

# The Role of Trust in IS/Business Alignment

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## Abstract

*IS/business alignment is an ongoing concern for both IS and other senior managers. Although it is often seen as a progression towards alignment, then full integration, of IS plans and business plans there is increasing evidence that the social dimension of alignment, or IS/business integration, is an equally important aspect. So far there has been no overriding theory for the social dimension of alignment. This paper places it within social capital theory. This theory argues that the development of networks of relationships within a social group is necessary for that group to effectively achieve common goals. I then argue that trust, an essential element in the development of social capital, between IS and business personnel is a prerequisite of IS/business alignment. A brief review of the literature is used to support the argument. This argument is also relevant in many other areas of IS endeavour.*

## Keywords

IS/business alignment, social capital theory, trust

## Introduction

Many authors have found or recommended that, to be effective, an information system (IS) must be aligned with its relevant business goals and visions (Chan 2002, Chan, Huff, Barclay & Copeland 1997, Chan, Huff & Copeland 1998, Coakley, Leader & White 1995, Henderson, Venkatraman & Oldach 1996, Henderson & Sifonis 1988, Gottschalk & Solli-Saether 2001, Jones, Taylor & Spencer 1995, Kearns & Lederer 2000, Lederer & Mendelow 1988, Lederer & Sethi 1988, Moynihan 1990, Niederman, Brancheau & Wetherbe 1991, Sabherwal 1999, Venkatraman 1989, Venkatraman 1994). However, even the concept of alignment is vexed by a plethora of meanings and definitions (Chan et al. 1997). For some attaining alignment with business goals and visions is a matter of integrating strategic information systems planning (SISP) with business planning, with the level of integration of these plans indicating the level of alignment (Kearns & Lederer 2000, Teo & King 1996, Teo & King 1997). Others define alignment as the “fit between business strategic orientation and IS strategic orientation” (Chan et al. 1997) which goes far beyond mere planning to include, among other aspects, the vision and culture of the organization. This latter view has been extended even further to include the relationships between the chief information officer (CIO) and chief executive officer (CEO), and between the IS department and other organizational units (Chan 2002, Nelson & Coopriider 1996, Nelson 2001, Reich & Benbasat 2000). This latter view maintains that the relationships between various actors will affect the planning process (whether the resultant plans are either formal or informal) and, therefore, the level of integration of those

plans, as well as the implementation of business and IS strategies. This view of alignment includes the concept of integration “the quality of the state of collaboration that exists among departments that are required to achieve unity of effort by the demands of the environment.” as defined by Lawrence and Lorsch (1967). In fact Chan (2002), Leonard (2001) and Reich and Benbasat (2000) believe that this social dimension of alignment, or integration, with its emphasis on informal working relationships between actors, may lead to a more long term alignment than the formal organizational structures and procedures is able to provide.

## **The importance of the social dimension of alignment**

In his work on the measurement of alignment Luftman (2001) places some emphasis on integration even though this term is not mentioned specifically. Equally, those authors who view alignment as the integration of business and IS plans also accept the importance of the social dimension and functional integration. For example, many of the critical success factors of successful integration of business and IS plans identified by Teo and Ang (1999) are social in nature. Additionally, Luftman, Papp and Brier (1999) and Luftman (2001) found that one of the main inhibitors of IS/business alignment is the lack of a close relationship between the IS function and other business units. Conversely, they found that a strong business – IS partnership was an enabler of alignment.

There is also a rich literature investigating the importance of the CIO/CEO relationship, and to a lesser extent the relationship between business and IS line managers, in achieving an effective IS function and attaining business goals. Achieving these objectives is analogous to attaining IS/business alignment. Jones et al. (1995) found that while most CEO's are reasonably satisfied with their CIO's there appeared to be a lack of communication between the two that meant that CIO's were generally not a part of business strategy formulation. CIO's who have two-way communication with their CEO's are generally less concerned with planning issues than those CIO's who do not have this relationship or are structurally further removed from their CEO's. This is explained by the former CIO's better understanding of the CEO's wishes and the vision, goals and objectives of the organization (Feeny, Edwards & Simpson 1992, Watson 1990). The work of Feeny et al. (1992) emphasized the importance of including a CIO, who had excellent domain knowledge and a desire to transform the organization, within the senior management team. An additional advantage was a CEO who was focussed on output (effectiveness) rather than throughput (efficiency) (Feeny et al. 1992).

