



# Building Trust Across Virtual Social Spaces: the Vendors' Perspectives

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# Global Organizations

Global organizations must be able to transport their know-how into a broader range of cultural and political settings; and must also be able to accommodate within the corporate family people drawn from a wide range of national cultures.

Herbert Simon

Socio-cultural processes inherent in the process of knowledge transfer, includes how clients and vendors draw upon and apply different forms of explicit-implicit, and formal-informal knowledge.

(Sahay, Nicholson & Krishna 2003)



# Virtual Social Spaces

Global businesses have created new virtual social spaces over space and time through telecommunication networks.

Healthy picture of offshore software market shows that diversity of sites and nationalities is expected to increase, and will result in

- Rich and poor economies doing business together
- Big and small business collaborating together
  - Hybrid working patterns across sites

**How then can trust be built in the VSS?**



# Trust in.....

## Local Visible Social Spaces

Individuals are basically tribal and self-centred, and find it easier to trust those who appear similar to themselves, as they can be counted on to act similarly in a given situation.

People tend to tally up similarities and differences such as working style, cultural groups, accents, dress code, or even gender within their local visible spaces, before they begin to trust the other party.

(Hurley, 2006)



# Trust across Time and Space

“Trust is related to absence in time and space. There would be no need to trust anyone, neither individuals nor abstract systems, if their activities were visible and easy to understand. So the prime condition for trust is lack of full information”

(Giddens 1990 p. 33).

Though some lack of visibility across geographical boundaries cannot be avoided, some transparency in information can be brought about by engagement and relationship philosophy and good relationship management skills.

(Moore & Martorelli 2004).



# Trust in business relationships across VSS is...

...the process of accommodating a shared understanding of socio-cultural differences across client-vendor relationships for a larger professional cause.



# Research Question

**How are offshore software development business partners sensitized to each other's apprehensions in accepting diversity to build trust across dissimilarities in the VSS?**

“Offshore can provide an invaluable learning opportunity to underscore the value and importance of acceptance of other cultures within the organization”

(Gold 2005 p. 13).



# Research Design

The study is concerned with exploration of both social and organizational aspects associated with offshore software development practices in the VSS.

- Qualitative research methodology
- Multiple case study
- Observations & semi – structured interviews
- Participants: senior management and developers

Case studies are useful tools to capture the knowledge of practitioners and to develop theories from this knowledge

(Benbasat et al., 1987)



# Visibility Attributes from Literature on Offshore Outsourcing in Software Development

<b>Key Attributes</b>	<b>Literature Reviews</b>
Formal work methods, international certifications, prototypes, documentation, communication, portals/ virtual private networks, centralized office, deployment of employees at offshore sites	Heeks, R., Krishna, S., Nicholson, N. & Sahay, S. 2001, Gopal, Mukhopadhyay & Krishnan 2002, Gustavo & Wilson 2005, Gold 2005, Jennex & Adalakun 2003, Moore & Martorelli 2004, Ptak 2005, RajKumar & Mani 2001 , Rottman and Lacity 2004, Sahay, Nicholson & Krishna 2003, Tiwana, 2003



# Basic Assumptions

Trust is taken as a function of visibility attributes over time.

$$\text{trust} = f(\text{visibility}, \text{time})$$

- (1) trust can be increased by addressing visibility attributes
- (2) business relations do not have a condition of distrust
- (3) trust level will decline when breach of trust occurs.



# Four Levels of Trust

## Entrepreneurial Risk

- Some trust exists when people meet each other even for the first time
- When the vendor approaches the client with an offer of service, some visibility is created

## Calculated Risk

- Ongoing interaction with stakeholders increases visibility
- Level of risk reduces

