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THE IRISH BRIDGE: A CASE STUDY OF THE DUAL ROLE IN OFFSHORE SOURCING RELATIONSHIPS

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Abstract

Based on Relational Exchange Theory (RET), this paper explores the dual role in offshore sourcing as experienced by an Irish software development company. As part of a large U.S.-based company, the Irish site acts as a “bridge” in their offshoring practices. While the U.S. site offshores work to Ireland, and the Irish site offshores work further to India. Hence, the Irish site has experience of being both customer and vendor in an IS offshoring relationship. The study reveals elements for a successful offshoring relationship and presents lessons learnt from the dual “bridge” role that emerged in our study. Furthermore, it is questioned whether this bridge role will be a viable model also in future offshoring arrangements. While temporal location will always work in Ireland’s favour and be an advantage, location alone will not be enough to keep position in future offshoring arrangements. Instead, depth of expertise and experience will be even more important for future competitiveness.

Keywords: Offshore sourcing, offshoring, global software development, customer-vendor relationship

Introduction

In recent years increasing attention has been paid to offshoring of information systems (IS) functions in organizations. As recognized by Carmel and Tjia (2005), offshoring can be understood as the shifting of tasks to any country outside the home country. More recently, however, the term offshoring has taken on a somewhat new meaning and is now commonly understood as the shifting of tasks to low-cost nations, often referred to as “developing nations” or “emerging nations” (Carmel and Tjia, 2005). In relation to software, there are several tasks, such as programming, software testing, and software maintenance, that are sent offshore. While manufacturing industries have been offshoring to lower-cost destinations for 30 years or more, it wasn’t until the mid 1990s that a significant portion of software development work was being sent offshore. During that decade, India became a dominant player in the offshoring of IT business processes. By 1999, India had roughly 200,000 well-trained software professionals, and was exporting \$1 billion in software and software services annually (Carmel 1999). Potential cost savings, reduced cycle time arising from “follow-the-sun” software development, and access to a larger labour pool have helped fuel the amount of work being offshored from high-cost countries such as the U.S., U.K. and Scandinavia to lower-cost economies such as India, China, Russia, and Malaysia. The U.N. World Investment

Report 2004 predicted that offshoring of IT-enabled business processes will increase 18-fold between 2002 and 2007 (United Nations 2004). Overall, there seems to be an ongoing rise of IS offshoring.

However, the growth of IS offshoring is not limited to volume alone (Goles and Chin, 2005). The scope and nature of IS offshoring is expanding from focusing on cost and efficiency to encompassing offshoring as a means of improving the organization's overall business performance (Feeny and Willcocks, 1998). This change has led to a realization that the *customer-vendor relationship* plays a critical role in the success or failure of an offshoring arrangement. Unfortunately, there are indications that the road to a harmonious relationship is not without peril. For example, approximately 25% of all service providers lost their accounts when re-negotiating sourcing contracts, and the average customer now spends around 15% of its IT budget on legal fees related to litigation of the contract (Goles and Chin, 2005). Although there is a dawning recognition of the importance of the customer-vendor relationship, there has to date been a relative lack of empirical research on the topic. While many researchers mention the importance of the customer-vendor relationship, few make this the main focus of their work. As recognized by Goles and Chin (2005), this opens up an outstanding opportunity for future research comparing and contrasting customer and vendor perspectives in interorganizational exchange relationships such as offshoring arrangements.

In this paper, we explore the dual role experienced by an Irish site of a large U.S. software development company. In being part of a large U.S.-based company, the Irish site acts as a "bridge" in their offshoring arrangements. While the U.S. site offshores work to Ireland, the Irish site – acting as the bridge – offshores work further to India. Hence, the Irish site has experience of being both customer and vendor in an IS offshoring relationship, an experience that offers unique potential for research comparing and contrasting customer and vendor perspectives. To explore this dual role, we use the conceptual framework presented by Goles and Chin (2005). Based on Relational Exchange Theory (RET) and with a focus on interactions, interdependencies, and reciprocities between parties, this framework identifies elements that comprise an interorganizational relationship. Based on the conceptual framework presented by Goles and Chin (2005), our research objective is thus:

- How can we understand the "bridge" role of being both customer and vendor in an offshoring relationship?

Methodologically, we adopt an interpretivist approach to develop a richer understanding based on in-depth case study analysis (Yin, 1994; Walsham, 1993).

The paper is structured as follows. The background section defines some key terms used in this study and gives an overview of previous research on offshoring. In relation to this, the theoretical framework is introduced and its use as an analytical tool in this study is explained. The research method section outlines the research approach and provides a detailed description of the research site. Next, the research findings and discussion section guides the reader through the empirical material and its analysis and, finally, the conclusion section covers the main contributions of this paper.

