

Draft Working Paper

Governance and Corporate Social Capital: Friends or Foes?

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1. Introduction

The purpose of this paper is to explore governance implications in a business environment that is becoming increasingly networked (Pekar & Margulis, 2003) and where Corporate Social Capital (CSC) is becoming an increasingly important competitive lever (Leenders & Gabbay, 1999). Traditionally, governance has been viewed as achieving business value through compliance to accepted pre-defined rules and standards. In an increasingly complex and interconnected market place, this approach to governance is becoming increasingly difficult to sustain. The use of CSC arguably is an emerging alternative style of governance, where formal hierarchical control does not exist and actions are dictated more by influence than dictate. In many ways compliance style governance and CSC style governance could be seen as competing approaches. However, as market actors become more interconnected, will a confluence of the two be required to achieve effective governance? The Information Technology (IT) Governance context has been chosen for particular attention to help illustrate the emerging issues facing the governance task, with some practical examples.

The emergence of a networked business environment is threatening a major disruption to current IT governance practices. The IT market place is becoming increasingly

networked and the complexity of organisational demands of IT is such that compliance to standard processes is no longer sufficient.

This research makes use of a combination of literature review and empirical analysis to synthesise a proposed new framework for IT governance. To illustrate simply the IT governance challenge, a review is conducted of the IT outsourcing experience from a network perspective. A method for assessing intangibles like CSC was developed based on a computer supported content analysis and social network analysis (SNA) techniques, to identify the link between the CSC of a firm and its performance.

This paper will initially provide a brief review of current IT governance practices and present the basic issue being faced by such practices. This will be followed by a description of the IT global market place from a networks perspective. The concept of corporate social capital (CSC) will then be introduced with a description of some empirical research that has been conducted to identify the links between aspects of CSC and firm performance in the global IT services sector. A framework is then offered to facilitate the incorporation of CSC to provide a more effective IT governance framework.

2. What is IT Governance?

IT governance is considered a subset of corporate governance. A common basic definition of IT governance is:

“The primary goals for information technology governance are to (1) assure that the investments in IT generate business value, and (2) mitigate the risks that are associated with IT”¹

More detailed definitions extend beyond the “what” of IT Governance and begin to detail some of the “hows”. This definition from the IT Governance Institute provides an example of such:

¹ http://en.wikipedia.org/wiki/IT_governance (accessed 11th June 2008)

“IT governance is the responsibility of the board of directors and executive management. It is an integral part of enterprise governance and consists of leadership and organisational structures and processes that ensure that the organisation’s IT sustains and extends the organisation’s strategies and objectives.”²

The inference from the above definition is consistent with the current views on corporate governance, especially in light of the Enron, Arthur Andersen and Worldcom collapses, that led to the establishment of a new compliance regime around the Sarbanes-Oxley act in the USA. In other words, compliance to a defined standard of processes, organisational structures and procedures is seen as the way to achieve effective IT governance.

One of the tensions that exist in meeting the fundamental objective of IT governance, being to generate business value, and a compliance approach to IT governance is that compliance is a clear cost to the business. Whether this is more than balanced by the benefits achieved is a topic for discussion in this paper. One could argue that the provision of a “compliance standard” for IT governance in an industry that is in continual and rapid evolution and its creation is nothing but an illusion. Therefore the application of a compliance only approach to IT governance would in fact be hindering, rather than aiding the business.

To put the above argument in perspective one needs to consider the environment that is being governed. To facilitate this discussion a decision making framework developed by David Snowden, called the Cynefin Framework (Snowden, 2002; Snowden & Boone, 2007) is used.

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http://www.isaca.org/Content/ContentGroups/ITGI3/Resources1/Board_Briefing_on_IT_Governance/2690_4_Board_Briefing_final.pdf (accessed 11th June 2008)



Figure 1 – Cynefin Decision Making Framework

The Cynefin framework was born out of Snowden’s studies in Knowledge Management (KM). Snowden showed an early appreciation for how simple KM methods were failing to meet the early expectations of the organisations adopting them. He subsequently developed the Cynefin framework to introduce the application of sense making to management and organisational practice and to create an open source movement for methods on management consultancy.

Through the use of the Cynefin framework, some of the challenges in IT Governance become clearer. The journey through the framework is best commenced at the area to the lower right, labeled “Simple” and “Best Practice”. This domain is meant to identify the simple contexts where the environment is relatively stable and clear cause and effect relationships exist. Managers in this domain typically practice a sense, categorise and respond (S-C-R) approach which eventually develops into a “best practices” suite of standard processes to be applied on the occurrence of a pre-determined event. The “Simple” domain could aptly be applied to many of the operational domains of an IT outsourcing contract. For example, the best practice Information Technology Infrastructure Library (ITIL) (ITIL.org, 2007b) was initially established by the UK government to help standardise on best IT management processes to international quality standards. The latest upgrade to ITIL (version 3) acknowledges the need to move beyond the internal IT management processes.

