M., & Kujala, J. (2008). Impact of services on project business. *International Journal of Project Management*, 26, 497-508.
- Bengtsson, M., & Kock, S. 2000. "Coopetition" in business networks—To cooperate and compete simultaneously. *Industrial Marketing Management*, 29, 411-426.
- Blomquist, T., & Wilson, T. L. (2007). Project marketing in multi-project organizations: A comparison of IS/IT and engineering firms. *Industrial Marketing Management*, 36(2), 206-218.

- Campbell, N. C. G. (1985). An interaction approach to organizational buying behavior. *Journal of Business Research*, 13, 35-48.
- Cova, B., & Holstius, K. (1993). How to create competitive advantage in project business. *Journal of Marketing Management*, 9(2), 105-121.
- Cova B., & Hoskins, S. (1997). A twin-track networking approach to project marketing. *European Management Journal*, 15(5), 546-56.
- Cova, B., Mazet, F., & Salle, R. (1994). From competitive tendering to strategic marketing: An inductive approach to theory-building. *Journal of Strategic Marketing*, 2, 1-19.
- Cova, B., Mazet, F., & Salle, R. (1996). Milieu as a pertinent unit of analysis in project marketing. *International Business Review*, 5(6), 647-664.
- Cova, B., & Salle, R. (2000). Rituals in managing extra business relationships in international project marketing: a conceptual framework. *International Business Review*, 9(6), 669-685.
- Cova, B., & Salle, R. (2011). Shaping projects, building networks. In Morris, W. G., Pinto, J. K., & Söderlund, J. (ed.), *The Oxford handbook of project management* (pp. 391-409). New York: Oxford University Press.
- Davies, A., Brady, T., & Hobday, M. (2007). Organizing for solutions: Systems seller vs. systems integrator. *Industrial Marketing Management*, 36(2), 183-193.
- Denzin, N. (1978). *Sociological methods: A Sourcebook*. 2nd ed. NY: McGraw Hill.
- Dubois, A., & Gadde, L. E. (2002). Systematic Combining: An Abductive Approach to Case Research. *Journal of Business Research*, 55(7), 553-560.
- Dwyer, R. F., Schurr, P. H., & Oh, S. (1987). Developing buyer-seller relationships. *Journal of Marketing*, 51(2), 11-27.



- Dwyer, R. F. (1980). Channel member satisfaction: laboratory insights. *Journal of Retailing* 56, 59-74.
- Easton, G., & Lundgren, A. (1992). Changes in industrial networks as flow through nodes. In Axelsson, B., & Easton, G. (eds.), *Industrial networks. A new view of reality* (pp.89-104). London: Routledge.
- Eisenhardt, K. M. (1989). Building Theories from case study research. *Academy of Management Review*, 14, 532-550.
- Engwall, M. (2003). No project is an island: linking projects to history and context. *Research Policy* 32, 789-808.
- Ford, D. (1980). The development of buyer-seller relationships in industrial markets. *European Journal of Marketing*, 14(5/6), 339-354.
- Gadde, L-E., & Håkansson, H. (1993). Professional purchasing. London: Routledge.
- Grabher, G., & Ibert, O. (2011). A contextual view on temporary organizations. In Morris, W. G., Pinto, J. K., & Söderlund, J. (eds.), *The Oxford handbook of project management* (pp. 175-198). New York: Oxford University Press.
- Hadjikhani, A. (1996). Project marketing and the management of discontinuity. *International Business Review*, 5(3), 319-336.
- Hadjikhani, A., Lindh, C., & Thilenius, P. (2012). The impact of discontinuity on firms' business relationship behaviour. *European Business Review*, 24(2), 134-150.
- Heide, J. B., & John, G. (1992). Do norms matter in marketing relationships? *Journal of Marketing*, 56(2), 32-44.
- Holmlund, M., & Törnroos, J. (1997). What are relationships in business networks? *Management Decision*, 35(4), 304-309.