Background

Before proceeding any further, it will be useful to clarify some key terms. There are a number of definitions on "offshoring". Also, the term shares characteristics with "outsourcing", and for the purpose of this study we distinguish between the two. Below both terms are defined and we provide the definitions used in this particular study.

Offshoring versus Outsourcing

An offshore location can be any other location outside the home country (Carmel and Tjia, 2005). More recently, however, the term "offshoring" has taken on a new meaning. From being used for describing tax havens such as the Cayman Islands offshore the coast of the U.S., it is nowadays commonly understood as the shifting of tasks to low-cost destinations (Carmel and Tjia, 2005). Low-cost destinations would typically be those falling into the economic grouping of "developing nations" or "emerging nations", such as India, China, and Russia (also known as the "Big Three") plus Brazil, Romania, and Israel.

Outsourcing, on the other hand, has two implications. First, it means that tasks and processes are contracted to be performed outside the boundaries of the firm. Second, it is understood as an entire process being delegated to an outsider. To date, there are a number of definitions describing IS outsourcing. For example, Cheon et al. (1995)

define the term as “...the organizational decision to turn over part or all of an organization’s IS functions to external service provider(s) in order for an organization to be able to achieve its goals” (Cheon et al., 1995, p. 209). Likewise, Goles and Chin (2005, p. 49) define outsourcing as “...contracting with one or more third party vendors for the provision of some or all of an organization’s IS functions, where ‘functions’ include one or more IT activities, processes, or services to be provided over time”. In the definitions provided by Klepper (1995, p. 249) and Loh and Venkatraman (1992, p. 8), the interorganizational relationship is emphasized in saying that outsourcing is “...the provision of services by a vendor firm to a client” and “...managing a firm’s IT infrastructure through governance mechanisms with other firms”. Global IS outsourcing is often described as the contracting of IT services to vendors external to an organization where the market for both clients and vendors can be located anywhere in the world (Lacity and Willcocks, 2001). However, many firms of today have globalized via acquisitions, i.e., by acquiring smaller software firms and then moulding them into their global operations. Others have globalized by setting up subsidiaries or software centres. When such an offshore centre is owned by the client company, it is called a “captive center” (Carmel and Tjia, 2005). Thus, these arrangements would not be considered outsourcing (as defined above), since they are performed inside the company rather than performed by a third party. In the words of Carmel and Tjia (2005), a better word would be *sourcing* – where sourcing could be from outside the firm, i.e., outsourcing, or inside the firm, e.g. in captive centres.

The terms “outsourcing” and “offshoring” are often used almost as synonyms. However, in light of the above discussion, we distinguish between the two in this paper. Here, offshoring is about location – offshored activities are performed in a different location to the main operation (which would then be the onshore location). Outsourcing, orthogonal to offshoring, is about governance – outsourced activities are performed by another organization, a third party, as opposed to in-house by the organization itself. Consequently, any particular activity can be performed either offshore or onshore and can be performed in-house or be outsourced. Table 1 shows the distinction and relationship between the concepts. For the purpose of this study, we use the concept *offshore sourcing* as suggested by Carmel and Tjia (2005), which thus covers both types of offshoring in Table 1.

Table 1: Offshoring versus Outsourcing

	In-house	Outsourced
Onshore	In-house (traditional model)	Subcontractor (third party) in the same locale
Offshore	Foreign branch of the same company (captive centre)	Subcontractor (third party) in a foreign locale

Previous Research

In looking at research on offshore sourcing, Levina and Ross (2003), suggest that the leading reason behind sourcing is the need to reduce and control IT operating costs. This is supported by Goles and Chin (2005), who recognize that sourcing practices began with a heavy emphasis on cost drivers. Over time, however, the emphasis in research has broadened to include studies describing variations in orientation (Nam et al., 1996) and extent of sourcing (Lacity et al., 1995). Furthermore, new modes of operation, such as “multi-sourcing” (Lacity and Willcocks, 2001), “near-shoring” (Lapper and Tricks, 1999), and “best-shoring” (Fruitman, 2003) are gaining prominence in response to changes in the type of work being sourced – and to political and market pressures (Thiagarajan, 2000).

According to Lee et al. (2000), research on offshore sourcing can be categorized into three different groups. First, there is the group employing an *economic perspective* – primarily transaction cost economics or agency theory – to

frame the question of whether or not to send tasks offshore. Second, there is the group exploring offshore sourcing using a *strategic management perspective* based on either the resource-based view of the firm or resource-dependency theory. Third, there is the group taking a *social perspective* on offshore sourcing. This group is differentiated from the previous two by its underlying assumption that there are shared norms and a harmony of interests between the parties that go beyond the formal contract. As recognized by Ring and van de Ven (1994), interorganizational relationships are maintained not because they achieve stability but because they maintain balance between formal and informal processes. Hence, if personal relationships do not supplement formal role relationships over time, then there is increased likelihood that conflicts will emerge. In a similar vein, Goles and Chin (2005) argue that structuring the contract properly is indeed necessary – but not sufficient. Although the contract is the foundation of a sourcing relationship, it is limited by virtue of uncertainty about the future. Thus, extralegal mechanisms based on mutual awareness and understanding become relevant. In studies adopting the social perspective, the general conclusion is that structuring the contract properly is necessary but not sufficient for offshore sourcing success. Instead, the customer-vendor relationship is seen as increasingly important for the outcome of the offshore sourcing arrangement.

