The Impact of Communications and Understanding on the Success of Business/IT Alignment

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Abstract

This article reports on an investigation of IS stakeholders communication and mutual understanding, and their impact on the success of business / IT alignment. In particular, by following a hermeneutic study of transcripts of two focus groups and several interviews conducted with senior business and IT executives, the paper explores the issues of modern business context and practices, project scope and structure, trust, language and nomenclature, and the barriers to the effective stakeholder communication and understanding. The study results are finally compared against the standard model of business and IT alignment. The main unexpected finding being executives' pre-occupation with issues of "marginal" value to the alignment model, such as day-to-day management of communicative and understanding effectiveness, as opposed to the fundamental issues of strategy and infrastructure fit.

Keywords

Strategic alignment model; communications between stakeholders; understanding; hermeneutics.

INTRODUCTION

Over the years we have witnessed a large number of Information Systems (IS) project failures worldwide. Some of these projects, now of historical importance, provided the vehicle for some seminal investigations of factors to IS success, e.g. the California Department of Social Services (Keil, Mann, *et al.* 2000), Denver International Airport (DIA) and the Taurus project at the London Stock Exchange (Keil and Montealegre 2000, Montealegre, Nelson, *et al.* 1999), the "Golden Triangle Corporation" Financial Information System (Markus 1983) and the New Zealand Education Department (Myers 1994b). The local Australian IS market has its own share of scathing reports on large scale projects downfall seriously impacting the organisations concerned. Amongst these were the Crane Group who had come close to insolvency because of a troublesome over budget and over time PeopleSoft implementation (Hayes 2004, Rochfort 2004), and the Department of Defence failed HR system (Barker and Fabro 2004). Many of these problematic IS developments are still ongoing and are subject to the Sisyphus effort in project recovery, such as the RMIT student records PeopleSoft AMS (Academic Management System), which has been reported extensively in the popular press (Buckell 2003, Ketchel 2004) and was under investigation by the Victorian Auditor General's Office (Cameron 2003, p58-88).

Among factors which contributed to many of these failed undertakings, whether initiated in-house or being outsourced, we can commonly observe a significant degree of misalignment between business and IT vision and values, project expectations and scope, goals and risks, understanding and cultures, strategies, structures and processes - all these aspects which are expected to be in a *state of alignment* for the business / IT venture to be considered mature and consequently successful (Luftman 2000). The *alignment process* (or re-alignment) can be used by management with great finesse not only to prevent some major project failures but more importantly to rectify sub-optimal organisational structures and processes, to improve business / IT collaboration, to enhance inter- or intra- organisational communication and understanding, and in general, to resolve tension between IT departments and business units in the delivery of IT products and services (Gordon and Gordon 2002).

Considering the wide-ranging and potentially fatal impact of the alignment processes on the project and business success, we have undertaken an in-depth exploration of both the concept of business / IT alignment as reported in the extant literature and more significantly of Australian executives' experience and their opinions on the issues of alignment and the evolving understanding between business and IT. Some of the findings of this investigation are henceforth reported in this article.

What is Alignment

As can be seen from the discussion thus far, the issue of business / IT alignment can be considered from two vantage points, i.e. that of a state of the factors influencing the performance of business / IT collaboration, and that of a process lining up these factors into the most desirable configuration at any given point of time.

Reich and Benbasat (2000, p 82) suggest that business / IT alignment should be viewed a state or an outcome of a business process or activity. One of the motivations for such a view point is their intention of measuring the degree of alignment, which could involve observing a number of well-defined variables. All such variables can be observed in two distinct dimensions, i.e. the *intellectual dimension* which identifies the characteristics of a high-quality set of interrelated IT and business plans, and the *social dimension* which determines the degree of understanding and commitment of business and IT executives to the mission, objectives, and plans of both business and IT. Our interests, similarly to Reich and Benbasat's, are mainly in the social arena of business / IT alignment. However, in contrast to their view of alignment being a state of strategic fit between the organizational objective to deliver its products and services and the design of an IT structure in its support, we embrace the Henderson and Venkatraman's perspective of this fit to be inherently dynamic, and thus leading us to the conclusion that business / IT alignment is not an event, an outcome or a state but rather a "process of continuous adaptation and change" (Henderson and Venkatraman 1993, p 473). As Galliers and Newell resolutely remark IS strategy itself, as encompassed in the alignment process, should also be considered as "on-going and processual, crucially dependent on learning from 'below', from tinkering and improvisation, and from the emergent and unintended consequences of strategic decisions, as well as from the more deliberate, designed and codified IT 'solutions' that have been implemented." (Galliers and Newell 2003). The main objectives of this process would therefore include the IS priorities, capabilities, decisions and actions to support those of the entire business (Chan 2002). Furthermore, while the main objective for management is to create the most harmonious fit of all these facets in order to achieve their smooth functioning, they must do so flexibly by "periodically disrupting this harmony to adjust to a changing environment." (Miller 1992, p 159)