## Risk-return Trade-off

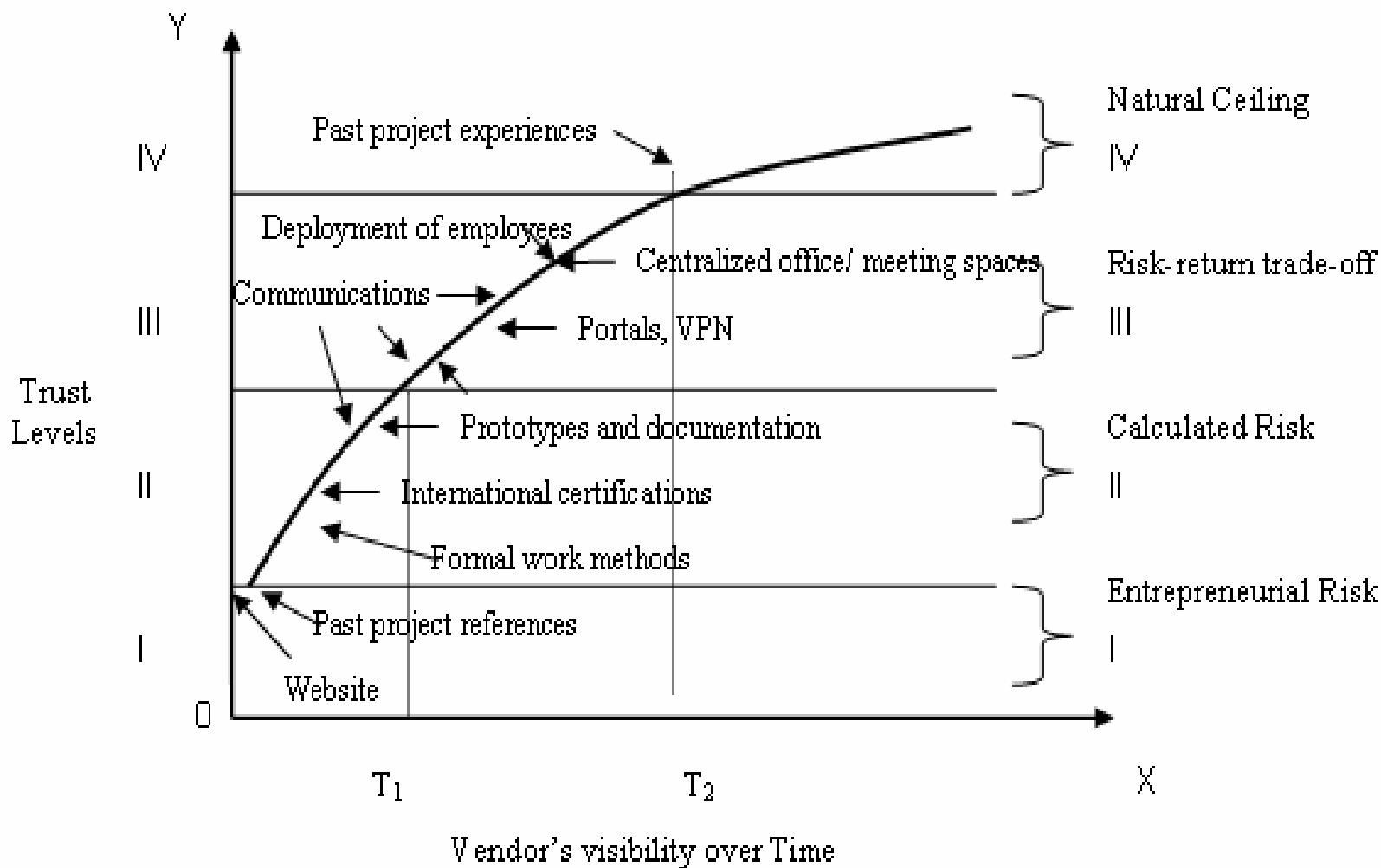
- Interactions based on common access to collaboration tools
- Ongoing communication
- Deployment of employees at offshore sites.

## Natural Ceiling

- Upper limit



# trust = f( visibility, time)





# New Zealand & India

	NZ	India	China	South Africa	Northern Ireland	Ireland
Language	Excellent	V. Good	Fair	Excellent	Excellent	Excellent
Government	Fair	Excellent	Good	Fair	V. Good	V. Good
Labour Pool	Good	Excellent	Fair	Fair	Good	Good
Infrastructure	V. Good	Fair	Good	Fair	V. Good	V. Good
Educational System	Good	V. Good	Good	Good	V. Good	V. Good
Cost	Good	Excellent	Excellent	V. Good	Good	Fair
Political Stability	Excellent	Fair	V. Good	Fair	Good	Excellent
Cultural Compatibility	Excellent	Good	Poor	Excellent	Excellent	Excellent
Data/IP Security	Excellent	Good	Poor	Good	Excellent	Excellent
Overall Climate	Good	V. Good	Good	Fair	Good	Good

Legend: Poor (Red), Fair (White), Good (Green), V. Good (Purple), Excellent (Black)

Source: Gartner. Herald graphic.

ITANZ Outsourcing Report, 23 February 2004 (NZ Herald)  
<http://www.investnewzealand.govt.nz/section/13569.aspx>



# Brief Case Descriptions

New Zealand

NZ1 & NZ2



India

IN1 & IN2



NZ1	NZ2	IN1	IN2
<ul style="list-style-type: none"> <li>❖ 230 employees</li> <li>❖ HQ – Wellington</li> <li>❖ Devlpt centers – Wellington, Auckland, London</li> <li>❖ Diverse cultural mix of employees</li> </ul>	<ul style="list-style-type: none"> <li>❖ 20 employees</li> <li>❖ HQ – Auckland</li> <li>❖ Devlpt center – Auckland</li> <li>❖ Local New Zealanders only</li> </ul>	<ul style="list-style-type: none"> <li>❖ 170 employees</li> <li>❖ HQ – Vizag, India</li> <li>❖ Devlpt centers – Vizag, Auckland, Melbourne, Dallas</li> <li>❖ Indian employees only</li> </ul>	<ul style="list-style-type: none"> <li>❖ 80 employees</li> <li>❖ HQ – Minneapolis, US</li> <li>❖ Devlpt centers – Pune, Minneapolis</li> <li>❖ Indian &amp; American employees (of multi-nationalities)</li> </ul>



