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A Model of Cultural Occlusions

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Abstract

Offshore outsourcing of information technology services is a recent global trend. Organizations may not have considered the impact of outsourcing on their learning capabilities for future competitive competencies. The impact on learning may depend on the national cultures of the client organization and of the offshore outsourcing vendor. A conceptual model of cultural occlusions to organizational learning in IT outsourcing relationships is developed in this paper. Suggested solutions include employing boundary spanners to mitigate of any unfavourable impacts. The cultural occlusions model may inform IT practitioners in an offshore outsourcing relationship, and the IT industry strategy of developing countries offering offshore outsourcing services.

Keywords

National culture, offshore outsourcing, organizational learning

INTRODUCTION

Offshore outsourcing of information technology (IT) services is a recent global trend amongst large corporations. Australian corporations, led by the major banks and Telstra, have begun participating in this trend. With offshore outsourcing accounting for less than 3 per cent of expenditure on IT services, Australian participation in is consistent with the global trend (Longwood, Jestor and Berg, 2003). According to The Economist (2003) 25-30% of Fortune 100 companies spend 1-5% of their IT services budget offshore. From a recent low base, the increase of offshore outsourcing has been substantial, with the largest Indian vendors enjoying annual growth of approximately 35 per cent in the Australian IT services market (Longwood, et al. 2003). Indian firms have been the principal recipients of the offshore IT outsourcing by Australian corporations, though vendors from The Philippines, Malaysia and China are entering the market (Uren 2004).

The principal motive for corporations to undertake offshore outsourcing is to realize a reduction in the costs of IT services. Cost control is the classical driver for organizations to outsource IT services (Lacity and Hirchhiem 1993 in Goo, Kishore and Rao 2000), and outsourcing to developing nations with a lower cost base increases the cost incentive. Salaries of IT programmers in India, a major component of total IT service costs, are 13 per cent of Australian salaries in comparable positions (Uren 2004). While these cost savings are sufficiently attractive for large corporations to begin to engage in offshore outsourcing, Leavy (1996) argues that organizations may not have fully considered the impact of outsourcing on their learning capabilities for competitive competencies.

However, the trend towards global outsourcing comes at a time when there is increased emphasis on organisational learning (cite). Because learning by doing is central to organisational innovation processes (Arrow, 1962, Malerba, 1993) there is a chance that outsourcing reduces the learning opportunities for the client organisation. The potential for global outsourcing to impact on the learning opportunities of the client may depend on national cultural differences between the vendor and client organisations. However, there is little material available that directly

considers this question, and so far no theoretical framework for considering the impact of cultural differences on learning opportunities related to global outsourcing.

Therefore, this paper asks how differences in national culture could impact on the learning impact of offshore outsourcing on learning by the client organisation. In addressing this question, at the conceptual level, a model of cultural occlusions is developed[1]. That model is based on a step-wise, three-way synthesis of selected arguments from the theory of the organizational learning and outsourcing (Leavy 1996), IT outsourcing (Kern 1997), and national cultures in organizations (Crozier 2000 after Hofstede 1980, 1991). The process by which the model of cultural occlusion was developed forms the remainder of this paper. Selected arguments from literature on learning, outsourcing and cultural differences are briefly reviewed. This is followed by the syntheses. Firstly, the arguments on IT outsourcing and on the learning organization is presented. This is followed by the synthesis of arguments from IT outsourcing and national culture. Together these two syntheses enable a particular outsourcing relationship to be generalised as favourable or unfavourable to organizational learning. In this way the model of cultural occlusion is defined before propositions are drawn and tested within the conceptual framework of the relevant literature. Finally conclusions are drawn.

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LEARNING AND OUTSOURCING THEORY

In order to develop a model that links cultural differences in offshore outsourcing to learning in organizations, it was firstly necessary to identify:

- theories of learning in organizations that were applicable to the offshore outsourcing relationship,

- theories of offshore outsourcing that were applicable to cross cultural situations;

- theories of culture that were applicable to learning dynamics within the offshore outsourcing relationship.