Model of Alignment

In our pursuits of insights on business / IT alignment, we have taken a commonly accepted view of alignment as concerned with integration of the organisational internal (infrastructure) and external (strategy) contexts as well as the functional integration of business and IT domains (see Figure 1) (Henderson and Venkatraman 1993, Luftman, Lewis, *et al.* 1993, Norden 1993). The model has been adopted by many researchers as a way of understanding the relationships that exist between IT and business (Chan 2002, Hu and Huang 2005, Kefi and Kalika 2005, MacDonald 1991) and has been extended and simplified to suit various purposes, e.g. Croteau *et al.* (2001) offered an interesting simplified variant on the strategic alignment model that showed business performance as a product of a well aligned business and IT infrastructure, which they term "co-alignment". Furthermore, it is often useful to view the relationship between business and IT as that of supply of and demand for technological solution (Ward and Peppard 2002, p 45) (as noted in Figure 1).
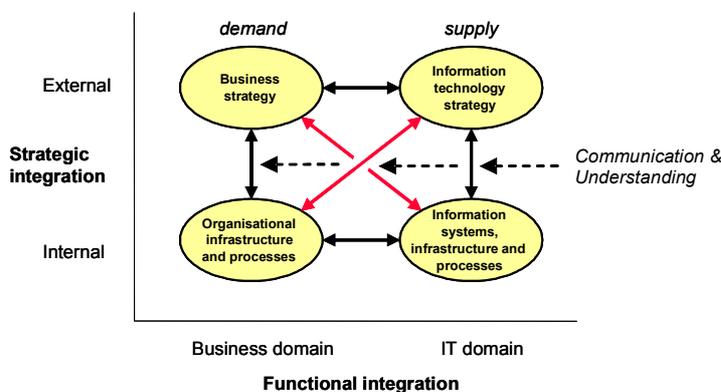

Figure 1 - Business / IT Strategic Alignment Model

Considering our focus on the social dimension of the business / IT relationship and the processual aspects of the alignment, it is therefore the socio-technical linkages (see solid arrows in Figure 1) between the convenient objects of these models that are of interest to us. In fact, our concerns are even more specific inasmuch as our investigations centre on determining whether or not one or more of the linkage components could possibly hinge upon the successful understanding, and necessarily communication, between all the parties involved in an IT project. This particular focus has been motivated by the emerging theme in the alignment literature which highlights the need for the *collaborative business strategy* - collaborative, as in modern organisations business activities continually involve partner organizations, i.e. customers, suppliers and sourcing entities (Galliers and Newell 2003).

In view of this emerging need for intra- and inter-organisational collaboration, the issue of effective communications between the business and IT leading to good alignment is always assumed but rarely clearly articulated. Interestingly Kaplan and Norton (2004, p 62) observe that an organization can be considered as "aligned when all employees have commonality of purpose, a shared vision, and an understanding of how their personal roles support the overall strategy.". Sharing and commonality of views between top business and IT management and employees, across various organisational functions, that corporate and IT strategists could only be established by active communication of each other's needs, vision, values, goals and methods (Segars and Grover 1998, pp 143-144). In fact, Reich and Benbasat (2000) reported that one of the most important predictors of alignment was a high level of communications between IT and business executives. Parise and Henderson (2001, p 910) concur and strengthen this claim by noting that success in business collaboration relies on sharing and exchanging of tacit resources, such as knowledge and life-long personal expertise of employees, that is difficult to formalize, communicate, transfer and imitate, and as such are of intrinsic strategic value to the organisation.

The way of alignment is a communication-and-understanding intensive process. It is succinctly described by Kaplan and Norton (2004, p 62), "First, managers communicate the high-level strategic objectives in ways that all employees can understand. This involves using a wide range of communication mechanisms: brochures, newsletters, town meetings, orientation and training programmes, executive talks, company intranets, and bulletin boards. The goal of this step is to create intrinsic motivation, to inspire employees to internalize the organization's values and objectives so that they want to help the organization succeed. The next step uses extrinsic motivation. The organization has employees set explicit personal and team objectives aligned to the strategy and establish incentives that reward employees when they meet personal, departmental, business unit, and corporate targets." And so, at its core, the alignment process is all about communication and mutual understanding of data, roles and responsibilities, identities, incentives and other types of organisational and technical information (Lee 2004, p 111).