“ITIL looks for the first time at some business fundamentals and relationships between all players in modern organizations using IT” – Sharon Taylor, Chief Architect (ITIL.org, 2007a).

It is suffice to say that the combination of the ITIL learning and the checkered history of IT delivery performance suggests that the IT services environment is more than “simple”. Moving to the upper right context labeled “complicated”, the domain is characterised by potentially multiple “right” answers. There is no one best process, so this domain is labeled with “good practice” as the aspiration. Cause and effect relationships still exist, though they are not clearly apparent to all. Examples of complicated domains include oil exploration, aircraft manufacture or possibly IT outsourcing. In complicated domains, critical reliance shifts from managers to “experts”. The response to particular events is to sense, analyse and then respond (S-A-R). This situation adequately describes the typical help desk service, where operators field calls (sense), analyse the problem (analyse) and then hopefully provide a solution (respond) through a combination of documented processes and their own personal expertise. Help desk problems that are escalated rely on service technicians with higher levels of expertise and consequently less reliance on documented practices.

The IT services environment as we know it today may sit in the “complicated” domain. There is no single “best practice” to how it is done. Decisions on management of IT also now go beyond the simple economic argument, though this will always be present.

Now if we up the ante to consider emerging trends of multisourcing, Enterprise 2.0, off-shoring, open source software, public IT infrastructure and the like, the level of increased complexity goes beyond simply scaling up of previous practices. Moving to the top left context labeled “complex”, the ability to identify a single “right” answer is no longer possible. This context is contrasted with the “complicated” context by comparing the deconstruction and reconstruction of a sophisticate piece of machinery like a racing car or aircraft, with say managing the future of a Brazilian rainforest (Snowden & Boone, 2007).

Experts are able to successfully work with complicated machinery, but the ecosystem of a rainforest is sufficiently complex to suggest that comprehensive analytical processes are still insufficient. Solutions are however achievable through a probe-sense-respond approach. This is an emergent process where a level of experimentation is undertaken before a firm direction for action is taken. Could the current IT management context be seen as “complex”? The ecology of the IT market place will be explored in a later section, but it is suffice to say here that it shows some similar elements to a Brazilian rainforest, so the notion can’t be dismissed entirely.

The final context identified in the Cynefin framework is “chaos”. This domain is described as one of turbulence, with no consistent patterns of cause and effect and any level of analysis would prove worthless. The guidance for firms operating in this context is to act-sense-respond. Acting first to restore order in even a single area provides the basis for working to transform the situation from chaos to complex and hopefully to some identifiable patterns that can be worked with. It would be harsh to identify current IT management experiences as chaotic, though no doubt many an IT executive may have felt they had been in that situation at times. The guidance here is that if circumstances, like a major downsizing and restructuring of your firm occurring just as several of your key providers have been identified for fraudulently scamming their clients, is to act to restore order in any area. In chaotic situations any action will do as long as it contributed to restoring some sense of order.

In summary, it has been agued here that current IT management context largely fit within the “complicated” business decision making context with the risk of moving to the “complex” domain as trends in multisourcing, enterprise 2.0 and open source evolve. In terms of IT governance, this will mean a progression from the ideas of “best practice” compliance to one where some level of experimentation is welcomed. This is not to say that all IT governance decisions will be in the complex or complicated domains. The portfolio of decisions undertaken within a typical IT management context may spread across all of the Cynefin framework domains. What is important to understand from this section is that there is no “one size fits all” solution and that governing an IT services

context may require decision making strategies from all four Cynefin domains at some time or other.

Having identified common perceptions of what IT governance currently is and providing an argument as to why a compliance driven approach alone may be insufficient, the following sections will build on this argument. The next section uses the global IT marketplace to illustrate the increasing level of complexity that IT and business executives are currently faced with.

3. The Evolving Nature of Markets toward Networks

A new era of IT application is both disruptive and challenging to the way traditional IT governance is conducted within organisations today. What is unsettling is that current compliance driven IT governance practices are diametrically opposed to working in a networked world. Open source software development, Enterprise 2.0, public infrastructure usage, supply networks and multisourcing are emerging business trends centred on networks. Heavily governed IT infrastructures are forcing staff to look for other avenues outside the firm to conduct their business, be it through establishing a Facebook or MySpace group or other consumer oriented networking sites. To sustain a position of relevance, IT governance participants will need to rely more on their social capital and how they are perceived in the organisation's trust network. To achieve this will require a major shift in thinking about what constitutes IT governance.

IT outsourcing has been a common practice now for over a decade, with the earliest contracts being signed in the early 1990s. IT outsourcing was founded on transaction theory economics (Williamson, 1981) whereby if a firm found that the cost of its internal IT services exceeded the price that the market could deliver them, then the service should be outsourced. The experience with outsourcing has been far more complex than this. It is argued in this paper that a resource based theory (Barney, 1991) is a more appropriate

underpinning theory for IT outsourcing governance, and that a key resource is corporate social capital (Leenders & Gabbay, 1999).

