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Cultural attributes influencing collaborative IT Services Delivery
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Background

Beginning in 2000, a research team in Carnegie Mellon University's Institute for Software Research (ISR) formed the IT Services Qualification Center (ITSqc) and conducted an extensive literature review, structured interviews, and observation of more than 30 organizations engaged in IT Services Delivery in multi-cultural, geographically distributed contexts (U.S., U.K., Germany, India, Brazil). This research is aimed at identifying and codifying the best practices in use for IT-enabled Services sourcing (both outsourcing and insourcing/shared services) [Hyder, et. al 2004, Hefley, et. al 2006]. Since Services are currently estimated to involve approximately 70% of the world's industries and the growth of this sector is advancing to reach more than US$850B by the year 2010 [Babaie, et. al 2006], understanding cultural attributes that impact productivity and feasibility of global service delivery is of great interest to our Center (and to corporate and government organizations).

Research Objectives

The three research objectives driving this effort are:

1. Identification of cultural attributes impacting IT Service Delivery;
2. Categorization/creation of a conceptual framework for studying the interaction effects of cultural attributes and collaborative technologies; and
3. Conducting case studies of implementations of culturally adaptive collaborative technologies to support high quality IT Service Delivery.

Categories of Cultural attributes and collaborative technologies

Initial identification of cultural attributes that appear to influence/matter in service delivery are enumerated below.

Units of analysis considered and where some data are in hand include: (1) individuals, (2) task teams – co-located, (3) task teams – geographically distributed, and (4) business unit, global corporate organizations.

Geographic distinctions we are currently using are: North America (U.S., Canada, and Mexico), Central/Latin America, Europe (including Czech Republic, Romania, etc.), Asia Pacific (India/Pakistan, China, Japan, Korea, and Australia).

Attributes we have identified initially are: Organizational hierarchy, formality of culture (norms), social protocols, religion, gender, spoken language, written communications, non-verbal cues, physical proximity/contact, color and symbol usage (e.g., marking on white boards, fonts, interface design), dress codes, etc.
Dysfunctional or inadequately addressed collaboration situations we believe need to be addressed include:

1. Making Hierarchy Salient – who speaks and in what order – in U.S., whomever has information whereas in Japan or other AP countries, it is person with highest stature – preserving social norms influences technology acceptance/usefulness;

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2. Accommodating social protocols – amount of time/effort and affordances needed to introduce team/meeting participants;

3. Showing people's physical images (or not because of religious or ethnic taboos);

4. Use of language (even when it is English), e.g., terms like "table" which have opposite meaning in U.S. and India – correction of misunderstandings is often time-consuming and awkward via distance communication modalities;

5. Adjusting for non-verbal cues, e.g., head movements that in U.S. and Europe signal agreement, but in other countries mean "I'm listening" or "no";

6. Interface designs or written communication, e.g., drawing on white boards with colors such as black for India or pink in Korea carry negative meanings (death/evil in the first case and vulgarity in the second one).

Collaborative technologies in prevalent use include: video-conferencing, audio-conferencing, Instant Messaging, email, shared workspaces/team rooms, and knowledge systems.

Methodological challenges

We have developed a case study structure [Yin for documenting/studying the cultural attributes and currently available collaborative technologies. However, the complexity of these phenomena do not make their study amenable to highly controlled experimental methods. Thus current research efforts are limited to providing rich descriptions to inform other research. Also, there is no mechanism for engaging designers/developers of collaborative technologies to increase their awareness of these cases or to incentivize them to intervene in addressing identified areas of concern.

References

[Babaie 2006] Babaie, Ellie, et. al, Forecast: IT Services, Worldwide. 2003-2010 (Update). 30 November 2006, Gartner Report ID Number: G00144709

[Hefley 2006a] William E. Hefley and Ethel A. Loesche, "The eSCM-CL v1.1 Model Overview: The eSourcing Capability Model for Client Organizations v1.1," Carnegie Mellon University, IT Services Qualification Center, CMU-ITSQC-06-002, September 2006.

[Hefley 2006b] William E. Hefley and Ethel A. Loesche, "The eSCM-CL v1.1 Practice Details: The eSourcing Capability Model for Client Organizations v1.1," Carnegie Mellon University, IT Services Qualification Center, CMU-ITSQC-06-003, September 2006.

[Hyder 2004a] Elaine B. Hyder, Keith M. Heston, and Mark C. Paulk, "The eSourcing Capability Model for Service Providers v2: Model Overview," Carnegie Mellon University, Institute for Software Research International, CMU-ISRI -04-113, April 2004.

[Hyder 2004b] Elaine B. Hyder, Keith M. Heston, and Mark C. Paulk, "The eSourcing Capability Model for Service Providers v2: Practice Details," Carnegie Mellon University, Institute for Software Research International, CMU-ISRI -04-114, April 2004.

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[Yin 2003] Robert K. Yin, Case Study Research: Design and Methods, Third Edition, Sage Publications, Inc. , CA,(2003)

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