Using Relational Exchange Theory for Understanding Offshore Sourcing

All sourcing arrangements have one thing in common: they involve participants in some type of exchange relationship. Thus, to further understand what constitutes such a relationship, there is the need for a theory that takes into account both the spirit of exchange and the implications of a contract. Relational Exchange Theory (RET) is such a theory. With its roots in marketing and law, it focuses on interactions, interdependencies, and reciprocities between parties in an exchange, holding that transactions between parties are increasingly governed by processes based on informally negotiated rules (Arndt, 1979). RET has been described as a rich and powerful framework capable of capturing the complex webs of interdependence that often characterize interorganizational exchange relationships (Spriggs, 1996). In this study, two aspects of RET is particularly useful. First, RET argues that contracts between parties are incomplete and cannot be expected to anticipate all possible contingencies that might arise. In our view, this applies well to a globally distributed development environment that is both technically and socio-culturally complex. Second, RET assumes that exchanges between parties are shaped by a set of shared expectations about behaviour. These expectations arise from the notion that the relationship is worthy of continuance and, hence, prescriptive in that they become principles intended to sustain the relationship. In our experience, sustainability is critical, and, therefore, expectations about behaviour need to be addressed early on in an exchange relationship.

In an attempt to unify previous research using RET, Goles and Chin (2005) propose a conceptual framework in which they identify constructs comprising an IS sourcing relationship. In this framework, the nature and composition of a relationship is described in terms of *attributes*, i.e., characteristics that contribute to the functionality and harmony of a relationship (see Table 2) and *processes*, i.e., means by which the attributes are developed (see Table 3).

Table 2. Attributes that Contribute to the Functionality and Harmony of a Relationship.	
(1) <i>Trust</i>	The expectation that a party will act predictably, fulfil its obligations, and behave fairly.
(2) <i>Interdependence</i>	The extent to which each party's attainment of goals is dependent on the other party.
(3) <i>Consensus</i>	The extent of general agreement between the parties.
(4) <i>Commitment</i>	The willingness of the parties to exert effort and devote resources in order to sustain an ongoing relationship.
(5) <i>Cultural compatibility</i>	The extent to which each party can coexist with the others' beliefs and values.
(6) <i>Flexibility</i>	The willingness of both parties to make adaptations as circumstances change.

Table 3. Processes by Which the Attributes Are Developed.	
(1) <i>Communication</i>	The formal and informal sharing or exchange of information.
(2) <i>Coordination</i>	The management of interdependencies between parties.
(3) <i>Cooperation</i>	The undertaking of activities to achieve mutual benefits.
(4) <i>Conflict Resolution</i>	To amicably replacing disagreement with agreement.
(5) <i>Integration</i>	The intertwining of processes and attributes into each party's structure and processes.

In this paper, we adopt the social perspective, as mentioned above, for exploring the dual role of an Irish software development organization. In acting as a “bridge” between the U.S. and offshore destinations in India, the Irish site has experience of being both customer and vendor in an offshore sourcing relationship. As suggested by Goles and Chin (2005), we use their conceptual framework as a springboard for exploring the constructs of an interorganizational relationship. As a basis for qualitative interviews and further analysis, the framework focuses attention on the nature and composition of the customer-vendor relationship in offshore sourcing.

Research Method

Research Site

In this study, we explore the Irish site of a large, privately owned U.S.-based company that provides financial services and investment resources. The company has been developing software at its Galway site in Ireland since 2001, and currently employs around 100 people at this Irish site. The software products developed are supplied mainly to internal customers in the U.S. Most projects involve coordinating with several software development teams in the U.S. and India. Of particular interest to this study is the fact that the Irish site of this company acts as a “bridge” in offshore sourcing. While the U.S. site offshores work to Ireland, the Irish site – acting as the bridge –

offshores work further to India. Hence, the Irish site of this company has experience of being both customer and vendor in an offshoring relationship – an experience that offers great potential for research comparing and contrasting customer and vendor perspectives on the offshore sourcing relationship.