A recent phenomenon has been the movement from sole sourcing to multisourcing contracts. This review identifies the increasing networked nature of the IT market place. IT vendors are increasingly networked via joint venture arrangements or partnerships. Figure 2 illustrates the evolution to a highly networked IT outsourcing market in the UK, using IT outsourcing contracts data collected over the past decade³. The nodes are either IT vendors or client firms. The connecting lines indicate the existence of a contractual arrangement. It shows that it is no longer possible to look at individual vendors as isolated entities. Both clients and vendors are now connected within a complex web of business relationships. The situation is in fact far more complex than that illustrated in Figure 2, as there are also a plethora of non-contractual relationships that are not shown on these maps. It is apparent that sociology and social capital does have a part to play in the IT market place (Granovetter, 1985; White, 1981).

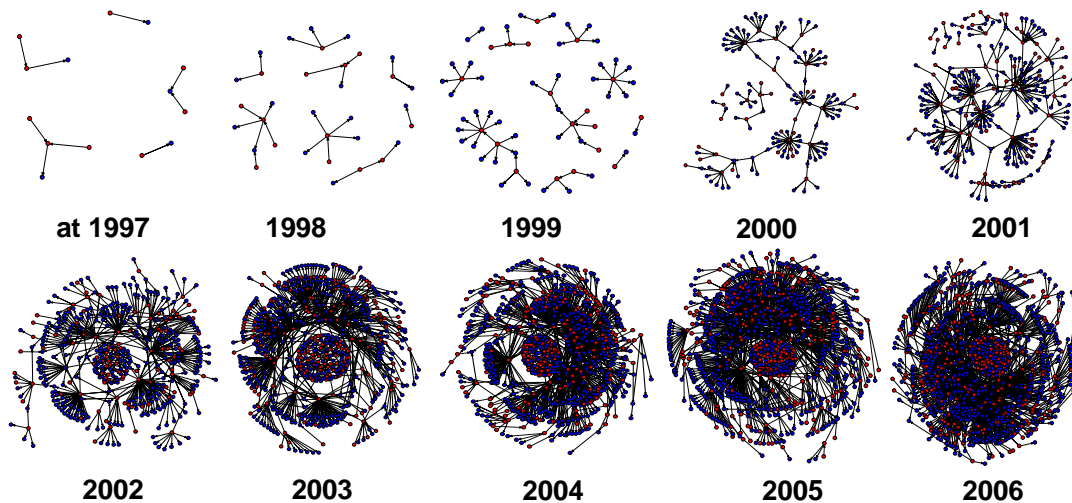


Figure 2 – A Decade of UK IT Outsourcing

Of course the IT governance task has not always been as complex as it is today. In the early days of IT there were far fewer IT vendors available. Much of the software

³ Datamonitor Contracts Data Base www.datamonitor.com

provided was custom written. The main task for the IT executive was to select a single reliable vendor, who was typically a hardware manufacturer. Sourcing IT has become increasingly complex as the IT market has evolved. Figure 3 provides an illustration of how this complexity has evolved to the point where if a firm wants to take advantage of “best in class” IT resources, then they will also have to deal with the maximum IT governance complexity and the sociological aspects that come with it. As one moves from independent business unit IT services, through a shared service model, to outsourcing with a single provider and then different configurations for managing multiple external providers, the governance environment increases in complexity. In terms of multi-sourcing it is not simply a matter of selecting the “best in class” vendors. One must also consider the sociology of engaging multiple vendors to work together for the good of the firm. It is unlikely that this can be achieved through contractual means alone (Kern & Willcocks, 2001).