- Håkansson, H. (1982). International Marketing and Purchasing of Industrial Goods: An Interaction Approach. In Håkansson, H. (Ed.), *International Marketing and Purchasing of Industrial Products* (15-24). Chichester: John Wiley & Sons.
- Jalkala, A., Cova, B., Salle, R., & Salminen, R.T. (2010). Changing project business orientations: Towards a new logic of project marketing. *European Management Journal*, 28(2), 124-138.
- Kumar, N., Stern, L. V., & Anderson, J.C. (1993). Conducting Interorganizational Research Using Key Informants. *Academy of Management Journal*, 36(6), 1633-1651.
- Lohtia, R., & Krapfel, R. (1994). The impact of transaction-specific investments on buyer-seller relationships. *Journal of Business & Industrial Marketing*, 9(1), 6-16.
- Lundin, R. A., & Söderholm, A. (1995). A theory of the temporary organization. *Scandinavian Journal of Management*, 11(4), 437-455.
- Mandják, T., & Veres, Z. (1998). *The D-U-C model and the stages of the project marketing process*. In Halinen K., & Nummela, N. (Eds.), *14th IMP annual conference proceedings* (pp. 471-490). Turku School of Economics and Business Administration :Turku, Finland.
- Mele, C. (2011). Conflicts and value co-creation in project networks. *Industrial Marketing Management*, 40(8), 1377-1385.
- Miles, M. B., & Huberman, A. M. (1984). *Qualitative data analysis: A source book of new methods*. Newbury Park, CA, USA: Sage publications.
- Möller, K. E., & Wilson, D. T. (1988). *Interaction perspective in business marketing: An exploratory contingency framework*. Report 11-1988, Institute for the Study of Business Markets, The Pennsylvania State University, PA.

- Möller, K. E., & Wilson, D. T. (1995). Business relationships-An interaction perspective. In Möller, K. E., & Wilson, D.T. (Eds.), *Business Marketing: An Interaction and Network Perspective* (23-51). Boston: Kluwer.
- Owusu, R. A., & Welch, C. (2007). The buying network in international project business: a comparative case study of development projects. *Industrial Marketing Management*, 36, 147-157.
- Patton, M. Q. (1987). *Qualitative evaluation and research methods*. CA, USA: Sage publications.
- Penttinen, E., & Palmer, J. (2007). Improving firm positioning through enhanced offerings and buyer–seller relationships. *Industrial Marketing Management*, 36, 552-564.
- Pettigrew, A. M. (1989). Context and action in the transformation of the firm. *Journal of Management Studies*, 24(6), 649-670.
- Pinto, J. K., & Prescott, J. E. (1988). Variations in critical success factors over the stages in the project life cycle. *Journal of Management*, 14(1), 5-18.
- Pondy, L. R. (1967). Organizational conflict: concepts and models. *Administrative science quarterly*, 12(2), 296-320.
- Ring, P. S., & Van de Ven, A. H. (1992). Structuring cooperative relationships between organizations. *Strategic Management Journal*, 13, 483-498.
- Ritter, T. (2007). A framework for analyzing relationship governance. *Journal of Business & Industrial Marketing*, 22(3), 196-201.
- Romano, C. (1989). Research strategies for small business: a case study. *International Small Business Journal* 7(4), 35-43.
- Siggelkow, N. 2007. Persuasion with case studies. *Academy of Management Journal*, 50, 20-24.

- Skaates, M. A., Tikkanen, H., & Lindblom J. (2002). Relationships and project marketing success. *Journal of Business & Industrial Marketing*, 17(5), 389-406.
- Skaates, M. A., Tikkanen, H., & Alajoutsijärvi, K. (2003). The international marketing of professional service projects: To what extent does territoriality matter? *Journal of Services Marketing*, 17(1), 83-97.
- Söderlund, J. (2011). Theoretical foundations of project management: Suggestions for a pluralistic understanding. In Morris, W. G., Pinto, J. K., & Söderlund, J. (Eds.), *The oxford handbook of project management* (pp. 37-64). New York: Oxford University Press.
- Teece, T. J. (1986). Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. *Research Policy*, 15(6), 285-305.
- Vaaland, T. I., & Håkansson, H. (2003). Exploring interorganizational conflict in complex projects. *Industrial Marketing Management*, 32(2), 127-38.
- West, J. (2003). How open is open enough? Melding proprietary and open source platform strategies. *Research Policy*, 32(7), 1259-1285.
- Wilkinson, I. F. (1981). Power, conflict, and satisfaction in distribution channels-an empirical study. *International Journal of Physical Distribution and Materials Management* 11(7), 20-30.
- Wilson, D. T. (1995). An integrated model of buyer-seller relationships. *Journal of the Academy of Marketing Science*, 23(4), 335-345.
- Yin, R. K. (1994). *Case Study Research: Design and Methods*, 2nd edition. Thousand Oaks CA, USA: Sage publications.