Enablers and inhibitors of strategic alignment include executive support, understanding the business, IT-business relations, and leadership (Luftman 2000). Understanding and communication are central to these factors. Luftman (2000) further identifies the following aspects of communication that play a pivotal role in the alignment process: mutual understanding between business and IT, inter/intra-organizational learning, rigidity/flexibility of communication protocols, effective knowledge sharing, and efficacious business / IT liaison. On the other hand Luftman (2000) also highlights the importance of developing partnership between business and IT, which impacts business perception of IT value, role of IT in strategic business planning, shared goals, risk, rewards and penalties, IT program management, relationship/trust style, and the opinions and the subsequent actions of a business sponsor/champion.

As can be seen from the discussion so far, the alignment research clearly focuses on the development and implementation of integrated strategy and infrastructure combining business and IT. While the researchers' pursuit of a perfect fit between business and IT strategy provides the promise of alignment success, it is the ongoing, collaborative alignment process that will eventually deliver the benefits to IT projects and their hosting organisations. We believe that it is the effective, mainly face-to-face, communication and the ensuing understanding of all the collaborating business and IT stakeholders that drive this alignment process to its success. To further explore this premise and to better understand the communicative / comprehension factors that influence this process, we have interviewed a number of senior executives, who struggle daily in their attempts to align the goals of their IT departments with the core of their business, to align IT infrastructures with business processes, and to align information system requirements with business needs.

RESEARCH METHOD

The researchers conducted two focus groups of senior business executives to talk about issues surrounding the alignment of business and Information Systems. The two sessions followed a standard focus groups protocol (Stewart and Shamdasani 1991) and involved a total of 16 participants. Given the nature of the issues under discussion, the participants played quite distinct roles in their organisations, e.g. those of Chief Executive Officers (CEOs), Chief Information Officers (CIOs) and Chief Financial Officers (CFOs), project managers,

senior managers and senior consultants. The mix of organisational positions, responsibilities, tasks and views benefited the group dynamics and stimulated discussions. The focus group members represented a variety of substantial and long-standing companies in Australia, of which activities were ranging from software development and management consulting, through health care, banking and finance, to logistics and business intelligence. The dynamics between different industry groups and the IT and non-IT executives was exceptional which is reflected in the richness of the collected data.

The initial questions that were put to both groups were about the alignment between business (problem area) and IT (solution area). The participants were asked to consider a number of propositions (such as the impact of alignment on project success) and to discuss these and to add their own experiences and knowledge (such as the impact of alignment on requirements quality) into what factors influenced this alignment. The follow up interviews, of about 90 minutes each, were then conducted with the focus groups participants to further elaborate their views and opinions.

The researchers videotaped the focus group sessions and audio-taped the interviews, which resulted in hours of video and audio streams that were later transcribed and analysed. As both focus group discussions evolved into heated debate, the videotapes captured some invaluable details of participants' interactions that is missing from the respective paper transcripts. Not only were the body language, repartee and "robust" arguments in clear evidence, but the actual way that the group dynamics drove the discussions also emerged.

It should be noted that in interpretive studies, such as hermeneutics, interviewed participants are treated on equal footing with the investigators and considered co-researchers.

All transcripts were analysed using Ricoeur's principles of critical hermeneutics (Ricoeur 1974) to drill down through their text, critically reflecting upon it, creating its meaning, providing its multiple interpretations, and as a result producing more, i.e. derived, documents, which enlarge and enhance the original texts.

The very act of creating this derivative document forces the researcher to engage with the data, sorting and categorizing it artificially (Gadamer 1975), engaging with all the components of the knowledge fragments and building them into new understanding. Critical hermeneutics, as previously adapted by Lukaitis and Cybulski to analyse some well-known case studies (Lukaitis and Cybulski 2004), can be shown to be of great value to identify clear cut categories and topics, and the resulting derivative documents subsequently allow quick ranking of the factors impacting some of the issues under consideration.

The adopted method (Lukaitis and Cybulski 2004) relies on the set of iterations - also known as hermeneutic cycles or circles - to gather small pieces of knowledge, often out of context, and reconcile these smaller pieces with the gathering horizon of understanding of the whole phenomenon. As each small piece (a morsel of knowledge) is reconciled with the whole (an understanding of a domain), the whole then becomes the horizon that contains all the knowledge. This gathering understanding of the domain under investigation then causes the existing smaller individual parts to be re-evaluated and possibly their new meanings re-integrated again into the new understanding (Dilthey 1990, Schleiermacher 1819).

Through the hermeneutic cycle, researchers can commonly observe an oscillation between individual fragments of knowledge and the understanding of the whole of a domain. One can tell when understanding has been reached because all the data and observed phenomena are consistent, no longer appear strange and simply make sense (Myers 1994a). It is often described as data saturation, when any new data neither adds to, nor detracts from the understanding developed.