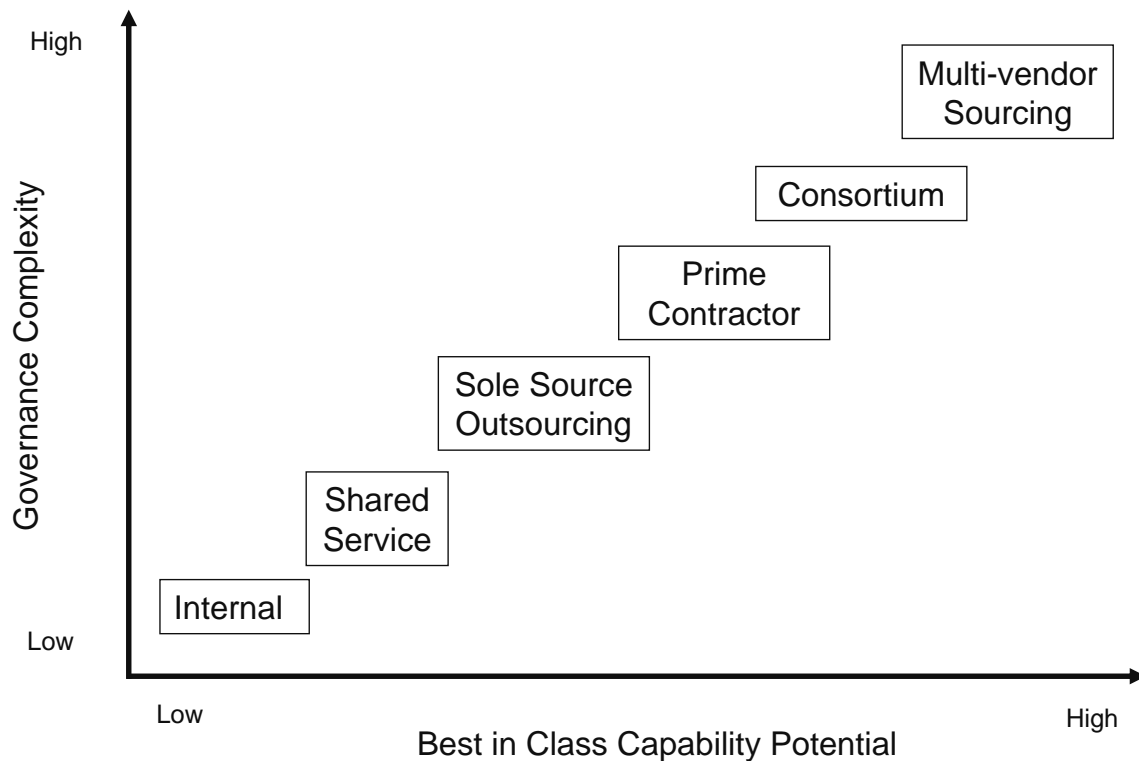


Figure 3 – IT Sourcing Evolution

An argument has now been established for identifying current IT environments as sufficiently complex to require more than a compliance approach to governance and that

it is likely that social capital will have a role to play in effective governance. In other words, as well as the “top down” compliance approach, an alternative CSC approach that relies substantially on influence across all levels of the organisation, may also be required. The next section reports on empirical research that identifies the links between CSC and firm performance.

4. Corporate Social Capital and Links to Performance

This section provides a summary of some empirical research linking CSC to firm performance. A full account of this research can be found in Lock Lee (2008). This section describes how the hypotheses for this research were developed and defined. The CSC construct was built up in a stepwise fashion from a narrowly focused construct like structural social capital (SC), through the increasingly more abstract constructs of intellectual capital (IC) and corporate reputation. This is illustrated in Figure 4:

Corporate Social Capital

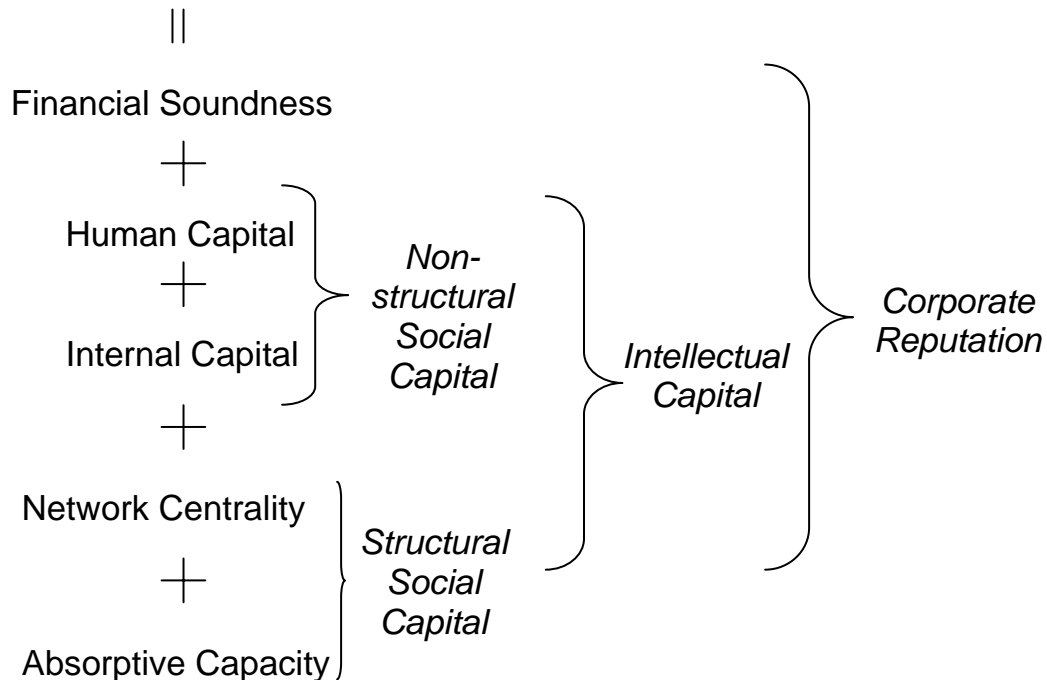


Figure 4 – Integrated Model for Corporate Social Capital

From a base formulation of network centrality (CENT), Absorptive Capacity (AC) is added to cater for the ability to absorb new knowledge from alliances. Intellectual Capital (IC) is added as a status attribute for the firm. Corporate reputation can be formulated as IC with the addition of financial soundness. Collectively, the concepts of alliance networks, AC, IC and corporate reputation can be incorporated into the integrated model for Corporate Social Capital (CSC). The advantage of the building block approach is that, as well as developing hypotheses to test the impact of the individual CSC elements on firm performance, one can also assess the additional contribution each sub-element makes to the overall CSC formulation, using stepwise regression approaches.

The CSC representation shown in Figure 4 is therefore used to provide a context for the construction of the hypotheses for this research. A more detailed research model was developed to describe how the contextual model has been operationalised to achieve testable hypotheses. Figure 5 summarises the linkage between the measurable elements found within the hypotheses and the CSC concepts identified in Figure 4:

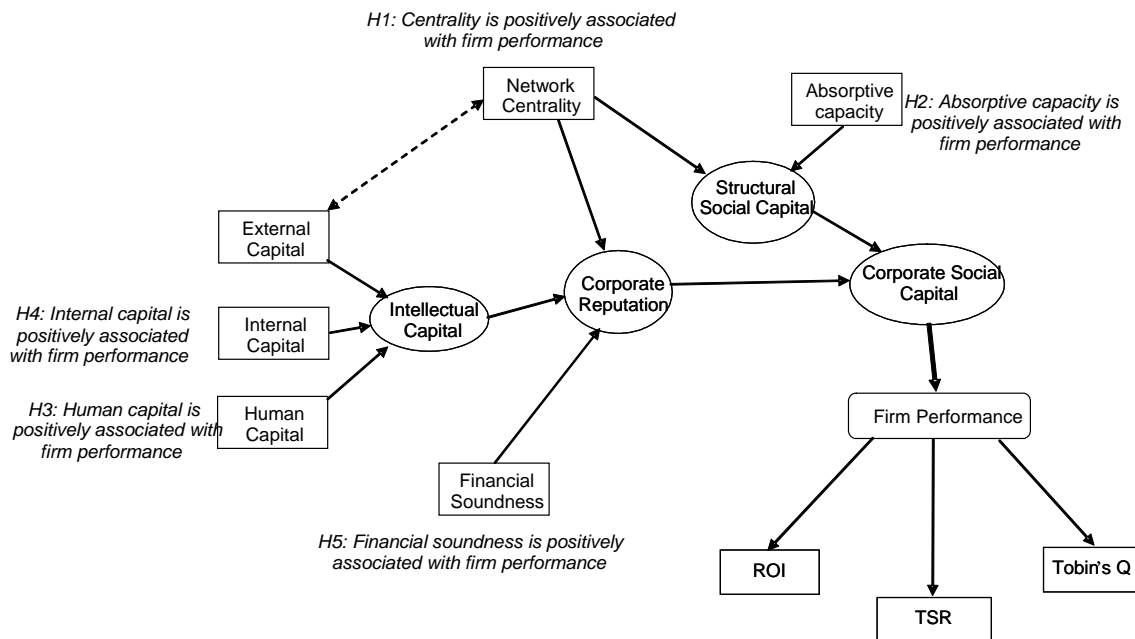


Figure 5 – Path Model for Hypotheses Development

The ovals represent latent variables which are manifested in the observed or measured variables identified in the rectangles. The dotted connection between network centrality and external capital (EC) identifies the potential redundancy between these elements from a conceptual perspective. The hypotheses link the measured variables, being the elements of CSC, with the three firm performance measures of return on investment (ROI), total shareholder return (TSR) and market to book ratio proxy, Tobins Q (TobQ).

Addressing each hypothesis in turn, the first construct is a firm's centrality (CENT), measured by its positioning within the market's network of alliances, versus firm performance. The proposition relating firm centrality to performance is inferred by social network researchers (Baker, 1990; Burt, 1992; Tsai, 2001). The proposition that a firm's centrality can be viewed as a significant intangible asset for the firm is conjectured here. IC researchers refer to EC (Sveiby, 1997) or relationship capital (Marr & Chatzkel, 2004; Roos & Roos, 1997), but not specifically centrality. It is therefore expected that there is a positive relationship between centrality and firm performance as identified in the following hypothesis:

H1: Centrality is positively associated with firm performance

The second construct adds AC, which is operationalised as R&D intensity (RES) (Cohen & Levinthal, 1990; Tsai, 2001), to centrality and provides a richer concept, labelled here 'structural social capital'. AC takes into account a firm's capacity to absorb knowledge or information from an alliance partner. It is expected that a firm's ability to absorb new knowledge will be positively related to its performance, which is identified in the following hypothesis:

H2: Absorptive capacity is positively associated with firm performance

The third construct uses elements from the IC model (Sveiby, 1997) to come up with an enriched version of an IC construct. The Sveiby model deconstructs IC into components of EC, internal capital (INC) and human capital (HC). For this research, CENT is used in

place of the EC element in Sveiby's IC model on the basis of conceptual equivalence, in that they both focus on a firm's external relationships. A number of authors have proposed that a firm's IC predicts firm performance (Lev, 2001; Stewart, 1997; Sveiby, 1997). Coleman (1988) argued the relationship between HC and SC. Pennings et al.(1998) identify the importance of both SC and HC on firm survival. The following hypothesis proposes the relationship between HC and firm performance.

H3: Human capital is positively associated with firm performance

Internal, or organisational, capital has also been related to the competitive advantage of the firm (Martin-de-Castro, Navas-Lopez, Lopez-Saez, & Alama-Salazar, 2006). This finding continues the theme for all the sub-elements of IC having a positive effect on performance. The proposition that INC is positively associated with firm performance therefore constitutes the fourth hypothesis:

H4: Internal capital is positively associated with firm performance

The fourth construct introduces financial soundness together with IC to come up with a representation of corporate reputation. Several authors have developed theories linking corporate reputation to firm performance (Fombrun & Shanley, 1990; Hall, 1992). The importance of the financial element of corporate reputation is inferred by Brown & Perry (1994) in their claim that a firm's 'financial halo' can obscure other elements of a firm's corporate reputation. It is therefore expected that financial soundness will be positively associated with firm performance as described in the fifth hypothesis:

H5: Financial soundness is positively associated with firm performance

In summary, the proposition that CSC positively impacts firm performance is achieved through a series of hypotheses linking the sub-components of CSC to firm performance. In the course of evaluating the hypotheses, the results would also inform the impact of subsidiary constructs like CENT, AC, IC and corporate reputation.

Computer supported content analysis research methods were used to identify alliance connections between selected firms in the global IT services market. SNA tools were then used to graphically display market place connections as shown in Figure 6 and calculate centrality measures for each firm. The content analysis of business reports also provided indices for the CSC components like human capital, absorptive capacity and internal capital.