The selected relevant material is overviewed briefly here in order to set the theoretical framework in which the model resides. The overview is not intended to be definitive or comprehensive. The authors accept that the seminal work of Hofstede, for example, has been criticized (e.g., McSweeney 2002).

Robey, Boudreau and Rose (2000) provide a definition for organizational learning of intentional and unintentional processes, which enables the possession, access and correction of organizational memory and, in so doing, provides a course for organizational action. Organization memory, in this definition, is knowledge possessed by human members of the organization and the knowledge imbedded in the artefacts of the organization. Goo, Kishore and Rao (2000) cite a large body of organizational theory to support the concept of organizational learning as a way of obtaining a future competitive advantage.

Markus (2000) provides a basic definition of IT *outsourcing* as external service providers developing, operating and managing IT application systems for the business processes of the organization, rather than providing the services in-house.

Leavy's (1996) exploratory analysis is principally concerned with organizational learning for obtaining competitive advantage and outsourcing of manufacture. The paper cites multiple case studies in academic and practitioner literature. Leavy identifies a learning dilemma that outsourcing deepens current competencies at the possible expense of learning opportunities for future competencies.

According to Goo, Kishore and Rao (2000) a key driver for contracting an IT outsourcing relationship from an organizational learning perspective is *core competencies/differentiation considerations.* This driver is defined as a way of obtaining competitive differentiations and market efficiency for non-core activities; and expressed in the analyzed articles as "focus business on core competencies", "gain competitive advantage" and "off-load responsibility for non-core activities" (2000 p. 606). This driver is concerned with the current competitive position and not the organizational learning for future competencies emphasized by Leavy (1996).

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[1] An example of cultural occlusion would be if an Australian organisation outsources to an Indian vendor. The Indian higher power distance (Crozier 2000 after Hofstede 1980, 1991) could establish an unfavourable working context of power dependence (Kern 1997), which would occlude organizational learning in the Australian client.

Kern (1997) presents theoretical framework for understanding IT outsourcing. Kern's framework for an IT outsourcing relationship is applied to the various information exchanges between the client and vendor, e.g. service enforcement and monitoring. These exchanges are subject to an initial *contractual* focus and a post-contractual *normative* focus of the IT outsourcing relationship. The IT outsourcing relationship framework includes a *working-context* which is generalized for client-vendor exchanges. The IT outsourcing working-context consists of four characteristics:

- *Trust*: Based on a commitment by each party to bear the other party's risks in the IT outsourcing relationship;

- *Satisfaction*: Achievement of expectations beyond that defined by service level agreements of the client's initial outsourcing strategy;

- *Co-operation*: Avoiding unnecessary conflict in practice, between individuals, at any point in time;

- *Power Dependency*: Avoid one party dominating the IT outsourcing relationship due to the total dependency of the other party at the organizational level.

Crozier (2000) provides an updated interpretation of the Hofstede's national cultural dimensions in organizations from studies commenced in the late 1960's. Hofstede study is based on 116,000 employees of IBM in 40 countries. Hofstede's four cultural dimensions are:

- *Power Distance*: the degree of equality distribution of power is accepted;

- *Uncertainty Avoidance*: the level of tolerance for uncertainty and ambiguity;

- *Masculinity*: the degree to which traditional masculine values are re-enforced;

- *Individualism*: the degree to which individual or collective relationships are re-enforced.

Crozier surveys other contemporary research on culture in organizations and does not invalidated Hofstede's findings.

SYNTHESIS

The following synthesis brings together the above arguments in a two stage, step-wise process. Firstly, Kern's material on IT outsourcing is synthesized with Leavy's work on organizational learning. Then, the synthesis of Kern's and Leavy's works is synthesized with Crozier's work on national culture to produce a conceptual understanding of the potential for cultural differences to impact on the learning opportunities in offshore outsourcing.

The method used was to look for links and common arguments that would enable sense to be made of the various theoretical perspectives (Kern's, Leavy's and Crozier's) from the stand point of the other theories. These sources were selected because their common unit analysis (the organisation) and focus (inter-organisational relationships) makes them conceptually compatible.