We interviewed people from three different projects, all of which were chosen because of their experiences with the Irish site acting as an offshoring “bridge”. In the first project, a huge volume of market data is processed and then sold on to other business units within the company. Market data applications are developed in-house, and separate third-party applications are also integrated into the system. The project is headed in the U.S. Development work is carried out at the Irish site, with quality assurance (Q.A.) activities completed in Bangalore, India. Originally the U.S. site dealt directly with India, and all inter-site communication went through the U.S. However, the Irish site is now moving toward a closer “partnership” with their Indian colleagues, with direct communication being facilitated by a daily four-to-five hour overlap in working hours. In fact, the Irish site has overlapping work hours with India during the morning (Irish time), and U.S. colleagues can be reached from 1 or 2pm onwards. This has helped Ireland becoming a bridge location between U.S. and India.

The second project is responsible for customizing a large complex enterprise system for IT governance that is being deployed company-wide. The Director of Software Development is based at the Irish site. Requirements, first generated in the U.S., are being refined during on-going communication between the Irish and the U.S. sites. The Indian site became involved in the project in June 2005. Software development work is now carried out in both Ireland and New Delhi, India, with some Q.A. work also carried out in India. A total of 35 people are involved across the Irish and Indian sites. The Irish site has very mature processes, and well-defined units of software development work are sent to India. In the future, however, the responsibility for complete software development projects may shift toward India, with higher-level design activities being completed by the Irish team.

Finally, in the third project, interfaces are developed for customers’ payroll systems. Originally, the Irish site acted much as the offshore unit within the project, with a high level of involvement in their work from the U.S. site. Once the Indian site became involved, the Irish and Indian sites were managed as one geographically distributed team. The project manager resides in Ireland, with approximately 15 people across both locations. Work is offshored from the Irish site on to the India site. Past experiences of having the work offshored to Ireland now allows the Irish team to understand better their offshore sourcing relationship with the team in India.

Research Design

Given that little research to date has been conducted on the customer-vendor relationship in IS offshoring, this study was concerned with achieving an increased understanding of this phenomenon and the particular constructs that comprise such a relationship. Bearing this in mind, an interpretivist approach that sought to develop a richer understanding based on in-depth case study analysis (Yin, 1994; Walsham, 1993) was employed.

Data was gathered over a 16-month period from January 2005 to April 2006, and drew upon a number of sources (see Table IV summarizing our research activities). These ranged from workshops and informal meetings to a series of interviews, both face-to-face and via telephone, and e-mail correspondence. The first phase of the project began in January 2005 with a workshop on ‘Global Software Development’. The workshop, comprising both researchers and practitioners, highlighted the complex nature of today’s software development environment and the new challenges that are introduced in offshoring arrangements. This workshop was complemented with face-to-face qualitative interviews with three project managers and one technical product manager at the company. The interviews of approximately one hour duration each were recorded and transcribed. These initial interviews served to give a good overview of the company and the many different projects that involved geographically distributed teams.

Following the first phase, as other key informants emerged during the interview process, the second phase of the project (April 2006) comprised eight interviews and a workshop. Five of the interviews in this phase were telephone interviews, with one researcher asking questions while another researcher listened and took notes. This set-up made it possible to discuss each interview in detail and to compare notes and interpretations. In addition to this, three face-to-face interviews were carried out at the company site. As in the first phase of the project, all interviews were recorded and transcribed. Two of the interviewees from the first phase were included also in the second phase, allowing for more in-depth discussions and comparisons. In some cases, follow-up telephone conversations, as well as e-mail correspondence, took place to clarify and refine emerging issues. To further discuss our findings, the second phase also included a workshop held at the university. At this workshop, strategies for offshoring and

outsourcing were discussed along with different theoretical frameworks that can be used to analyse empirical studies of this phenomenon.

In total, this research project comprised two workshops involving researchers and practitioners, one formal on-site meeting with company management, twelve qualitative interviews, and several informal meetings as well as telephone discussions and e-mail correspondence with company representatives. Ten of the interviewees were Irish-based staff and two were India-based.

The conceptual framework presented by Goles and Chin (2005) was adopted for both data collection and analysis. With a focus on attributes and processes that comprise an interorganizational relationship, this framework worked as a basis for our interview protocol as well as for categorizing and analyzing our empirical findings. This is in line with Patton (1990), who suggests that an interview guide constitutes also a descriptive analytic framework for analysis. A common problem in relation to qualitative research is that different individuals may interpret the same data differently, so-called ‘multiple realities’ (Kaplan and Duchon, 1988). This problem was addressed through the method of venting. In this process, results and interpretations are discussed with professional colleagues (Goetz and LeCompte, 1984). For example, our set-up of the interviews, i.e., one researcher asking the questions and the others listening and taking notes, allowed for a detailed discussion within the research team after each interview. In this discussion, different interpretations were recognized and an increased understanding emerged within the team, since we were able to systematically discuss our different interpretations. In addition, findings were continuously presented and discussed with colleagues and practitioners at the project workshops. Still, we highlight only the Irish perspective of the relationships we describe. In future research, consideration may be taken also to other perspectives. Here we explore the particular “bridging role” experienced in Ireland and, hence, focus our attention to the Irish site of the company.