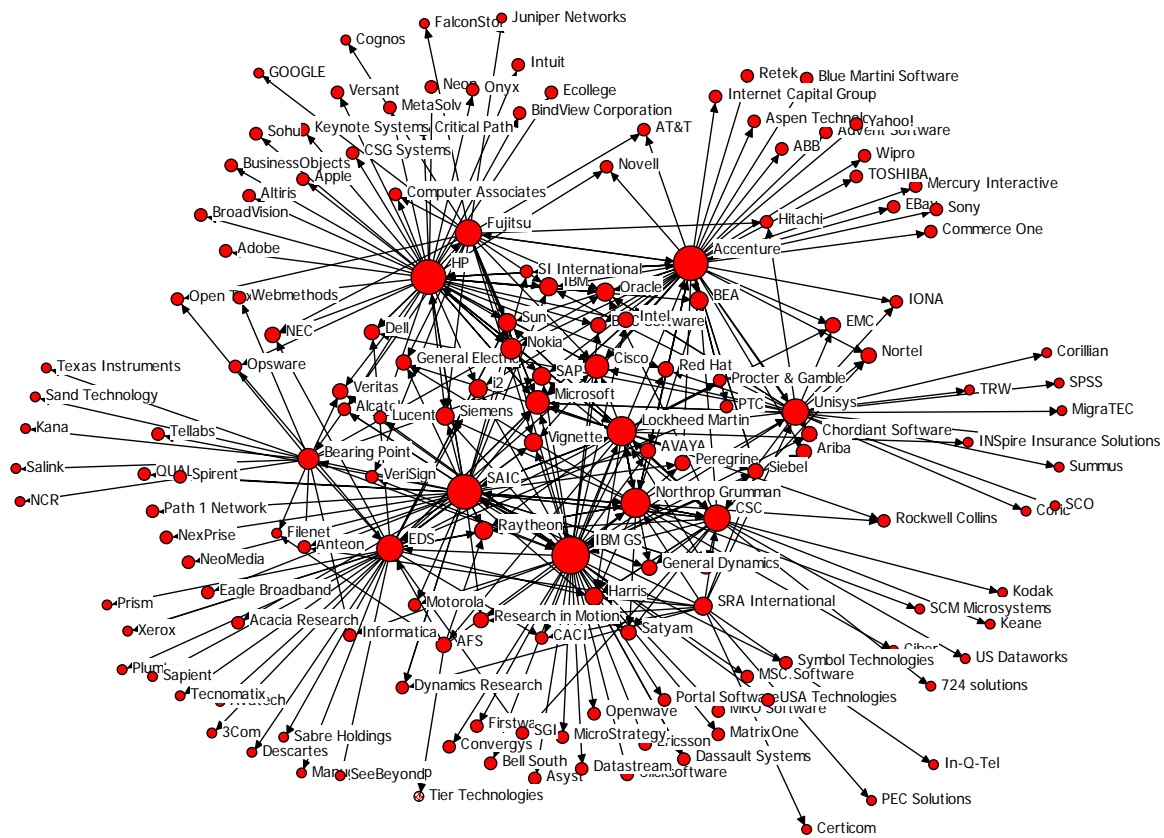


Figure 6 – Industry Map with High Centrality Nodes Highlighted

The results of the empirical study of CSC in the global IT market place showed that, beyond financial soundness, market centrality and human capital are critical components of CSC, that predict increased total shareholder returns (H1, H3 and H5 supported). Other elements of CSC were shown to have a negative impact on firm performance

becoming CSC liabilities, rather than assets. For example, investments in internal capital and R&D by firms who were not financially sound resulted in a drop in firm performance measures. From an IT governance perspective, IT executive need to move beyond simple “best of breed” to a networked model for governance that recognises CSC building as an important complement to traditional governance mechanisms. An understanding of market centrality, human capital development as well as sustaining sound finances would all need to be considered within IT governance regimes if they are to be effective in the current IT services business environment.

Having established that social capital has a part to play in IT governance and that CSC in its own right is linked to firm performance, what is left to do is identify how CSC and traditional compliance based forms of IT governance can profitably co-exist. In the next section a framework is proposed by the consideration of CSC within IT governance, and potentially, corporate governance frameworks.

5. Governance and Corporate Social Capital

It has been previously argued that the increased complexity in the IT market place should be forcing a re-think on traditional compliance forms of IT governance. The following table summarises the technical and business trends that have led to the current complex IT governance environment.

Business Trend	Hierarchical Control	Matrix Management	Business Network
Technology Trend	In-house data centres	Distributed Computing	Pervasive Computing
Governance Trend	Simple	Complicated	Complex

Table 1 – IT Governance Environment Trends

As IT becomes more pervasively available, the technology begins to underpin new business capability. One can see that the technology trends are seeing IT infrastructure

moving from a privately held and managed asset to one which is publicly available at increasingly commodity like pricing. Social computing, open source software and publicly available network infrastructure are visible evidence of these trends. Lower infrastructure costs are facilitating higher connectivity between businesses and within market places, providing the opportunity for business networks to deliver on the globalisation promise (Friedman, 2005). However, IT environments will still vary across the complexity spectrum. Therefore a governance framework is required to reflect the appropriate mix of compliance and CSC led activities.

There will also be organisations that will sustain a preference between a compliance led or CSC led approach. The framework provided in Figure 7 characterises governance mechanisms related to the complexity of the IT environment and preferred governance style.