Synthesis of IT outsourcing and organizational learning

Applying Kern's (1997) IT outsourcing working-context provided by Kern (1997) to the empirical generalizations for organizational learning of Leavy (1996) produces a conceptual map of the IT outsourcing relationship between the client and vendor organizations. The synthesis is summarized in the Table 1.

In Table 1 we see that each of Kern's four outsourcing contexts is important to the achievement of competitive advantage through learning by the client.

A favorable working-context to organizational learning by the client organization can be seen in Table 2. A favorable working-context provides a benefit to the client by accessing the complementary core competencies of the most sophisticated vendor in the subject area, and widens the competencies of the client by the organizational learning opportunities provided by the outsourcing relationship (Leavy 1996).

IT outsourcing working-context (Kern 1997)	Empirical generalization related to organizational learning to obtain a competitive advantage (Leavy 1996)
Trust	The vendor will preserve the key skills of the client in the normative phase of the IT outsourcing relationship.
Satisfaction	The vendor will consciously build on the client's competitiveness by a deeply layered learning capability.
Co-operation	Integrated resource management which will not cut off the client from the vendor discrete activities, and share implicit knowledge.
Power Dependency	Strategic co-development of client and vendor organizations producing overall learning that would occur in an integrated, bureaucratic firm.

Table 1: IT outsourcing relationship framework synthesized to organizational learning

IT outsourcing working-context	Favorable working-context for organizational learning
Trust	The vendor commits to preserving the key skills transferred from the client.
Satisfaction	The vendor consciously builds on the client's competitiveness by a deeply layered learning capability.
Co-operation	The client and vendor co-operating to share implicit knowledge.
Power dependency	The client and vendor co-developing to produce an overall learning that is, at a least, the equivalent of an integrated, bureaucratic firm.

Table 2: Favorable IT outsourcing working-context to organizational learning

An unfavorable working-context to organizational learning for the client organization can be seen in Table 3. In an unfavorable working-context, the dangers for the client are the loss of key skills and learning opportunities to future competencies. These future competencies are not codified in any discrete IT application of the organization, but are to be found embedded in the collective know-how of the integrated activity of the organization (Leavy 1996). Without a favorable IT outsourcing working-context, the mobilization of this knowledge would be at risk.

IT outsourcing working-context	Unfavorable working-context for organizational learning
Trust	The vendor not preserving the key skills of the client
Satisfaction	The vendor focused on only satisfying the service level agreements
Co-operation	The client and vendor engaged in unnecessary conflict and cut each other off from their own discrete activities
Power dependency	The vendor dominating the IT outsourcing relationship due to the total dependency of the client

Table 3: Unfavorable IT outsourcing working-context to organizational learning

Therefore from Table 2 and Table 3 we see that Kern's four IT outsourcing contexts can be managed within a relationship to provide either a favorable or an unfavorable working context for organizational learning by the client organization.

Synthesis of IT outsourcing and national culture in organizations

Hofstede's national cultural dimensions in organizations were synthesized with the Kern's IT outsourcing relationship framework to deduce how organizational learning of the client might be impacted. The IT focus of

Hofstede's original sample of IBM employees is relevant to this research topic. The dimensions synthesized in the conceptual study were *Power Distance*, *Uncertainty Avoidance* and *Individualism.* Hofstede's dimension of *Masculinity* was not included in the conceptual study as no association with an IT outsourcing working-context for organizational learning was deduced. Hofstede measures each cultural dimension on a ratio scale to 100 and typifies *High* and *Low* values on a scale with particular sets of organizational characteristics (Crozier 2000). The high and low cultural characteristics of organizations were compared to the IT outsourcing working-context to deduce whether or not the cultural characteristics are favorable for organizational learning. The result of the synthesis is in Table 4.