Figures and tables

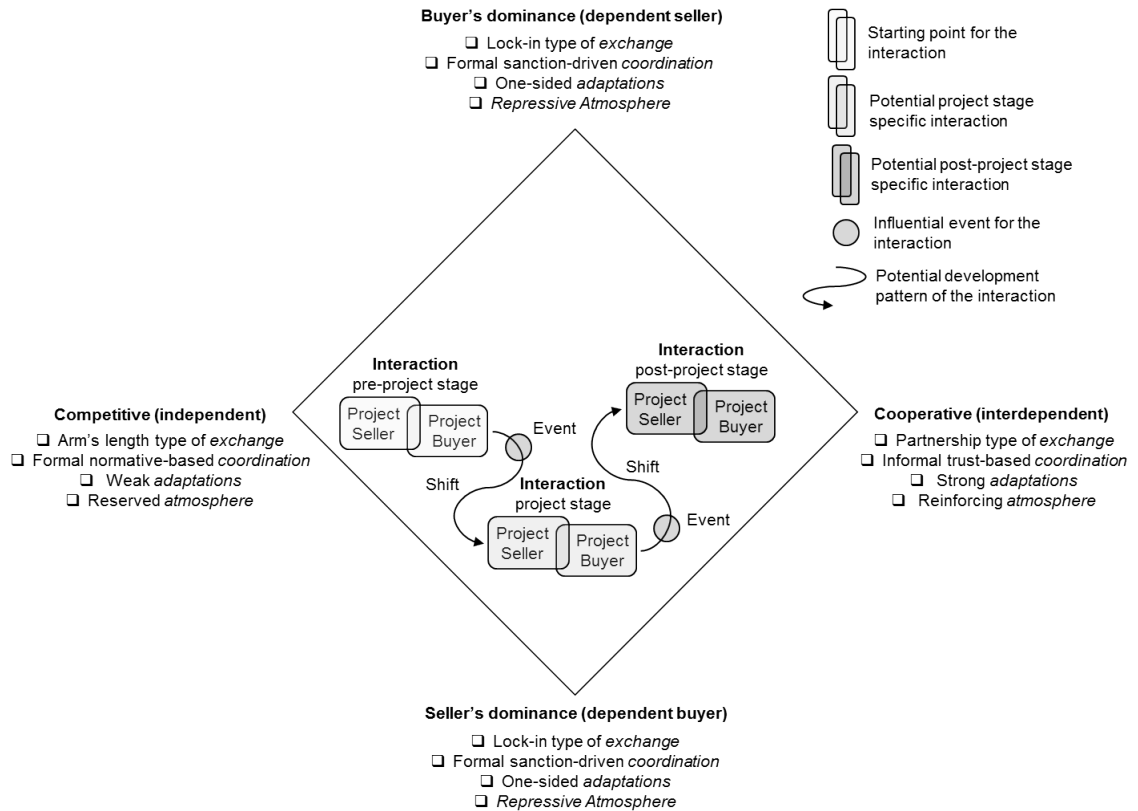


Figure 1. A framework for the development of post-project buyer-seller interaction in service-intensive projects.