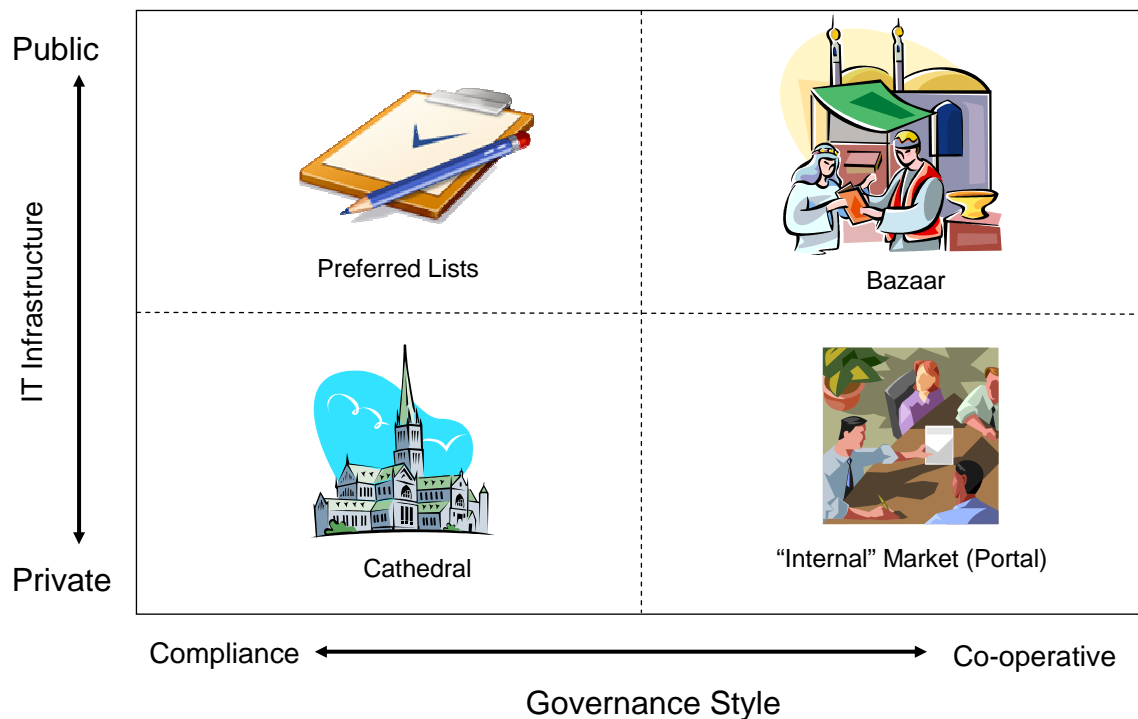


Figure 7 – A New Framework for IT Governance

The lower left quadrant identified by the cathedral depicts the regime that existed in the early days of IT. IT infrastructure was privately held by the organisation, which was well suited to a compliance style of governance. It is still possible to manage in this way today by choosing to own and manage one's own IT infrastructure, while blocking access to external IT facilities e.g. social networking sites like Facebook and MySpace. For businesses looking to protect market leading technologies and/or processes, this is still a viable form of governance.

For organisations still preferring to operate a compliance style of governance while still benefiting from the lower cost externally owned IT infrastructure and/or applications, the "preferred list" is a mechanism for limiting the complexity. This is achieved by choosing to limit the size of the IT market that one draws from. This quadrant reflects how the majority of firms are currently managing the complexity of the current IT environment. The downside however is that major elements of the IT market may be left out, reducing the opportunity for generating true innovation and therefore new business value.

CSC infers a more co-operative approach to IT governance. The quadrant identified by the "internal market" indicates a governance regime that embraces open market approaches, but contained within the bounds of privately held infrastructure. This approach provides a useful blend between embracing a co-operative CSC approach to engaging the IT internal consumer, while protecting the organisation from the vagaries of publicly available facilities. The approach is likely to be more "end user" friendly than the typical compliance based regimes, where IT staffs are typically seen as protective and conservative.

The final quadrant illustrated by the "bazaar" depicts a situation where the organisation relies totally on IT commodity infrastructure. The organisation may have no desire to own or manage IT infrastructure and staff are therefore left to their own IT resources. As frightening as this may seem to some, many loose business networks would act precisely like this. Members of the business networks would connect via publicly available

mechanisms like e-mail, social software and free applications like Skype and Google applications. Is this an indication of what the future holds?

The use of the framework is not intended to be prescriptive. Organisations can choose to operate in any of the four quadrants or potentially a combination of them. What is important in using the framework is to identify what the positive and negatives of choosing to operate in a particular governance regime. For example, for an IT organisation wanting to become more engaged with its end-user community, a strategy for migrating from a cathedral or preferred lists approach to an internal market approach could be viable. Replacing a current intranet where publishing content is controlled, to a wiki, where content can be published by all, is an example of an initiative in executing such a strategy. A new start up organisation may choose to operate in the “bazaar” quadrant to minimise start-up costs, but then move toward a “preferred list” approach once its IT needs are more formally understood. The overall intent of the framework therefore is to enable a considered approach to IT governance, incorporating CSC along with compliance approaches.

6. Summary

The title of this paper intimates that CSC and traditional compliance approaches to IT governance are diametrically opposed i.e. foes. An argument was put forward that the increased complexity of IT governance environments were now such that having a “best practice” standard against which compliance can be assessed is only an illusion. Emerging technology trends around multi-sourcing, off-shoring, Enterprise 2.0 software, open source software and publicly available commodity infrastructure are seen as indicators that the IT services environment is becoming markedly more “networked”. The dramatically higher levels of business connectivity enabled by this technology therefore indicate an increasing role for social capital into the IT governance equation. Empirical research identifying the links between CSC and firm performance were presented as further evidence and support for CSC to be considered as part of any effective IT governance regime.

The final section provided an IT governance framework that provides for how CSC and traditional compliance driven approaches can be “friends”. As the IT governance environment complexity increases, CSC approaches are available to facilitate a more cooperative approach to governance and a closer engagement of the IT department with their end user clients. At the same time this must be balanced by the rigor available through compliance led approaches to ensure that known social capital liabilities like “group think” and closed communities do not promulgate within the IT governance regime.

This paper has provided a unique view of IT governance from a networking perspective. New insights have become available through viewing IT markets as a network using social network analysis and content analysis tools. As with any new perspective caution is also required against over reading situations and prospects, including the extension to corporate governance. More R&D work is required to understand the practicalities of integrating compliance and co-operative approaches to governance. Compliance and CSC will be both friends and foes for some time yet.

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