1 IT outsourcing working-context (Kern 1997) for organizational learning (Leavy 1996)	2 Cultural Dimensions (Hofstede in Crozier 2000)	3 Value of dimension UNFAVORABLE to organizational learning in an IT outsourcing relationship	4 Value of dimension FAVORABLE to organizational learning in an IT outsourcing relationship
Trust The vendor will preserve the key skills of the client.	**Uncertainty Avoidance**	**Low:** An organization that is less procedure-oriented; and less ready to avoid risk, e.g. loss of skills resulting from staff turnover.	**High:** This creates a rule-oriented organization that institutes procedures to codify the transferred skills.
Satisfaction Build competitiveness by a deeply layered learning.	**Uncertainty Avoidance**	**Low:** This is reflected in an organization that is less procedure-bound and less able to manage change. Such an organization would be less capable of building on new learning.	**High:** This creates a rule-oriented organization that institutes procedures to manage change. Such an organization is capable of implementing learning beyond the codified knowledge in the original outsourcing agreement
Co-operation A party not cut off from the other from discrete activities, and sharing of implicit knowledge.	**Individualism**	**Low:** A more collectivist nature with close ties between individuals within a team. Everyone seeking consensus from fellow members of their team. These closely bonded teams may be introspective and less inclined to share knowledge across inter-organizational boundaries.	**High:** Indicates that individual independence and responsibility are dominant within the organizations. Individuals may tend to form a large number of loose relationships outside of the immediate team, and facilitate sharing of knowledge across inter-organizational boundaries.
Power dependency Co-development to produce overall learning	**Power Distance**	**High:** Organizations are more likely to follow a hierarchical system that does not allow decision making amongst most members and across organizational boundaries.	**Low:** De-emphasizes the association between organization members' position and decision-making power. Decision making is decentralized and more likely to span organizational boundaries.

Table 4: National cultural dimensions synthesized to IT outsourcing working-context for organizational learning.

In Table 4 we see that given the favorable or unfavorable working context for organizational learning by the client organization as set out in Tables 2 and 3, the Hofstede's cultural differences suggests the establishment of value dimensions that result in high or low learning opportunities for the client organization. That is to say, there may be cultural occlusion of learning opportunities.

MODEL

Based on the synthesis of the conceptual study, the national cultural dimensions of an IT outsourcing partner can be generalized as being favorable or unfavorable for organizational learning. This section delivers a model of how national cultural occlusions to organizational learning might occur in an IT outsourcing relationship. This occlusion is depicted in Figure 1.
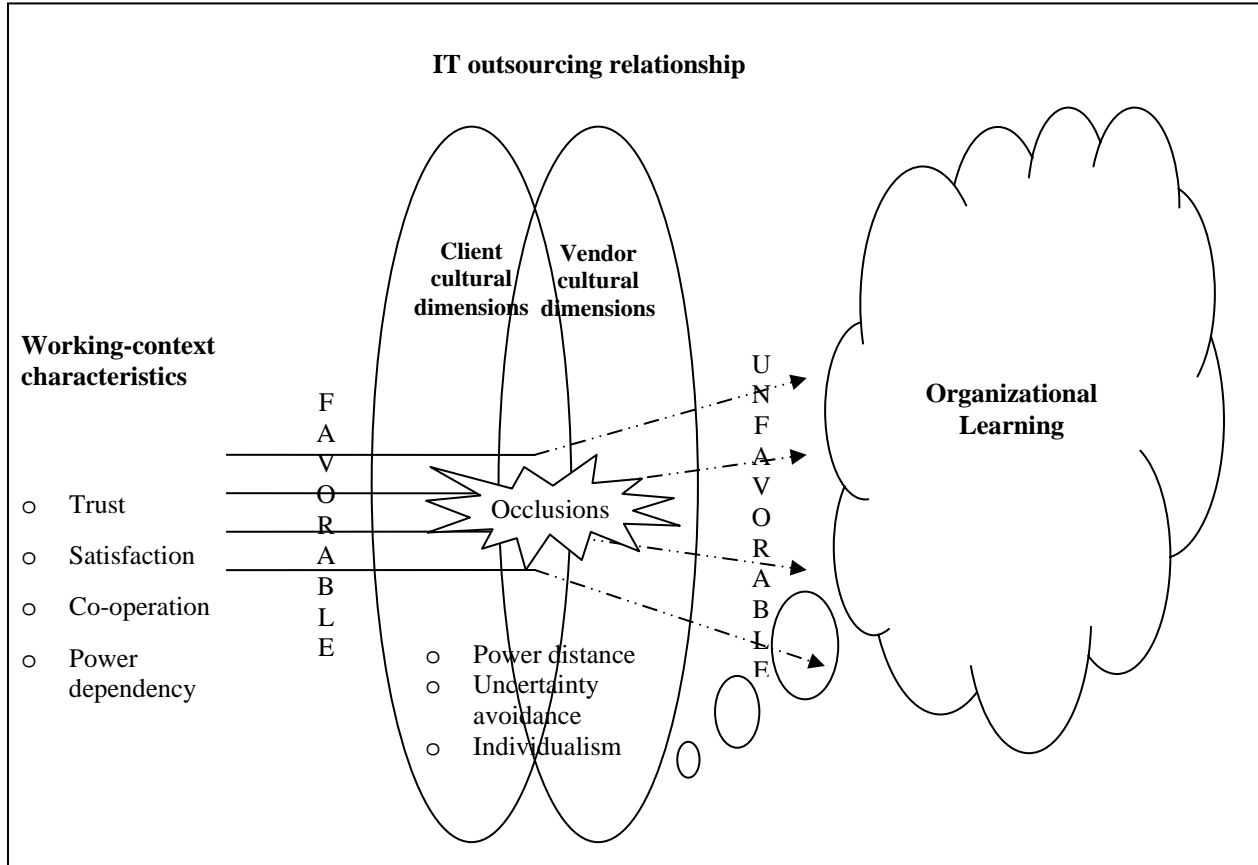