Table 4. Summary of Research Activities		
Phase	Date	Research activity
Phase 1	January, 2005	Workshop on ‘Global Software Development’
	March 8, 2005	On-site meeting with company management
	July 20, 2005	Interviews with three project managers (face-to-face)
		Interview with technical product manager (face-to-face)
Phase 2	April 4, 2006	Telephone interview with senior systems analyst
	April 5, 2006	Telephone interview with director of software management
	April 6, 2006	Telephone interview with senior software engineer
	April 19, 2006	Workshop on ‘Offshoring/outsourcing strategies’
	April 19, 2006	Telephone interview with India developer
	April 20, 2006	Interview with principal engineer (face-to-face)
		Interview with India project leader (face-to-face)
		Interview with project manager (face-to-face)
	April 26, 2006	Telephone interview with project manager

Research Findings and Discussion

In this section, we present and discuss the results from the qualitative interview study. In accordance with the conceptual framework (Goles and Chin, 2005) adopted in this study, we present our empirical data using two categories: attributes and processes. Within each category, the different constructs comprising an interorganizational relationship are presented and further illustrated with quotes from the interviews.

Attributes of a Customer-Vendor Relationship

Below we present the attributes (i.e., the characteristics that contribute to the functionality and harmony of a relationship) comprising a customer-vendor relationship. Each attribute is further illustrated with quotes from our interviews.

Trust

Trust refers to the expectation that a party will act predictably, fulfill its obligations, and behave fairly (Goles and Chin, 2005). All our respondents agree that trust is critical and that an offshoring relationship is more about trust than it is about contracts. Often there exists a contract at the level of “my team will deliver this amount of work”, but it is not so much a contract, it’s more a set of objectives agreed between managers. As recognized by one manager, it is not about contracts, it is about trust and trying to meld the teams into one. However, this can be difficult when dealing with new sites, something that the Irish site has experienced in its bridge role between offshore locations:

“When getting work sent to us, from, for example, the U.S. – then we know our capability. When offshoring to someone else...it’s different, as you don’t know if they’re capable of doing the work.”

Likewise, there needs to be an understanding of the capabilities and the limitations that exist at different sites. While, for example, requirements may need to be very detailed in the beginning, a long-term relationship in which the parties know each other can allow for more flexibility and more loosely specified requirements:

“You really have to understand and trust the capability of the people you are working with. We aren’t necessarily offshoring complete projects. It’s more handing over well-defined tasks. And so you need to have an understanding of what the capabilities are of the resources you are working with, so you understand not only what work you can send to them but how well it must be defined.”

“Since we started dealing with the U.S., trust has developed so now they know that they will get what they ask for. They know that if there are any issues they’ll be told as early as possible. In the beginning they looked more closely at how we did things – making sure that we were meeting all the dates. That same kind of thing is what we are trying to do now with India – looking at their projects currently to make sure that they are getting the tasks done. Eventually, I imagine that when India has some experience we won’t be doing that as much any more.”

As recognized by Klepper (1995), trust has long-term benefits, as it allows a focus on long-term objectives, it suppresses opportunism and increases cooperation, it enables risk-taking, and it reduces conflict. In our study, both project managers and software developers emphasize the importance of trust in a relationship – whether it is as customer or vendor. While there is a formal contract on a high level, the day-to-day practices are more about establishing and maintaining team spirit and a collaborative atmosphere within and between teams. As can be seen in the quotes above, the Irish site has the opportunity to learn from previous experiences with the U.S. when dealing with new offshore locations such as India.

Interdependence

Interdependence refers to the extent to which each party’s attainment of goals is dependent on the other party (Goles and Chin, 2005). Interdependence is described as beneficial for cooperation between parties. This is discernible in our study when asking one of the project managers about the extent to which each party’s attainment of goals is dependent on the other party. In answering this, one project manager emphasized that he couldn’t afford that India didn’t work, since he and his team would be considered unsuccessful – no matter where they were located:

“I cannot afford that India does not work. If my team is unsuccessful, then I’m unsuccessful, no matter where they’re located.”

This opinion suggests a connection between interdependence and partnership success as suggested by Kanter (1994). However, our respondents also emphasize the difficulty in establishing and maintaining interdependence due to the wish to grow at each individual site. Especially sites in India seek to grow very quickly, and one possible scenario, as outlined by one of the interviewees, would be India bypassing the 'Irish bridge' in the future and instead dealing directly with the U.S..

Consensus

Consensus refers to the extent of general agreement between parties (Goles and Chin, 2005). This is emphasized as very important, and while our respondents all realize the benefit and necessity of a written contract they admit that, generally, decisions are agreed upon between managers and that what really makes the decision is the level of expertise among resources in different locations.