In a review of the literature on what we do, and do not, know about successful CIO's Brown (1993) found that most literature supported the proposition that non-technical skills such as communication were valued more than technical skills. However, she also noted that no empirical research on the CIO/CEO relationship had been conducted to that date.

In one of the few papers that addresses the relationship between line managers Henderson (1990) argues that the integration of functional areas, including IS, is a key to successful IS implementation and competitive advantage or, in our terms, IS/business alignment. He argues that integration is dependant on the development of partnerships between IS and other functional line managers. These partnerships are of a much closer nature than those developed between people who are merely completing a transaction. Among other things, they embody risk and trust. He identifies two dimensions of partnerships: Partnership in Context, which is the degree to which the partners believe that the relationship will endure and; Partnership on Action, which is defined as the ability of the partners to influence decisions and policies that affect the performance of the partnership (p. 8). A major criterion

of a successful partnership is that the benefits must exceed those that could be achieved independently by the partners. The determinants of Partnership in Action are shared knowledge, the mutual dependency on distinctive competency and resources and, organizational linkage. Henderson identified three types of organizational linkage: physical process integration, information integration, and social networks (p. 12) the latter relating to the development of personal relationships.

In separate work Nelson and Coopriider (1996) found that mutual trust and influence between IS and business personnel leads to shared (domain) knowledge and that this has a direct influence on IS performance. However, neither mutual trust, nor mutual influence directly affected IS performance – this only occurred through the development of shared knowledge. This work, again, emphasized the importance of the relationship between IS and business staff. As a result of their research Nelson and Coopriider (1996) recommend that IS and line groups be given as much opportunity as possible to communicate, interact socially and attain goals to encourage the development of mutual trust and influence. They note, however, that communication by itself is unlikely to be successful in this regard.

This, then, indicates the importance of the social dimension of alignment (Reich & Benbasat 2000) and functional integration which emphasizes the relationships and partnerships developed between members of the IS and other business functions. It is, therefore, beneficial to address some of the theory behind these relationships and partnerships.

## Social Capital Theory

Social capital refers to the networks of relationships that constitute a resource in any social group. Unfortunately there is no universal definition of social capital, but the term was first used in community studies (Nahapiet & Ghoshal 1998). In these studies it was found that the network of personal relationships was an indicator of a well functioning neighbourhood that was able to mobilize its members to attain group goals. The network provided a basis for trust, cooperation and collective action. Social capital, in the form of networks of relationships, could explain why some communities were able to attain group goals whilst others could not.

An intrinsic part of the relationships necessary to create social capital is trust (Nahapiet & Ghoshal 1998). People tend not to share information and resources with those they do not trust, and it is this sharing that is, in effect, social capital.

One of the features of social capital is that, like knowledge, it is only valuable if it is used and it is strengthened, rather than exhausted, by use (Nahapiet & Ghoshal 1998). But, unlike most other resources within a society or organization, it is not the property of the individual – it belongs to the group and only exists whilst that relationship exists (Burt 1992). It is also different to other resources in that it creates “the opportunities to transform financial and human capital into profit” (Burt 1992).

Since the early studies on neighbourhoods social capital has been used to explain why some individuals, organizations, regions and nations outperform others economically. Fukuyama (1995) argues that the prevailing networks within a society, based on who the people in that society tend to trust, can explain why some nations such as the USA tend to develop corporations and others, such as Chinese communities, develop primarily family owned businesses. The USA has a culture of trust where the ability of the person is paramount. This encourages the recruitment of outsiders to manage and run a business for the owners, creating

a corporation. Relationships beyond corporate boundaries also allows access to a wide range of information and resources. In Chinese communities it is generally only extended family members who are trusted. The networks of personal relationships tend not to extend beyond this boundary and results in an inability to access external information and resources generally limiting the size of the business. Fukuyama (1995) makes the observation that, for this reason, in Chinese societies most large organizations are state owned. In other societies social capital is particularly poor and personal relationships and trust do not extend beyond the nuclear family. It is then difficult for the local community to work collectively for the common good, or for the society to create anything beyond extremely small, individually owned and operated businesses (Fukuyama 1995). Once again, any objective requiring collective action normally requires state intervention.