That hermeneutics can be an asset in an interpretive research, such as this study of contradictory and seemingly irreconcilable views of domain practitioners, is especially evident when dialectics (Kidder 1997, p1197) is deployed to thoroughly investigate the "truth" or otherwise of our growing understandings of a domain under investigation. Dialectics can be understood as the search for knowledge and understanding without applying judgmental attitudes. In other words, we seek all the arguments and issues involved, irrespective of whether they are for or against the proposition under investigation. And if we find too many arguments in favour of a given position, then under the rules of dialectic, we are obliged to seek out as many arguments against the proposition.

In the hermeneutic-dialectic tradition (Myers 1994a) we make our co-researchers' participation in the dialectics clearly visible, and thus we will let them speak for us in the following sections of this paper.

Hermeneutics further acknowledges that the distance between the investigator and the subject can be great. Kidder states *"... what is clear and obvious to one in reading a text is likely to be a function of one's own cultural orientation and one's own prejudices rather than the function of some given accessibility of the text"* (Kidder 1997, p1194). This "distance" then, can be equally ascribed to that existing between the business executive and the requirements engineer during the elicitation process, or even after requirements documents have been transcribed and are under investigation or reconciliation.

DISCUSSION

Our first focus group identified eleven principle issues that bore on the successful alignment of IT with the business. These issues included management inability to estimate projects and return on investment, problems with acceptance testing, project and risk management, trust, scope creep, resistance and change management, aspects of project and product ownership, vendors and business integration, and finally, the issues which were discussed most vigorously - the effectiveness of stakeholder communication and mutual understanding.

As was repeated in both focus groups and overwhelmingly reiterated in our interviews, the primary issue mitigating against good alignment was indeed "understanding", stemming from poor stakeholder communication. Interestingly, the recurring theme of this lack of understanding was being attributed as the fault of both the business executives and also the IT group. We will illustrate these issues with some of the collected data.

It seems that, in general as clearly felt by some of our participants, IT people feel a frustration that the business people appear not to have a sufficiently detailed grasp of their requirements (note that the initials in brackets indicate the co-researcher's code).

[SB - CIO of Trans-National Services Corporation]

> *That is the senior managers don't understand their business processes down to a level of granularity and detail that they need to, to make wise decisions about which part of this process can be changed this way and that way with the technologies. That's my view. And the ownership and responsibility moved out of the technology camp into the business camp.*

[SB - CIO of Trans-National Services Corporation]

> *Of actually having a, what we called systems analysis and design – those disciplines being learnt by the business folk and going through the process mapping. And, the business folk don't understand the detail we need it necessarily. Particularly at the senior management level who are trying to make a strategic decision.*

This frustration seems to get quite heated. If one reads between the lines what becomes evident is that the IT side of the understanding chasm suspects that there is some detail, some deeper understanding of the business that they are unaware of, yet need to know to enable a system to operate correctly.

[DW - Senior Consultant of Business Intelligence]

> *But when it comes down to the alignment to the business there's two parties. There is IT and there is the business. And I think both are at fault at this. But it's totally different trying to expect that the business sponsors that we deal with are going to have an adequate understanding of IT. So if those business leaders don't understand that one concept, that it is their business, they will not survive two hours in the marketplace without that system running. I think that is the biggest initiative we can push across them.*

[DW - Senior Consultant of Business Intelligence]

> *And I think that probably we are forced, have to go back to business to push back and say "if you don't understand it, you'll have to understand it, otherwise it will fail".*

The IT participants alluded to their belief that business executives needed to better understand the technology and how it can be better used. But it is not all about just a simple appreciation of how technology plays a part in a successful business, there is also the understanding of the business itself.

During the first focus group the dynamics between the business participants and the IT participants was quite interesting when one IT executive suggested that both sides of the understanding equation were at fault.

[SB - CIO of Trans-National Services Corporation]

> *You need to understand what you are trying to achieve in the business model and business model changes. What does that mean to my processes and how can I get a grip on them? That debate is not uniformly high level I have to say on both the technical side and on the business management side [smiling broadly].*

The response from the banker appeared to recognise the need for a better understanding between the different parties, even acknowledging that different parts of businesses are also quite unique…

[CP - Senior Manager of Australian Banking & Finance Organisation]

> *Is that businesses are all different and bits of businesses are different. This is basically interpersonal stuff [interjections of agreement from FC], it's about relationship building and about being able to understand who it is you are trying deal with and how you need to operate in respect to that particular piece of culture that you are operating with. Which touches on what John [point towards JB] talked about earlier on. And the other thing, my third and final one just carries;*