"Most things are agreed by consensus...changes as well. Ireland has 10 years of experience so it's not a case that they're [the U.S.] telling us what to do."

"What really makes the decision is the level of expertise among resources in different locations."

"It's not so much a contract, it's more a set of objectives agreed between managers."

The fact that managers agree on objectives instead of specifying these in formal contracts reveal a high level of consensus (as well as trust) in the company involved in this study. However, this might be the result of the particular sourcing arrangement. While contracts may be critical in outsourcing arrangements to a third party, they may be of less importance in an arrangement where the work being sent offshore is still performed within the company borders in a captive centre, as is the case in this study. Nevertheless, consensus is considered an important issue, especially when you act as the vendor in an offshore sourcing relationship.

Commitment

Commitment refers to the willingness of the parties to exert effort and devote resources in order to sustain an ongoing relationship (Goles and Chin, 2005). Commitment reflects the parties' view that the relationship will be sustained over time (Henderson, 1990). To encourage commitment, our respondents emphasize regular meetings and discussions. Also, it is suggested that speaking directly to a person is better than sending e-mails, since phone conversations encourage commitment and strengthen relationships over time.

"To encourage commitment we hold meetings and we discuss. The best is to bring it out in the meeting and speak to the person instead of sending off e-mails and copying senior managers on it."

While commitment could be experienced differently when being customer compared to when being vendor, this is not the case in our study:

"I think commitment is the same in any relationship – no matter if you are customer or vendor...."

"It all comes down to individual relationships."

Cultural Compatibility

Cultural compatibility refers to the extent to which each party can coexist with the others' beliefs and values (Goles and Chin, 2005). Interestingly, the interviewees in our study did not report on any major problems. While India is still considered culturally very different, they stress proper training, quality of developers, and opportunities for travel as solutions to potential problems.

"I haven't really experienced any problems...It really depends on the quality of the developers. "

"To overcome cultural problems you need to employ good people from the start, have a good team lead. Also, a proper training in the architecture of the system is a huge advantage – I think that's where other projects might fail...they don't have proper training."

"We have learnt about the time-zone differences. It's much the same for US-Ireland and Ireland-India. However, India culture is very different. What has really helped was having India people spending time in the U.S. or Ireland."

Also, the Irish experience of being both customer and vendor, i.e., acting as a bridge between the U.S. and India, has helped in this complex situation. Particularly, our interviewees agree that to understand what it means to be offshore potentially helps when managing offshore:

“We understand what it means to be offshore which makes us better potentially at managing offshore.”

Flexibility

Flexibility refers to the willingness of both parties to make adaptations as circumstances change (Goles and Chin, 2005). Here our interviewees emphasize the complex nature of software development and that these things tend to escalate in a distributed environment. What becomes important is to take day-to-day management seriously and to trust the expertise that is available. In overcoming cultural differences, the Irish site has an opportunity due to its dual role and experience of acting both as customer and vendor.

“Most circumstances are agreed by both parties...adaptations as well. Ireland has 10 years of experience so it’s not a case that they’re [the U.S.] telling us what to do.”

Processes of a Customer-Vendor Relationship

Below we present the processes (i.e., means by which the attributes are developed) comprising a customer-vendor relationship. Each process is illustrated with quotes from the interviews.

Communication

Communication refers to the proactive formal and informal sharing or exchange of information (Goles and Chin, 2005). As can be seen in our study, communication is intense, and the interviewees describe daily meetings and phone calls as prominent activities. While managers are the ones travelling, developers use information technology for keeping contact and cooperation happens cross-site at all levels:

“We have communication at all levels. Developers communicate cross-site and managers communicate cross-site.”

“To facilitate communication we use phone, e-mail and video conference systems. Also, we travel. I travelled to India once and the India team lead travelled to Ireland.”

“My manager has meetings with India once a week and there are US-Ireland-India meetings every week as well.”

As could be expected, the bridge role is discernible when discussing communication processes. As pointed out by one manager, the Irish site initiates most meetings – acting as the bridge between the U.S. and India.

“I think we initiate most meetings...acting as the bridge between the other two.”

Coordination

Coordination refers to the management of interdependencies between parties (Goles and Chin, 2005). Here the interviewees emphasize the importance of having clearly defined processes. This, they said, will help when dealing with different sites that may have different daily routines:

“This whole thing is more about having a good software process...not only about being spread across locations.”

“One of the bonuses that I saw when I came into the team was that there were very clear processes. There were very clear coordination checkpoints.”

In acting as the bridge between the U.S. and India, the Irish site has important knowledge that can be transferred when initiating new contacts and setting up new projects at different sites. Also, there is the belief that team members in India are more comfortable in calling the Irish site for advice instead of calling the U.S. representatives. If so, the Irish site has clearly a very important role to fill as an intermediate between the other two:

“When setting up a new offshore location you both need to be on the same page, what the process is, what the escalation route is and what your responsibilities are.”