Table 1. Interview data

| Firm            | Position                                  | Involvement | Duration of the Interview               |
|-----------------|---|-------------|---|
| Webtech         | Business unit manager                     | 1997-2012   | 1 h                                     |
|                 | Chief executive                           | 2005-2006   | 2 h                                     |
|                 | Chief project manager                     | 2005-2006   | 2 h                                     |
|                 | Project manager (a)                       | 2004-2006   | 2 h                                     |
|                 | Project manager (b)                       | 2003-2006   | 2.5 h                                   |
|                 | Project manager (c)                       | 2007        | 1 h                                     |
|                 | Project manager (d)                       | 2008-2012   | 1.5 h                                   |
|                 | Project manager (e)                       | 2009-2012   | 3 h                                     |
|                 | Account manager                           | 2012        | 1h                                      |
|                 | Leading application designer              | 1999-2006   | 1.5 h                                   |
|                 | Sales manager                             | 2005-2006   | 2 h                                     |
| Sales assistant | 2004-2006                                 | 1 h         |   |
| City            | IT Project manager                        | 1994-2006   | 2 h + 2 h (2 <sup>nd</sup> interview)   |
|                 | Development unit Project manager          | 2002-2006   | 1,5 h                                   |
|                 | Head of the communication department      | 1994-2012   | 2 h + 1 h (2 <sup>nd</sup> interview)   |
|                 | Head of the Consortium administration     | 2002-2012   | 1.5 h                                   |
|                 | Data administration specialist            | 2004-2012   | 2 h                                     |
|                 | Data administration manager (a)           | 2006-2007   | 1 h                                     |
|                 | Data administration manager (b)           | 2008-2012   | 2h                                      |
| Tourism         | ICT coordinator                           | 2001-2006   | 1 h                                     |
|                 | www-designer                              | 2004-2006   | 1.5 h                                   |
| Edu             | Development manager                       | 2001-2012   | 1.5 h + 2 h (2 <sup>nd</sup> interview) |
|                 | Head of information systems               | 2002-2012   | 2 h                                     |
|                 | Main user of CMS                          | 2001-2012   | 2.5 h                                   |
|                 | Data administration specialist (Consort.) | 2008-2012   | 1.5 h                                   |
|                 | Main user of CMS (Consort.)               | 2008-2012   | 2.5 h                                   |
| Total           | 26  |             | 50h (936 transcribed pages)             |

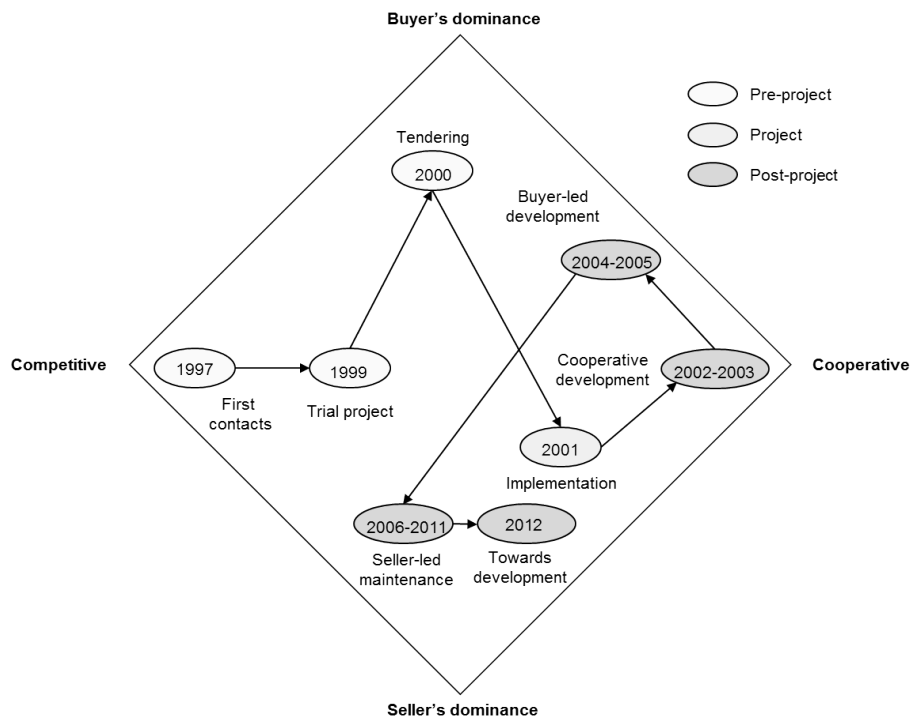


Figure 2. Relationship development between Webtech and City.

