

CRITICAL BARRIERS FOR OFFSHORE SOFTWARE DEVELOPMENT OUTSOURCING VENDORS

This briefing reports evidence on various barriers that have a negative impact on software outsourcing clients in the selection process of offshore software development outsourcing vendors based on scientific evidence from a systematic review.

FINDINGS

- **Language and cultural barriers** (56%) is the most common barrier identified.
- Studies have found that **country instability** (51%) has a negative impact on software development outsourcing clients. By ‘country instability’ we mean political instability, corruption, peace problems, terrorism threats and uncertainty relating to trade and investment. Half of the researches described **lack of project management** as a barrier that can have a negative impact on outsourcing clients. In the outsourcing process an effective project management plays a vital role as it has been a difficult task to manage the geographical distributed teams.
- **Lack of technical capability** (47%) can undermine the selection of competent vendor organisations. Research suggests that half of the companies that have tried outsourcing have failed to realise the anticipated results.
- 47% of the studies analyzed by the systematic review describe **lack of protection for intellectual property rights** as a barrier to outsourcing due to the fact that there is no such thing as an “international intellectual property right” that automatically protects anybody’s work throughout the world. Every country has its own national laws in order to protect individuals’ work against unauthorised use. However, it is always hard to implement these laws in order to address issues relating to intellectual property rights.
- 44% of the researches describe **communication gap** as a barrier in outsourcing business. **Poor relationship management** is also one the common barriers with the same percentage.
- 43% of studies have cited **poor quality of service and system/process** as a barrier. In order to compete in an international outsourcing business vendor companies need to improve the quality of their processes and services. Indian software companies have been reported to provide high quality software and this is the reason that in the software export market, India is a dominant software outsourcing provider.
- The complete list of barriers is presented in Table 1. Frequency that each barrier appear on the 98 researches analyzed by the systematic review is on column Freq.

Barries	Freq (n=98)	%
Language and Cultural barriers	55	56
Country instability	50	51
Lack of Project Management	48	49
Lack of protection for intellectual property rights	46	47
Lack of technical capability	46	47
Communication gap	43	44
Poor relationship management	43	44
Poor quality of service and system/process	42	43
Poor contract management	42	43
Hidden costs	37	38
Lack of control over project	33	34
Poor infrastructure	32	33
Opportunistic behaviour	27	28
Delays in delivery	22	22
Incompatibility with client	10	10
Strategic inflexibility	10	10

Table 1: Frequency of barriers

- Comparison od the barriers identified in three continents (Americca, Asiaand Europe) indicates that there are more similarities the differences between the barriers.
- **Country instability** appears in 65%, 43% and 71% of the studies for Asia, America and Europe, respectively. **Lack of protection for intellectual property rights** (52%, 46% and 47%), and **poor contract management** (39%, 49% and 53%). Those are the most common barriers in all three continents.
- Lack of project management, lack of technical capability, language and cultural barriers, poor quality of service and system/process, and poor relationship management are common barriers in Asia and Europe.
- Clients in America and Europe want **control over project** and they want to avoid outsourcing vendors who have **opportunistic behaviour** in the outsourcing business.
- The results indicate that outsourcing clients in America (43%) and Europe (59%) are having problems with **hidden cost** during outsourcing business.
- **Communication gap** is common in Europe (59%). Due to different cultures and languages in outsourcing business it is quite possible that a message is misunderstood by one or more of the outsourcing parties. In addition due to the geographical distributed teams in outsourcing business, facetoface communication is not possible where one can clarify any misunderstanding.

Keywords:

Software Outsourcing
Vendors

Who is this briefing for?

Software engineers practitioners who want to make decisions about software development outsourcing based on scientific evidence.

Where the findings come from?

All findings of this briefing were extracted from the systematic review conducted by Khan et al.

What is a systematic review?

cin.ufpe.br/eseg/slr

What is included in this briefing?

The main findings of the original systematic review.

What is not included in this briefing?

Additional information not presented in the original systematic review.

Detailed descriptions about the studies analysed in the original systematic review.

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