# Visibility Attributes

Websites

Past project references

Formal Work Methods

International Certifications

Prototypes and Documentation

Communication

Portals & VPNs

Centralized Office

Deployment of Employees

Past project experiences

Shared Understanding



# Cross Case Comparison

Visibility Attributes	NZ1	NZ2	IN1	IN2
❖ Website	Yes	No	Yes	Yes
❖ International Certifications	None presently (but earlier had ISO 9001 certification)	None presently (but earlier had ISO 9001 certification)	Yes ISO 9001 CMM level 3 Member of NASSCOM	None presently (but earlier were a member of Safe Harbour), Patents
❖ Formal Work Methods	Yes (least formal)	Yes	Yes (most formal)	Yes



# Cross Case Comparison

Visibility Attributes	NZ1	NZ2	IN1	IN2
❖ Prototypes	Yes	Yes	Yes	Yes
❖ Documentation	Minimal	Core activity	Core activity Very intense	Core activity
❖ Communication Methods	F2F with team members  Online tools (email, telephones, open source)	No direct F2F among team members  Online tools (email, telephones, open source)	F2F with team members  Online tools (email, dedicated telephone lines, open source)	Not much direct F2F among team members  Online tools (email, telephones, open source)



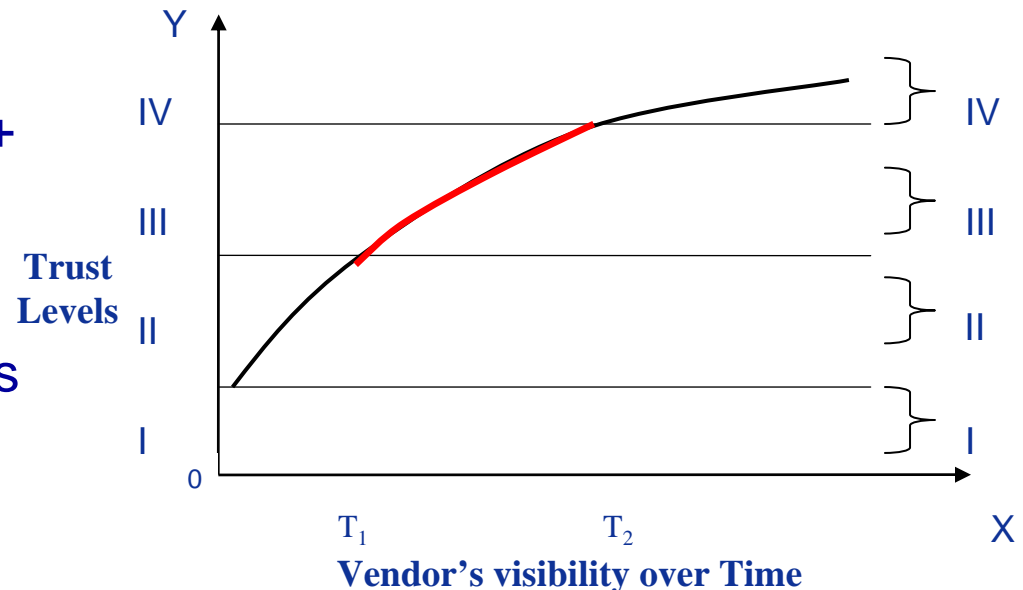
# Cross Case Comparison

Visibility Attributes	<b>NZ1</b>	<b>NZ2</b>	<b>IN1</b>	<b>IN2</b>
❖ Portals	Yes (Clux)	Yes (Microsoft SharePoint)	Yes (Bynet)	Yes (PVCH)
❖ Meeting Places in Client's country	Yes	No	Yes	Yes
❖ Deployment of Employees at Client Sites	Yes On-site team	No	Yes, Technology Laboratory Model	Team at HO interacts directly with clients.



# Cross- Case Comparison

- ❖ Difficult to ascertain exact position of these organizations on the T-Curve.
- ❖ However all of the four vendor firms appear to currently lie somewhere on level III.
- India: visibility attributes (– cultural compatibility + cost + big labour pool )
- New Zealand: visibility attributes (– certifications + cultural compatibility)





# Conclusions

- ❖ Common social spaces help in reducing client's apprehensions in sharing their knowledge portfolio with the vendors of other nationalities.
- ❖ New social structures are built upon understanding of diverse socio-cultural, managerial and technology-supported processes in the VSS.
- ❖ New Zealand vendor firms used less rigorous processes to reach the same trust levels as Indian vendor firms.
- ❖ New Zealand firms may be closer to level IV than the Indian vendor firms for the same established work processes, due to high cultural compatibility.



# Conclusions

- ❖ Similarity in visibility strategies between NZ and Indian organizations
  - F2F communication, planned formal meetings, and use of integrated groupware solutions.
  
- ❖ Differences in visibility strategies between NZ and Indian organizations
  - New Zealand organizations did not consider international accreditations important. Indian vendors used international accreditations and patents.
  - Meeting place at client countries in both of the Indian organizations.
  - Documentation is more thorough in Indian organizations.



# Limitations

- ❖ Study based upon understanding from vendor's point of view.
- ❖ Small sample size (4 cases only).
- ❖ Needs more rigorous testing on larger number of firms.



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**Thank You**