It is evident from the above that the culture of a society, or organization, will determine to a large degree the extent and strengths of the personal relationship networks that are possible within that society (Blau 1982). Social capital theory is, then, the study of the networks of relationships that occur within social groups, and this is then used to explain why some groups outperform others.

It is generally accepted that the networks of relationships that form the basis of social capital have two major dimensions, structural and relational, with Nahapiet and Ghoshal (1998) identifying a third, the cognitive dimension. This paper will restrict itself to the first two.

### **The Structural Dimension of Networks**

The structural dimension concerns itself, naturally, with the structure of the network. How many people are connected, are there redundant paths or connections and are there bridges between two or more network clusters?

The more people that a person is connected to in meaningful relationships, the better as this increases social capital. However it is not necessary for a person to be in personal contact with every other person within an extended network. Providing s/he knows someone who knows someone then it is likely that his/her access to information and resources is increased.

In theory, the optimum structure is a loose connection of clusters where there is minimum redundancy of paths within, and between, clusters (Burt 1992). This provides the maximum exposure to available information and resources with a minimum cost in developing, and maintaining, the required relationships. However, this is unlikely to ever be achieved due to the social nature of people and, in an organizational setting, the formal structures that co-locate people with similar tasks. The latter actually inhibits the creation of bridges or structural holes.

### **The Relationship Dimension of Networks**

The relationship dimension of social capital refers to the nature and strength of the relationships between pairs of people within a network. Relationships generally form as a result of repeated, effective communication. Key to their formation is the trust in, and trustworthiness of, the other party (Cohen & Fields 1999, Fukuyama 1995, Gargiulo & Rus 2002, Granovetter 1982, Nahapiet & Ghoshal 1998). In fact, so central is the idea of trust to social capital theory that Fukuyama (1995) when using this theory to explain the competitiveness of nations named his book simply "Trust".

An important aspect of the relationship dimension of social capital is the strength of the tie between actors from weak to strong (Burt 1992, Granovetter 1982). Simply, a weak tie is that typified by acquaintances, whilst strong ties hold family members and close friends together. The latter is characterized by frequent communication. Trust is a necessary ingredient of both forms of ties.

However, the strength of the tie has another aspect. As mentioned, strong ties develop between family and close friends and, often, workmates within a small workgroup. A characteristic of these clusters is that they are homogeneous - all members have access to the same resources and information, have similar belief systems whilst the "norms" of the group tends to restrict the range of possible actions. As a result they tend to foster "groupthink", inhibit the creation of knowledge and restrict the ability of a member to perform non-routine tasks (Burt 1992, Nahapiet & Ghoshal 1998).

Conversely, weak ties normally form the bridges between clusters although they can be present within a homogeneous group - you have a close relationship with a few members of a group whilst other members of that group are friends of your friends. The strength of weak ties is that, as a bridge between clusters, they allow access to other groups that have access to different resources and information. They allow the formation of a large heterogeneous network due to your relationship with acquaintances in other groups (Burt 1992, Granovetter 1982).

Nahapiet and Ghoshal (1998) have argued that social capital is a prerequisite to the development of knowledge within an organization and that ties between network clusters are important in the flow of information between what are generally homogeneous groups. This allows different ideas to be shared and, then, the development of new ideas and knowledge. In our situation, the development of relationships between IS and business personnel allows the ideas of both groups to be used to develop new business solutions. It is more likely to result in systems and services that actually meet users' needs and that then raises the credibility of the IS department.

Finally, in an organizational setting, formal structure can affect the development of social capital. Hierarchical structures that emphasize the adherence to rules, policies, chains of command and communication lines build cultures that are low in trust and social capital. Conversely, emergent structures built around teamwork and the achievement of results through relationships tend to create cultures that are rich in trust and social capital (Creed & Miles 1996).

The foregoing indicates that social capital, in the form of networks of relationships within and between workgroups, is a prerequisite to the creation of knowledge and innovative solutions to business problems. Trust is an essential ingredient to the formation of these relationships and is now discussed.