> *... your point forward a little bit further is that there really needs to be a level of understanding and consideration for the position of the other person in the process. And what do I know about what I am talking about. And I'm not the expert, I need your help. That's why I am seeking to engage with you in this process to get to the end. And as a broken down old salesman, the concept of mutual gain has to permeate right through the whole process. There's got to be mutual gain [mumbles of agreement all round].*

And the sharing of knowledge now needed between business and IT because of increased complexity…

[SB - CIO of Trans-National Services Corporation]

> *I mean the point I was getting to in a lot of this, is I see the responsibility of understanding of information flows and modelling information flows in an organisation which is sort of what we're all about, and making it concrete in technology. Realising it in technology. The understanding of that has moved from the purely IT end of the spectrum and has now been picked up the systems and process understanding is becoming required on the business side, for businesses to actually understand their own business models, their own information flows. Because we have much more complicated businesses, interactions.*

> *Doing business in China, marketing into Europe and North America is not something that is done by a couple of people with a couple of good ideas There's all of that happening, but you've got the information flows [which] are now global. And tracking the economics and logistics and all the rest of it is reasonably demanding. It's a much more complex problem. What I'm getting at is we're only part way through the process and business people are picking up on that [interrupt FC "Totally agree"].*

Nevertheless, senior executives from business appear to be quite concerned that IT seems to be unable to understand what is needed unless it is spelt out in some considerable detail. This theme where the business appears to be almost "putting up with" IT's inability to understand the detail of the business requirements keeps emerging throughout these encounters. This seems at odds with the claims of the IT people that business "doesn't understand enough of IT to be able to help".

It would seem that "understanding" simply does not exist between the two camps.

[DM - CFO of Australian Banking & Finance Organisation]

> *What we, what we find I guess is that whenever we request anything we actually have to go into a lot of detail to actually tell them exactly what we want it to do, and you know what options we want; what parameters it needs to be based on; what the desired outcome is. Otherwise, they'll go away and come up with this is what the software can do and just say that's it – take it or leave it. So you have to go into a lot of detail to actually explain to them exactly what the need is; why it's required; what the software, what we'd like the software to do and what the outcome is, that it's needed*

This seems to be confirmed from the IT camp by a throw-away remark made during a follow-up interview…

[RP - CEO of Australian Software House]

> *...and maybe really our problem is in requirements. Well their problem probably is in requirements and that's where most people have their most largest [expletive deleted]-ups.*

Once the data from the follow-up interviews and the second focus group are woven into the hermeneutic cycles, the key findings begin to emerge.

KEY FINDINGS

Several issues surrounding the impact of "communication" and "understanding" on the overall alignment problem, as discussed previously (see the alignment model Figure 1), have come to light (see Figure 2).
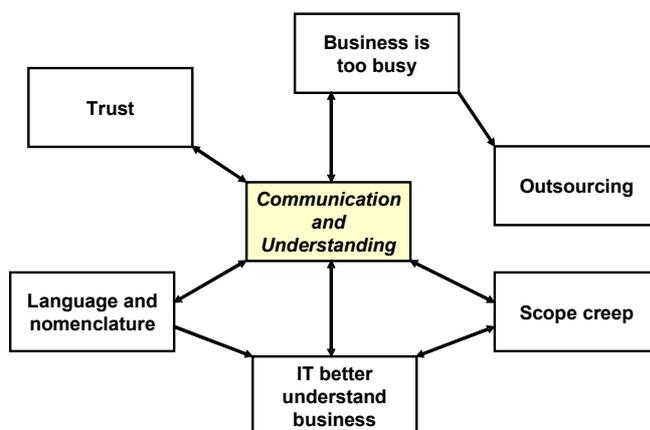

Figure 2 - Emerging Issues Impacting on Communications and Understanding, and Consequently Alignment

Business is too Busy to Understand IT

Throughout the discussion so far, it has been repeatedly raised that the responsibility for ensuring that communications has occurred effectively rests with IT, not business. Business is too busy to learn enough about IT to be able to talk with IT people on IT matters.

[FC - CIO of Trans-National Finance Corporation]

> *I think the first level is that there is just generally conceded by business people that are non-technologists that it's a level of technical understanding that they can't have and don't want to have.*

One CIO remarked that business is now engaging at such a complex level that there is great difficulty just understanding the processes that go on, and in engaging the right people at the right time.