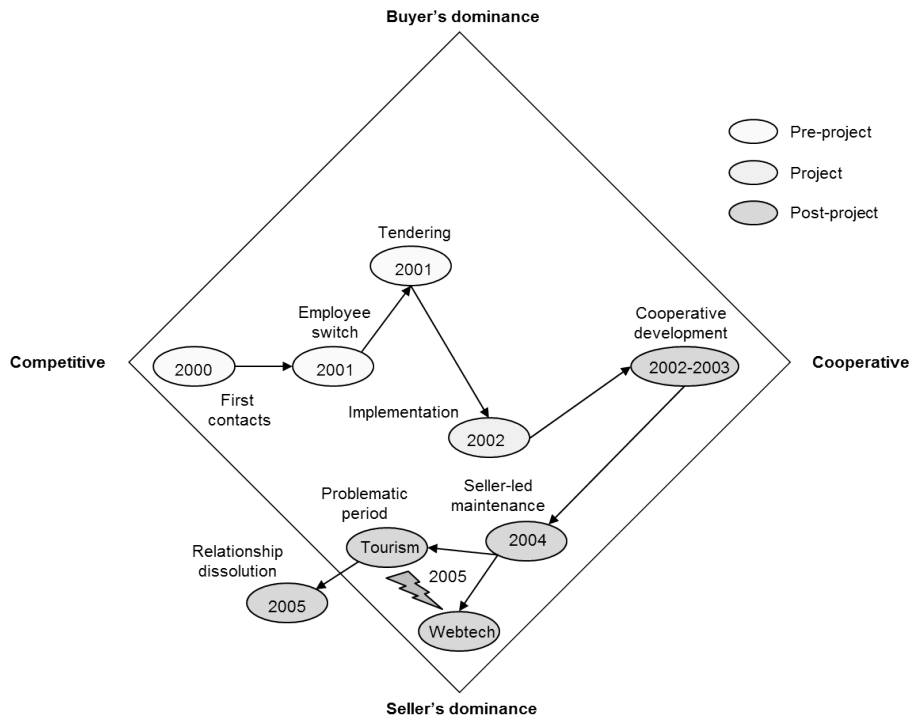


Figure 3. Relationship development between Webtech and Tourism.

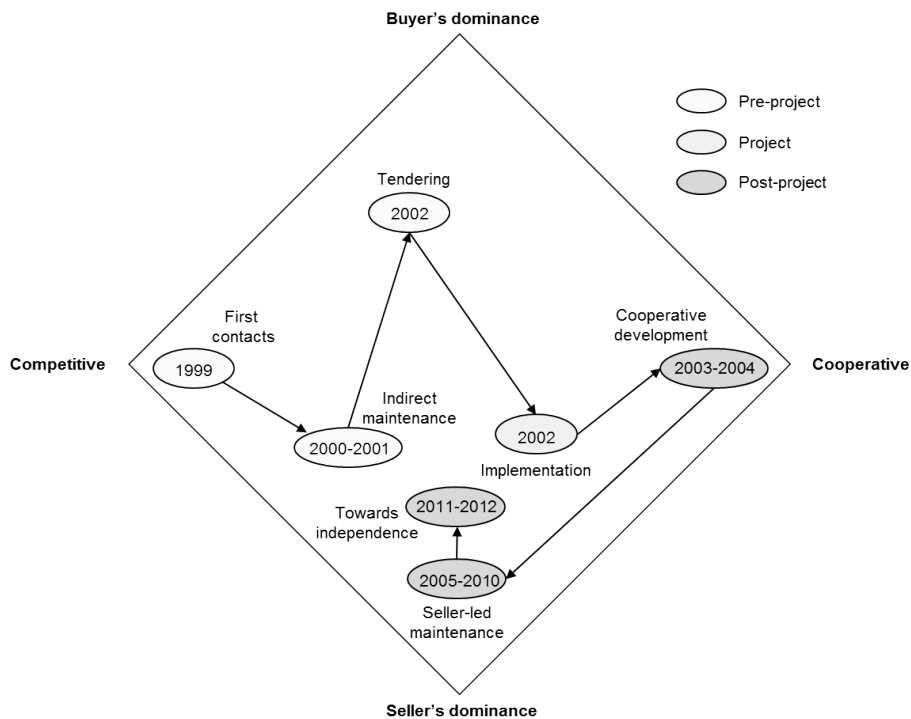


Figure 4. Relationship development between Webtech and Edu.