## **Trust**

Trust is a difficult term to accurately define, but includes a number of generally accepted ideas. It expects "that another's actions will be beneficial rather than detrimental" to us (Creed & Miles 1996, p.17). This can be expanded so that the other's actions are taking place in an atmosphere of dependence and risk so that the other has power over us (Kipnis 1996). These two concepts - reliance on others not to harm us, and the resultant power or control that the other party then has over us in a trusting relationship - are central to most definitions

of trust within social psychology. However, McKnight and Chervany (2001) have noticed that the definitions and characteristics given for trust vary depending on the discipline in which they were developed. These authors did not find any definitions of trust in the IS literature. This may pose problems for the IS discipline, as the concepts of trust being used may vary depending on the context. For example, this article is primarily concerned with interpersonal trust, the concepts and definitions for which come primarily from social psychology. However, the concepts for trust being used when investigating the perceived trustworthiness of e-businesses (dispositional and institutional based trust) tend to come from the psychology, economics and sociology disciplines. The reader should, therefore, recognize that the following discussion on trust is based on that found primarily in social psychology.

It is generally accepted that trust is based on three facets:

- the disposition to trust embedded within a person. That is, whether we believe that people, generally, are trustworthy or not (Creed & Miles 1996).
- characteristic similarity. This could be based on family, race, religion, culture, age, economic position, education or any other criteria that a person believes makes others trustworthy. In an organizational context this can be affected by the formal structure of that organization. People who have similar tasks within the organization and are co-located will tend to believe each other trustworthy within that particular setting (Creed & Miles 1996) as they will have, among other things, similar beliefs, goals and objectives, and functional knowledge. The corollary to this is that the development of trust is inhibited by dis-similarities. These could, in an IS/business situation, include: dress, use of technical jargon, different goals and objectives, educational background, a sense of technical superiority, lack of shared domain knowledge, and cognitive style (Bashien & Markus 1997).
- experiences of reciprocity. Repeated dealings with a person will indicate whether that person can be trusted to behave as expected. Obviously, people who work together and have numerous dealings with each other on a daily basis are more likely to develop a trusting relationship (Creed & Miles 1996).

We are interested in the latter two facets of trust as they have a direct influence on IS/business alignment.

When we meet a person for the first time with whom we must deal, we tend to make a value judgement on trust based on the first two facets, above. Do we naturally trust people, and does this person have similar characteristics to ourselves upon which we can base our judgement? Later experiences of reciprocity will alter the initial judgement. What we do know about trust is that it takes a relatively long time to increase as a result of reciprocity. It can, however, be destroyed very quickly as a result of these dealings to the point where there is distrust. Repairing such a damaged relationship is very time consuming and expensive (Lewicki & Bunker 1996).

However, McKnight and Chervany (2001) maintain that a lack of distrust in a trusting relationship can actually be counter-productive in the long term. They give the example of an accounting firm partner who has high trust in a client firm and, because of the level of trust, may ignore evidence of malfeasance.

Being trusted actually limits our possible actions – generally the profit gained by maximizing immediate returns is outweighed by the destruction of the relationship and the loss of future profit (Meyerson, Weick & Kramer 1996).

It appears that the level of dispositional trust in western countries, in particular, has been diminishing in recent years (Putnam 1993). This is placing increasing pressure on the remaining two facets, characteristic similarity and experiences of reciprocity, in the development and maintenance of trust between parties.

It has also been noticed that when placed in a position of having to trust someone where a trusting relationship has not yet developed, most people will attempt to gain some level of control or power over the trustee in an effort to minimize any possible harmful results. This is an attempt to counter-balance the control that the person we have to trust has over us – our results are dependent on the other party's actions. To exacerbate matters we feel most uncomfortable where there are few characteristic similarities between ourselves and the person we must trust (Kipnis 1996). This may partly explain the power politics that often occur between IS and business managers during an IS project.

Within an IS/business context, other authors have noted the importance of the credibility of the IS department in gaining user confidence, their input into business problem solving sessions as well as their involvement in the development of both IS and business plans (Bashien & Markus 1997, Chan 2002, Earl 1993, Gramignoli, Ravarini & Tagliavini 1999, Hackney, Burn & Dhillon 2000, Jones et al. 1995, Teo & Ang 1999). However, Bashien and Markus (1997) have noted that the two major elements of IS credibility are perceived expertise and perceived trust. One of the anomalies that they found is that IS managers regarded their technical expertise as the basis for their credibility. This was not, however, the view of business managers who placed far more emphasis on the trustworthiness and interpersonal skills of the IS managers. According to the authors, an IS person's expertise is not credited until he/she has demonstrated his/her trustworthiness. They found that no matter how expert the IT section is, if it does not have the trust of its business users it will not be regarded as credible. But they also found that credibility is often maintained in the absence of expertise, or a failure of expertise in a project, providing the IS function remains trustworthy (Bashien & Markus 1997). There is also some evidence to suggest that partnerships between the CIO and senior management based on trust need to be recognized as enablers of organizational change (Brown 1993).