[SB - CIO of Trans-National Services Corporation]

> *That's where we got to on that project I described as business led with a [expletive deleted] you just have to do this and this and so here's a prototype. Yeah that's ok but you just need this bit and you know it looks pretty good and then we involve more people from the business and they said oh [expletive deleted] no you've got to do all this other stuff. Then we got through that then somebody else came in from the business and said no! Over here we've got 19 different services that we offer and they are all tracked with different rates – and it just explodes. That was really badly done. That's an example of not involving knowledgeable people across the businesses at the right stages and finding out as you went. And that prototype builds took over a year while we were battling synchronising databases, foreign databases and those sorts of things.*

And in some cases the business went one of two ways. Either they started to disengage with IT and simply said "this is what we want just go and do it", or they wanted to get dangerously involved.

[PC - Senior Manager of Trans-National ICT Organisation]

> *... some of the people in the business side they sort of say, I don't care how you do I just want you to do this, you go away and you work it out cause that's why I'm paying you lots of money or whatever.*

> *It's one of those things, is it really the IT's responsibility to understand it or it is, are we going to be asked in the business people to become IT literate, literate to a point where they're coming up with a solution for you?*

> *The problem with that is when they do do that is because they don't a lot of times understand the IT side of things, they are creating the Ben Hur's of the world.*

Outsourcing as Impacting Communication and Understanding

The outsourcing issue emerged quite strongly as a response to the "I don't care how it is done, so long as it is done and done cheaply" attitude. It seems that some businesses have become so disenchanted with their own IT people and the difficulties associated with them that they become disenfranchised.

In extreme cases, some companies determined that IT was not their core business and opted for outsourcing as a way of divesting expensive energy away from the business to an outside body. They did not want to know about IT, they did not care about IT, all they wanted was for it to be done.

[PC - Senior Manager of Trans-National ICT Organisation]

> *...you get it from a different perspective when they have outsourced, because when they outsource, that's why they outsource in the first place - a lot of the companies is because they just don't want to know [about their IT]. They don't really care, they just want it done. IT is seen as one of the most expensive things out there that is costing, that the company is wasting their money on. IT is very expensive in comparison to the rest of the organisation out there.*

[HI - CFO of Health Care Group]

> *As long as it works I don't care.*

[Facilitator]

> *It just doesn't matter?*

[HI - CFO of Health Care Group]

> *It doesn't matter. It doesn't matter where it comes from.*

In the repartee that surrounded the focus groups and the subsequent follow-up interviews, an interesting contradiction appeared. On the one hand we have some pretty large (say) finance/banking organisations happily outsourcing extremely large components of their core IT business to external providers, and on the other hand, we find a company in the same industry space stating what looks like the opposite. They are saying that IT is their core business.

[FC - CIO of Trans-National Finance Corporation]

> *They've, that has been an ongoing... and that's one of the things that sort of fires me up and engages me is that in financial services particularly, it seems particularly that the product is the system – the system is the product. You know there's a piece of plastic at the end but the product and the way it's run, charged, fees, all that kind of stuff sits in the system. And for a long time it was considered throw it over the wall – it's an IT problem.*

The outsourcers, on the other hand, often take in some of the IT people directly from that business and use them and maybe their infrastructure as part of the outsourcing arrangements. That way, the existing business knowledge (i.e. understanding) or intellectual capital is not entirely lost.

[PC - Senior Manager of Trans-National ICT Organisation]

> *...the organisation has agreed with that because a lot of organisations actually say we will outsource but only if you employ 80% of our staff or 30% or whatever it may be.*

The outsourcers then found that after numerous acquisitions of IT staff from companies who elected to outsource that they were slowly acquiring individuals with expert domain knowledge in various industry groups.

Scope Creep as the Beginning of Dialogue

Scope creep can be attributed to being a symptom of poor communication and understanding. However, in the discussions with our co-researchers scope creep has been found to be perceived in two ways. Either in a pejorative sense where additional functionality is being added to a project potentially jeopardizing its success, or as a way of both parties (IT and business) better understanding each other's needs and capacities.

It is curious that throughout the investigation that it was not possible to find agreement about this issue. On one hand we had the example of a consultant being quite intolerant of scope creep…

[DW - Senior Consultant of Business Intelligence]

> *I think scope creep is initially an IT stuff up. I'm working on the basis that people, IT people, have done what their doing before, so the scope is the first part of the project and you need to identify what it is from there.*

Then once the pejorative sense of the term was discarded two quite distinct understandings of scope creep began to emerge. The first came exclusively from the business end of the group.

They acknowledged that the world is a changing place and the flexibility had to be considered because of changing circumstances. The best argument offered was about a long-term project that was well underway when the Australian Government announced the creation of a Goods and Services Tax (GST). That particular project had an instant scope creep – the addition of an allowance for the GST. It was simply not negotiable.