Table 2. Summary of the findings: interaction characteristics aligned with projects stages.

| Project stages           | Pre-project   | Pre-project  | Project   | Post-project   |   |   |
|--------------------------|---|--|---|--|---|---|
| Interaction orientation  | Neutral<br>1 <sup>st</sup> contacts   | Buyer-led<br>bidding   | Seller-led<br>implementation  | <b>Cooperative<br/>development</b>   | <b>Buyer-led<br/>development</b>  | <b>Seller-led<br/>maintenance</b>   |
| Exchange                 | <i>Arm's length</i><br><br>Occasional<br>information and<br>social exchange.<br>Small-scale<br>financial<br>exchange (trial<br>projects). | <i>Arm's length</i><br><br>Repeated<br>information and<br>social exchange.<br>Long-term<br>financial<br>commitment<br>(software<br>license). | Towards<br><i>Partnership</i><br><br>Frequent social<br>and information<br>exchange.<br>Implementation<br>specific payments<br>(education<br>services). | <i>Partnership</i><br><br>Frequent social and<br>core expertise<br>exchange. Long-<br>term financial<br>commitment<br>(development<br>services). | <i>Partnership</i><br><br>Intensive social and<br>core expertise<br>exchange. Extensive<br>buyer investments<br>(development<br>services).        | <i>Lock-in</i><br><br>Rare social and<br>occasional<br>information<br>exchange. Fixed<br>yearly payments<br>(maintenance<br>services).        |
| Coordination             | Formal<br><i>Normative</i>  | Formal<br><i>Normative</i>   | Informal<br>Gradually<br><i>Trust-based</i>   | Informal<br><i>Trust-based</i>   | Informal<br><i>Trust-based</i>  | Formal<br><i>Contract-based</i>   |
| Adaptations              | <i>Weak</i><br><br>Social<br>connections.   | <i>Moderate</i><br><br>Social ties, bid<br>adjustments.  | <i>Moderate</i><br><br>Social ties, work<br>process and<br>schedule<br>adjustments.   | <i>Strong</i><br><br>Social and structural<br>ties, work process,<br>schedule and<br>technical<br>adjustments.                                   | <i>Strong</i><br><br>Social and structural<br>ties, work process,<br>schedule and<br>technical<br>adjustments.                                    | <i>Weak</i><br><br>Social ties and<br>employer relation<br>adjustments. Fixed<br>structural ties.   |
| Competitive<br>continuum | <i>Extremely<br/>competitive</i>  | <i>Competitive</i>   | <i>Cooperative</i>  | <i>Extremely<br/>cooperative</i>   | <i>Cooperative</i>  | <i>Coopetitive</i>  |
| Dominance<br>continuum   | <i>Equal non-<br/>coercive power</i>  | <i>Buyer<br/>dominance,<br/>coercive</i>   | <i>Seller dominance,<br/>mostly non-<br/>coercive</i>   | <i>Equal non-coercive<br/>power</i>  | <i>Buyer dominance,<br/>mostly non-coercive</i>   | <i>Seller extreme<br/>dominance,<br/>coercive</i>   |
| Atmosphere               | <i>Reserved</i><br><br>Low mutual<br>expectations and<br>degree of social<br>closeness.   | <i>Reserved</i><br><br>High seller and<br>mixed buyer<br>expectations and<br>desire for social<br>closeness.                                 | Gradually<br><i>Reinforcing</i><br><br>Evolving mutual<br>expectations and<br>degree of social<br>closeness.  | <i>Reinforcing</i><br><br>High mutual<br>expectations and<br>degree of social<br>closeness.  | <i>Reinforcing</i><br><br>High buyer<br>expectations and<br>desire for closeness.<br>Moderate seller<br>expectations and<br>desire for closeness. | <i>Repressive</i><br><br>Blurred mutual<br>expectations.<br>Growing social<br>distance between<br>the parties.<br>Dysfunctional<br>conflicts. |





**Minerva Access is the Institutional Repository of The University of Melbourne**

**Author/s:**

Ojansivu, I; Alajoutsijärvi, K; Salo, J

**Title:**

The development of post-project buyer-seller interaction in service-intensive projects

**Date:**

2013-11-01

**Citation:**

Ojansivu, I., Alajoutsijärvi, K. & Salo, J. (2013). The development of post-project buyer-seller interaction in service-intensive projects. *Industrial Marketing Management*, 42 (8), pp.1318-1327. <https://doi.org/10.1016/j.indmarman.2013.06.009>.

**Persistent Link:**

<http://hdl.handle.net/11343/241782>

**File Description:**

Accepted version