Our argument so far has been that there are two dimension of alignment, intellectual and social, and that it is becoming increasingly evident that the social dimension of alignment, or IS/business integration, has a significant impact on the intellectual dimension – the alignment of IS plans, goals and vision with those of the business. Social capital theory can explain how networks of relationships within an organization can lead to the development of knowledge and allow people to work together to achieve common goals eventually leading to, in our case, integration, alignment and competitive advantage. It has also been shown that trust is a prerequisite to the relationships required to develop social capital. The literature is now briefly examined to determine whether the trust and relationships required for social capital have generally been developed between IS and business personnel.

## **IS/Business Relationships**

The literature is replete with calls to improve IS/business communications, the need to educate senior management, to gain senior management commitment to projects or IS strategic plans and to increase IS credibility. These would indicate that all is not well with the IS/business relationship.

The ability of CIOs to influence the decision to initiate or implement a project has not been particularly good (Enns, Huff & Golden 2001), with as little as 24% of projects identified in strategic information systems plans being commenced (Lederer & Sethi 1988). However, Enns et al. (2001) also found that those CIOs who formed relationships with their peer managers were much more able to influence these types of decisions. The combination of this information would indicate that most CIOs are not, as yet, very proficient at developing these relationships.

In research investigating the IS/user divide Kettinger and Lee (2002) discovered many power plays and conflicts of egos between IS and general business managers, that IS personnel often have a poor opinion of the abilities of users, and that IS departments are often not consulted prior to the approval of major projects. This, they contend, can lead to a situation where mistrust during implementation can escalate to influence other projects and the whole of IS operations. It also indicates a lack of relationship between IS and business managers.

Although there are many failures in the adoption of new technology, it appears that user satisfaction is higher if the need and characteristics of the proposed technology is agreed between the IS department and users prior to implementation (Kettinger & Lee 2002). This implies that domain knowledge is a two-way street – IS personnel must learn how the business works, but users must also have a basic understanding of technology. This, and other, research indicates that the exchange of domain knowledge is not occurring (Bashien & Markus 1997, Brown 1993, Chan 2002, Enns et al. 2001, Enns, Huff & Higgins 2000, Enns, Murray & Huff 1997, Feeny et al. 1992, Teo & Ang 1999). This exchange of domain knowledge is the creation of social capital. Its lack would indicate that the relationships necessary for it to occur are not being created or maintained.

As mentioned previously, trust is an important part of relationship building and the creation of social capital. But the IS literature would indicate that, generally, IS departments and personnel are not considered trustworthy by their business counterparts (Avison, Cuthbertson & Powell 1999, Bashien & Markus 1997). Combined with this is the complaint by many users of the overly technical jargon used by many IS people (Bashien & Markus 1997, Enns et al. 2000, Brown 1993, Kettinger & Lee 2002) that reduces trust and makes the development of relationships difficult.

There is another aspect of communications that also affects the development of relationships that IS managers should be aware of. IS managers tend to be wary of problems that may occur at the implementation stage during project planning and design. This is for very valid reasons as the proposals may impact the existing system, or create the need for new technology with which the organization is not familiar. However, business managers interpret this concern as being negative towards the project (Bashien & Markus 1997). It is quite likely that this misunderstanding of each other's intent is due to the lack of a close relationship, as managers note that once they know their IS managers they understand their concerns and interpret the message differently.

The foregoing has shown, briefly, that the relationships between IS personnel and users, and between IS managers and their peers leaves something to be desired. But the literature also gives some indication why this is occurring and is now discussed.



part of this theory it would appear that there needs to be much more interest placed in the development and maintenance of trust between IS and business personnel than has occurred to date (Chan 2002). Although a number of papers have made suggestion on how to develop this trust (Jones & George 2000, Nelson & Coopriider 1996) it has been either simplistic or does not consider the specific situation in which many IS personnel find themselves. Work in this area will probably pay dividends in IS/business integration and the long-term alignment that Chan (2002) found was encouraged by the informal social networks within organizations.

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