[HI - CFO of Health Care Group]

> *The world's ever changing so if you think you've got an agreed scope on day one, depending on how long the project is, by day ninety the world may well have changed and that also will, well could be scope creep. It could be got to do something different, good flexibility. It could just mean you've got to be flexible.*

Because of the cognitive and experiential distance between the business and IT it often took some time for understanding to flow freely between the two. Scope creep was thus seen as a resolution of understanding rather than an extension of functionality.

[HI - CFO of Health Care Group]

> *I'd call it clarification if it was there in the first place.*

[Facilitator]

> *They've misunderstood?*

[HI - CFO of Health Care Group]

> *Misunderstood, yeah.*

It was interesting to observe that these comments were more often than not made by the business based individuals rather than the IT people in the group of participants. The IT people were "less forgiving" about scope creep.

[RP - CEO of Australian Software House]

> *This is really nobody's fault in some ways. I mean it is of course somebody's fault, but this can happen and the fact is that this means you do have scope creep. I mean what has happened is we had an imperfect understanding.*

Traditionally, scope creep is managed as part of the overall project management charter (whichever one you follow). It is treated as an aberration and as a threat to the overall health of a project. One individual described it succinctly…

[PA - Senior Consultant of Project and Risk Management]

> *That's why I define scope in these terms. You manage scope creep by ensuring that any changes in any of those parameters including the dollars spent are treated as a scope change and goes to steering committee for resolution where it gets [expletive deleted]. Scope creep occurs because of uncertainty, because at the start you don't have a detailed analysis of all the business areas. As you go into that detailed analysis of course people will come with thoughts and say we meant to do this or we didn't understand that it didn't include this or why don't we do that. There is a lot of that sort of discussion before you finalise your requirements.*

And again we notice the familiar term of "understanding" creeping into the discussions. This lack of understanding having a rippling effect right down through the course of the project.

Trust as Promoting Understanding

Trust suffers as a consequence of reduced communication and understanding. It was raised as an issue in that business did not trust IT for a variety of reasons. Among the issues preventing this trust was IT's inability to correctly estimate its figures and timelines.

[RP - CEO of Australian Software House]

> *When you have a total discrepancy between an ability to forecast what costs are going to be for these things and what they are not going to be, then you can't get any kind of business alignment. Because business doesn't trust IT. IT's numbers are wrong and IT's numbers are continuously and perennially wrong. And so therefore even very good projects, very good projects can be canned because their initial forecasts are wrong.*

Sometimes IT have a habit of purposefully inflating their estimates of costs and that might impact the degree of trust that business has in them. However, one of the CFO participants felt this was not specifically an IT trick and that most budget submissions had a degree of "fat" in them.

[HI - CFO of Health Care Group]

> *I mean you always get the people who over-estimate the costs of things and they do it a couple of times and then you automatically compensate for it. You know if they say well this is going to cost a hundred grand, you'd know that whenever they say a hundred grand it really means fifty because they've got a buffer up their sleeve.*

[Facilitator]

> *So this is just something you expect?*

[HI - CFO of Health Care Group]

> *Yeah. And they're no different to anyone else. Everyone would put in a budget higher than they need to make sure they can deliver.*

Emotion plays a part in trust as well. The business has an need that is often coloured with an emotional response and it is IT's responsibility to turn that around using a suitable methodology. Achieving this has shown to be extremely beneficial in engendering trust between business and IT.

[FC - CIO of Trans-National Finance Corporation]

> *And we've also, we've found the most use of building trust is where people come with an emotional response and you're able to turn it around using a methodology.*
>
> *And my favourite is this failure modes effects analysis where people come and say I'm scared about; I'm nervous about.*
>
> *And the best way to build trust at that point is to say I want you to articulate that to me and I want to put it into this process so we can work out why you're afraid, and again it's leading people to this level of simplicity.*

Another unfortunate effect of the loss of trust is that the IT group can lose their independence and self determination.

[HI - CFO of Health Care Group]

> *I think there's a lot more scope to do things if there is trust. I think you very rapidly lose control if there's no trust. You typically get told specifically what to do and expect it do exactly that and nothing else if there's no trust.*

Language and Nomenclature of Communication

In an effort to improve the chances of better communications occurring between business and IT, one organisation renamed the traditional IT roles into titles that reflected better the individuals' relationship with the business units. Names such as "architects" were used in preference to business analysts or systems analysts.

[PC - Senior Manager of Trans-National ICT Organisation]

> *We have that a lot with, I've seen it a lot with the architectural space as well because they may have not been called architects, they may have been called business analysts or project managers in their own business but really that's what they were doing. They were creating requirements documents. They may not call it a requirements document but that's what they were doing. They were identifying what was the business need and putting together some form of proposal, solution, this is my options paper or whatever you want to call it. It is difficult. What happens though is that sometimes having them being moved into different parts of the organisation helps.*

In some cases, these roles were carried out by non-IT trained people because of their expertise in the business. This was the case in recent core banking application's project.