“There are regular meetings between Ireland and India. But there are no meetings with India-Ireland-US. This is one of the issues we want to bridge. People in India are probably more comfortable calling up Ireland asking for help instead of calling up the U.S..”

Cooperation

Cooperation refers to the undertaking of complimentary activities to achieve mutual benefits (Goles and Chin, 2005). In this process, the Irish site often has the role of coordinating new projects and getting cooperation going between other offshore sites. However, while this “bridging role” might be sustainable in the coming years, it might not be there forever. Many see difficulties in maintaining this role in future cooperation:

“Our location is an advantage but it also depends on our depth of experience...there are other locations that can compete in terms of temporal position so we have to maintain and improve our expertise.”

“We often coordinate in setting up projects...our location is good for setting up projects. But I honestly don’t know if it’s sustainable...everyone wants to move up the value chain.”

Conflict Resolution

Conflict resolution refers to amicably replacing disagreement with agreement (Goles and Chin, 2005). All interviewees agree that e-mail is a common way of causing conflict. While conflicts are inevitable, conflict in an offshore sourcing relationship is especially problematic. Given the complexity of technology, the level of detail in contracts, and the sometimes disparate goals of the parties, the benefit of constructive conflict resolution cannot be over emphasized (Anderson and Narus, 1990). Since most conflicts happen on a one-to-one basis, the best solution is to pick up the phone and talk to the person. If there is a larger conflict, our interviewees’ advice is to set up a meeting and discuss the problem. Managers are believed to be helpful in solving conflicts since management relations cross-site are considered good:

“E-mail is a common way of causing conflict. Telephone is better.”

“I think you should avoid huge e-mail chains. Pick up the phone and talk to the person instead.”

“If there are people across locations that can communicate with each other openly, then conflict resolution is easier. Managers can help solve conflicts since managers cross-site have quite good relations.”

Integration

Integration refers to the intertwining processes and attributes into each party’s structure and processes (Goles and Chin, 2005). Integration enhances the quality of the parties’ internal business processes (Henderson, 1990) as well as the linkages that bridge differences between firms and individuals (Kanter, 1994). In our study, Irish company representatives have realized that travelling is beneficial for integration. Especially regular travels to the U.S. are mentioned as very positive for establishing a good long-term relationship. Learning from this experience, the Irish site now promotes company representatives to travel to India when setting up new projects at this offshore location. Furthermore, sharing ownership so that everyone has a stake in the project is considered beneficial for integration:

“Give everyone a share of the ownership. Therefore everyone has a stake in the project and therefore the project works well.”

However, while integration is recognized as valuable for interorganizational relationships (Henderson, 1990, Goles and Chin, 2005), our study reveals potential problems with integration in an offshoring context. For example, integration may be problematic for cooperation, since each site has a push to grow in a way that doesn’t necessarily fit with teams in other locations. In terms of time, however, Ireland is closely integrated with both the U.S. and India. This makes Ireland’s current position strong as an intermediate in offshoring arrangements.

“Integration is not always good for cooperation...at site level there is always a push to grow and that doesn’t necessarily fit with teams in other locations.”

“I think it’s critical when setting up an offshore site to set realistic expectations and a time frame and not to over commit. What I see is that a lot of managers are going to India from the U.S. and promising the world. Then the

expectation is set with the offshore site that they're going to get this – and they come looking for it. This – the huge desire in these offshore sites to grow very quickly – can make integration very difficult.”

“The time zone is a big issue and that works in our favour. From a time perspective we are in a good position. We have time overlap with both sites [US and India]. However, we are not a low-cost destination anymore. Now, we are based on quality. If we can maintain quality – we can maintain position.”

As is illustrated in the quotes related to attributes and processes, the three projects that we studied have varying approaches to the bridge model. This is due to historical reasons and the maturity of each site involved. Also, it is influenced by the intentions and strategies of different managers. For example, in the first project, the U.S. and Ireland are managed as one “extended team”, with the U.S. coordinating directly with India for Q.A. activities. However, Ireland’s geographic position has resulted in that site acting as a bridge whenever needed in the relationship between the U.S. and India. In fact, one manager stated that the increasing partnership with the Indian site means the extended team is merely increasing in size, now involving three locations instead of two.