Figure 1: National cultural occlusions to organizational learning model

The conceptual study deduced that, where a client has national cultural dimensions favorable for organizational learning and enters into an outsourcing relationship with a vendor with dissimilar national cultural dimensions, the result may be a blockage to the organizational learning of the client (see Figure 1). This blockage can be described as an *occlusion;* where two parts of a structure block one another to the overall disadvantage of the structure. An example of an occlusion from nature is where the two major forks of a tree grow into one another causing structural stress and jeopardize the growth of the tree.

An instance of a national cultural occlusion is an IT outsourcing relationship between a client with high individualism and a vendor with low individualism. From the above deductions (see Table 4), the client would have the favorable IT outsourcing working-context characteristic of *co-operation* and does not cut the vendor off from the client's discrete activities, as members of the client organization tend to form a large number of loose relationships and facilitate the sharing of knowledge. In contrast, members of the vendor organization with low individualism would form closely bonded groups within their organization. This high collectivism results in introspective groups in the vendor organization that are less inclined to share knowledge across inter-organizational boundaries. The contrast between the organizations in the IT outsourcing relationship is a national cultural occlusion that is unfavorable for *co-operation*, and a loss of learning opportunities for future competencies to the client

Propositions of national cultural occlusions to organizational learning

From the synthesis of national cultural dimensions to IT outsourcing working-context characteristics for organizational learning (see Table 4) it is possible to draw a number of conditional propositions.

Proposition 1. The *higher* the national culture dimension of *power distance* of an IT outsourcing vendor is, relative to that of the client, the more likely an unfavorable working-context of *power dependency* for organizational learning of the client will exist.
Proposition 2. The *lower* the national culture dimension of *individualism* of an IT outsourcing vendor is, relative to that of the client, the more likely an unfavorable working-context of *co-operation* for organizational learning of the client will exist.
Proposition 3. The *lower* the national culture dimension of *uncertainty avoidance* of an IT outsourcing vendor is, relative to that of the client, the more likely an unfavorable working-context of *trust* for organizational learning of the client will exist.
Proposition 4. The *lower* the national culture dimension of *uncertainty avoidance* of an IT outsourcing vendor is, relative to that of the client, the more likely an unfavorable working-context of *satisfaction* for organizational learning of the client will exist.