[JB - Project Manager of Australian Banking & Finance Organisation]

> *So we had so that all the departments, there were about eight departments – loans, credit control, finance, the whole lot, that all had to put their expert on the team, and we did that. But what we found, and the whole idea of having these departments involved for twelve to eighteen months was that they had the expertise in the areas.*

> *So that when we had builds or upgrades they could do it.*

Better IT Understanding of the Business

Several of the participating businesses actually placed their IT staff into the target business units for several months so that they could learn about the business. The experience of working with the business gave the IT people insight into the local issues.

[PC - Senior Manager of Trans-National ICT Organisation]

> *What happens is, it's really being able to put in those people in place that are able to see the business side of things and also able to have IT knowledge.*

> *That goes back to employing the right people I guess at times and also being able to put in, those people have to have the two areas of knowledge to be able to, that's why when you really see in the insource environment that the IT department is really successful is when they have their IT people have a really good understanding of the business.*

> *If I was to use some examples of companies I've worked for where they have had their own IT department, it has really been around the fact that a lot of their IT people and we have actually done that in some companies which is where you sort of say ok you're an IT person go and spend 3 months working with the business to understand what it is that the business really wants done and how do they really want to do it.*

One company with a very low IT staff turnover noted that their IT staff were already distributed throughout the business and were very well versed in the needs and operations of the business [BS].

[SB - CIO of Trans-National Services Corporation]

> *It's a worry (talking about churn rate of IT staff), I mean we had 2 celebrations last month. One for a developer who has been with the company 35 years and one who has been with the company 20 years. Late last year we had one for somebody who has been 25 years. It's interesting, it's been an interesting journey but I deliberately go looking for people who, we have a number of them who are coming up to their 10th anniversary of senior IT developers who I hired 10 years ago looking for people who wanted to be around for 10 years. They were at that stage in their life and career who want stability, opportunity for growth.*

Once projects were underway, experts from the business units are brought into the project team to make it happen. All participants bemoaned the difficulties associated with getting the best people out of the business units into the project teams. One found that placing the business experts onto the IT Project payroll helped the affected business unit.

CONCLUSIONS

We have found that IT and business executives seemed far less concerned with the alignment of their respective strategies or infrastructures, but rather with communication and understanding - issues traditionally perceived as of "marginal" value to the alignment model. And so, communication and understanding seem to play the principal role in ensuring that business and IT stakeholders' are "on the same page", considered requisite in dealing with continued uncertainty about business.

Understanding can be enhanced by ensuring that enough of the right business people are actively involved on the same level as the IT group in projects. It can also be helped by embedding IT people into the actual business units themselves, just so that they can get a better appreciation of the needs of that particular business unit.

Trust is intrinsically related to understanding (Chong and Dick 2004, McKnight and Chervany 2000) - our participants were quite vocal on this - when one is high then the other appears to follow.

If the business is sufficiently disenfranchised from their IT group there is a chance that the business might start seeing IT as not part of their core business and seek outsourcing as a way of cost containment and allowing them to focus on what they think is their core business. Business will often use terms such as "being too busy" or they "just want the job done". But this seems to happen only when the internal IT group are unable to deliver the IT that the business needs.

Scope creep has always been a problem that highlights a lack of understanding. This research has help focus on that issue by suggesting that there are several types of scope creep that we have found, ranging from the traditional additional functionality through to the clarification of understanding.

Surprisingly, business did not find scope creep to be the thorn that IT has perceived it.

Strict adherence to titles and roles has been blurred so that both domain experts and IT experts would all be sharing roles and sharing the same table in an effort to enhance alignment between business and IT.

Alignment is being seen as a dynamic state that is dependent on time, the relationships that exist between people, the success of communications and understanding, and the success of the business.

As noted by Dale (2004), however, business / IT communications are not straightforward and are often clouded by tensions between all participants. These tensions commonly create an "emotive complexity" making it difficult to manage stakeholder expectations, and thus colouring and politicising the collaborative process, and turning stakeholder communication into impassioned negotiations and consensus making (2004). To remove these tensions, Linda Paulson ultimately advocates face-to-face encounters between IT and business representatives as far more important than technology in use or business objectives assumed in the project - she suggests what many of our co-researchers enthusiastically stress in our interviews as well (2001, p 15):

> *"Perhaps, go out to dinner. ... Getting people to eat together breaks down barriers and helps improve relationships on both sides of the fence. It really all comes down to people."*

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