The second and third projects are similar in their approaches. Here the extended team involves only Ireland and India, with the U.S. remaining separate. The project manager of the second project manages both the Irish and Indian sites from Ireland, and the U.S. interacts with India through Irish managers and developers. However, the Irish manager saw some challenges to this model. First, the time zone difference between Ireland and India limits the level of integration possible between the two sites. Even though Ireland is located between the U.S. and India and therefore has time overlaps with both sites, the general feeling was that time is too limited for engaging with the extended team in India. Second, the ownership of the project remains at the U.S. site, and there is resistance from other sites to allow the Irish site to take project ownership. While project ownership would allow Ireland to act more efficiently as the bridge location, it would probably challenge the relationship with other sites. Similarly, the project manager in the third project is also based in Ireland. Here the Irish and Indian sites are considered to be one team. However, the project manager emphasized that there is a need to manage the expectations of the Indian site. The Indian site wanted more work and more ownership of projects, and was not happy to be managed from Ireland. As in the case with Irish ownership, this is a potential threat to the bridge model. The manager commented that all sites should realize that working together is a benefit to all. What is needed for the viability of the model is to make use of each others’ expertise and quality instead of driving competitiveness between sites.

Finally, managers from all three projects agreed that the bridge model presented the Irish site with the chance of promoting itself. In times when ownership of a project rests at the Irish site, it is that site that is accredited with successfully completing the project. Therefore, it is politically rewarding to act as the bridge location and be able to offer the site’s project management, design, and development expertise while also collaborating with other sites to complete different projects.

Conclusion

The objective of this paper was to explore the “bridge role” experienced by an Irish site of a large U.S. software development company. In being part of a large, U.S.-based company, the Irish site acts as a “bridge” in their offshoring arrangements. While the U.S. site offshores work to Ireland, the Irish site offshores work further to India. Hence, the Irish site has experience of being both customer and vendor in an IS offshoring relationship, an experience that we believe has interesting implications.

In relation to the conceptual framework employed, our interviewees emphasize that trust is critical for any offshoring relationship, no matter what role you have (i.e., customer or vendor). To act predictably, to fulfill one’s obligations, and to behave fairly is considered the most important attribute of any exchange relationship. However, our interviewees indicate that trust is something that emerges on an on-going basis and, hence, depends on all other attributes. Furthermore, they found trust difficult to describe, using the definition found in the conceptual framework. According to them, what become important is to set realistic expectations and to allow for flexibility once the relationship is established. This, in our view, indicates that attributes such as consensus, commitment, and cultural compatibility all play an important role in establishing and maintaining trust between parties and that the process of communication is particularly important for this establishment. Clearly the attributes and processes defined by Goles and Chin (2005) are closely interrelated and might be difficult to measure or even discuss one by one. Instead, we found them valuable for initiating a discussion and to get the respondents to reflect on what comprises an exchange relationship and how such a relationship can be understood.

In relation to the bridging role and what can be done to facilitate the exchange between parties, our respondents emphasize that software processes need to be clearly defined in order to manage technically complex work conducted by geographically distributed teams. Regardless of role, clearly defined processes and proper training in systems architecture will facilitate communication and coordination issues in distributed work. Also, shared ownership is considered important to help integrate sites and, hence, enhance quality of the work. Finally, our respondents point out that since the Irish site understands what it means to be offshore, it should potentially be better at managing offshore. This belief indicates that even though each offshoring arrangement is different, there are lessons that can be learned and transferred from one relationship to another – and even more so if there is the experience of being both customer and vendor. To be able to learn from one relationship to improve another is an experience unique to Irish software companies engaged in offshoring practices and an interesting area for further exploration both in terms of research and practice.

So, will this “bridge role” be a viable model also in future offshoring arrangements? As agreed upon by all interviewees, the time zone is a major issue that will work in Ireland’s favour – certainly in the typical context of U.S. outsourcing to the Far East. From a time perspective, the Irish site is in a good position, since there is reasonable overlap with both the U.S. and India. However, it remains to be seen if the advantages of these time-zone overlaps can render the bridge model viable in the long term. The variations of the bridge model in use in the company in this study has been progressing and evolving over a long period of time. Historically the site in Ireland was seen as offshore from the U.S.. But with rising labour costs in Ireland, it is no longer seen by the company as a low-cost offshore location but as a mature site with high quality output. Such an evolution between locations may now be seen also between the Irish and Indian sites. The experience of the employees at the Irish site, along with their mature processes, has allowed them to support the on-coming Indian team. Initially Irish developers were sent to India to hold interviews with new potential recruits, and they spent several months passing on knowledge to the Indian developers. This model proved highly successful in setting up new offshore teams, allowing the U.S. site to focus on higher-level issues while passing on day-to-day responsibilities to the Irish site. However, the growth of the Indian site could act as a potential threat to the bridge. With increased maturity, they are naturally unhappy to be managed from another site. Instead, they wish to have project ownership and to be seen as an autonomous and effective site for doing business. Furthermore, there are other locations that are in advantageous time-zone positions as well. Thus, to maintain its position as a bridge between the U.S. and offshoring locations in Asia, it is central for Ireland to maintain and improve quality. While location will always be an advantage, location alone will not be enough to keep position in future offshoring arrangements. Instead, depth of expertise and experience will be even more important for future competitiveness.

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