Table 5: Propositions of the national cultural occlusions to organizational learning

Each of the propositions listed in Table 5 consists of:

- A conceptual independent variable: the relative distance of the vendor's national cultural dimension from that of the client, which may be *higher* or *lower.*

- A conceptual dependant variable: a characteristic of the IT outsourcing working-context which is unfavorable to organizational learning of the client, as defined in Table 3.

- An interrelationship between the variables: the greater the relative distance of the independent variable, the more likely the dependent variable is to occur.

Australian client and Indian Vendor

The conceptual variables of the propositions need to be operationalized to test the cultural occlusions model empirically . For the purpose of this paper, the measure for the independent variable is the relative distance between the country of the outsourcing vendor and the country of the client, as scored in Hofstede's Dimension of Culture Scales (Crozier 2000).

Returning to the example given in the introduction, an IT outsourcing relationship between an Australian client and an Indian vendor, where all the conditional propositions for national cultural occlusions are true (see Table 6). This increases the likelihood for the Australian client of an unfavorable working-context of *power dependency, co-operation, trust* and *satisfaction* for the organizational learning.

National cultural dimensions	Australian client	Indian vendor	True propositions
Power Distance	Low	High	*Proposition 1.*
Individualism	Very High	Medium	*Proposition 2.*
Uncertainty Avoidance	Medium	Medium-Low	*Propositions 3. & 4.*

Table 6: Offshore outsourcing example

From Table 6 we see that, according to the model of cultural occlusion, an offshore outsourcing relationship between an Indian vendor and an Australian client organization is likely to lead to:

- an unfavorable working-context of *co-operation* for organizational learning of the client (Proposition 1)

- an unfavorable working-context of trust for organizational learning of the client (Proposition 2).

It is less likely to lead to:
- an unfavorable working-context of *trust* for organizational learning of the client (Proposition 3).
- an unfavorable working-context of *satisfaction* for organizational learning of the client (Proposition 4).

CONCLUSION AND LIMITATIONS

The generalization of national cultural occlusions to organizational learning to the reality of IT offshore outsourcing, is limited by any invalidity of Hofstede's Dimension of Culture Scales. The measurement of the relative distance between the organizations in the IT outsourcing relationship, required for the theoretical independent variables, is valid only with a clear national cultural contrast. Offshore outsourcing relationships are typified by a client organization in the developed "Western" countries and a vendor in the developing Asian countries.

Heeks (2002) suggests that "the West" is a concept that exists in the minds of many people in developing countries and is not a geographically defined region. The education of key individuals in western-mode institutions may provide *boundary spanners* for outsourcing vendors to reduce the cultural dimension relative distance from the client. In the instance of the Indian vendors, the returning IT diaspora from western countries may provide these boundary spanners (Carmel 2003).

The relative distance of a cultural dimension, between an IT outsourcing vendor and a client, may also be reduced by 'mid-shoring'. This is the practice where nationals of the developed countries of the client are employed by the offshore outsourcing vendor for key client-facing roles (The Economist 2003). These mid-shoring individuals act as boundary spanners between the client and the core operational centers of the vendor domiciled in a developing country.

The presence of boundary spanners may limit the generalization of the cultural occlusions model to IT offshore outsourcing. The net effect of boundary spanners to the national cultural dimensions of the vendor is a question for further research. If the 'boundary spanners' effect is significant, a measurement of the cultural dimensions based solely on the country that an organization is domiciled, would have reduced validity.

Appreciation of this limitation of the theoretical model's propositions does afford a means to mitigate the occurrence of national cultural occlusions. Deliberately employing boundary spanners in an IT offshore outsourcing relationships may reduce the likelihood of an unfavorable working-context for organizational learning.

The model of national cultural occlusions to organizational learning may inform IT practitioners involved directly in offshore outsourcing relationships and at a national industry level.

The model can inform chief information officers and chief knowledge officers configuring a particular offshore outsourcing arrangement. The configuration of the IT outsourcing working-context is largely dependant on the negotiations between the client and vendor during the initial contractual phase (Kern 1997); and cost control is the classical driver for contracting an IT outsourcing relationship (Lacity and Hirchhiem 1993 in Goo, Kishore and Rao 2000). An IT outsourcing relationship configured for cost reduction may inadvertently disadvantage strategic flexibility (Lacity and Willcocks 2001). When negotiating an offshore outsourcing relationship, cautionary consideration is required of national cultural occlusions to organizational learning for future competitive advantage of the client. To limit the likelihood of national cultural occlusions occurring, the configuration of the IT outsourcing relationship might include mitigating practices such as mid-shoring.

Governments and industry-groups can also be informed by the national cultural occlusions to organizational learning model. The IT industry strategy of some developing countries is to move up the offshore outsourcing value chain, beyond programming and into providing analysis/design services to clients in the developed world (Carmel 2003). The risk to the future competitive advantage of prospective clients, of national culture occlusions to organizational learning, may impede outsourcing vendors repositioning in this market segment. An informed IT industry policy of a developing country might mitigate the likelihood of national cultural occlusions with clients, e.g. by providing incentives for a returning IT diaspora.

The operationalization of the dependant variables is difficult. This is due to the lack of recognized measures for organizational learning processes that can be applied at a point in time or across time (Robey et al 2000). Qualitative research methods with highly contextualized observations, focused on client organizations after a period of time in the normative phase of an IT outsourcing relationship, might be required to determine whether an unfavorable IT outsourcing working-context has resulted.

REFERENCES

Carmel, E. 2003. The new software exporting nations: Success factors. *The Electronic Journal of Information Systems in Developing Countries*. 13(4)

Crozier, M. (2000). Reading 2.2 Culture and Organization. In C.A. Bartlett and S. Ghoshal (eds) *Transnational Management*, Irwin McGraw-Hill, Sydney.

Goo,J., Kishore, R., and Rao, H.R., (2000) A content-analytic longitudinal study of the drivers for information technology and systems outsourcing. *Proceedings of the twenty first international conference on Information systems*. December 2000.

Heeks, R. (2002). Information systems and developing countries: Failure, success and local improvisation. *The Information Society* 18: 101-112.

Kern, T., (1997). The Gestalt of an information technology outsourcing relationship: an exploratory analysis. *Proceedings of the eighteenth international conference on Information systems.* December 1997.

Lacity, M. C. and Willcocks, L. P. (2001). *Global Information Technology Outsourcing: In Search of Business Advantage*. Wiley: Chichestor.

Leavy, B, (1996). Outsourcing strategy and a learning dilemma. *Production and Inventory Management Journal*. Fourth Quarter 1996, Volume 37 Issue 4. ABI/INFORM Global.

Longwood, J., Jestor, R. and Berg, T. (2003). Top 10 ICT Trends in Australasia and Their Service Implications. Gartner, Strategic Analysis Report, 16 April 2003, R-19-3539

Markus, L. M. (2000). Paradigm Shifts—E-Business and Business / Systems Integration, Communications of the Association for Information Systems. Volume 4, 10. November, 2000

McSweeney, B. (2002). Hofstede's model of national cultural differences and their consequences: A triumph of faith – a failure of analysis. *Human relations*, 55(1), 89-118. An abridged version URL http://geert-hofstede.international-business-center.com/mcsweeney.shtml, Accessed 3 May 2004.

Robey, D., Boudreau, M-C. and Rose, G.M. (2000). Information Technology and organizational learning: a review and assessment of research, *Accounting, Management and Information Technologies*, 10,2: 125-155.

The Economist (2003). *Relocating the back office*. 11 December 2003.

Uren, D. (2004). How India took on the world, *Australian IT*, 29 April 2004, URL http://australianit.news.com.au/articles/0,7204,9419729%5e16681%5e%5enbv%5e,00.html , Accessed 12 July 2004.

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