

CRITICAL SUCCESS FACTORS FOR OFFSHORE SOFTWARE DEVELOPMENT OUTSOURCING VENDORS

This briefing reports evidence on critical success factors that have a positive impact on software outsourcing clients in the selection process of offshore software development outsourcing vendors based on scientific evidence from a systematic review.

FINDINGS

- Among the researches analysed in the systematic review, **Cost-saving** is the most common success factor (69%) which suggests that low cost software production or to charge a fair price has a positive impact on the outsourcing.
- Studies also indicate that **skilled human resource** (67%) is an important factor for the selection of competent vendor organisations. Research suggests that half of the companies that have tried outsourcing have failed to realise the anticipated results.
- Results show that **appropriate infrastructure of vendor organisation** as an important factor (60%). By “appropriate infrastructure” we mean: IT infrastructure, network infrastructure,telecommunication infrastructure, power/electric supply, roads, transportation, physical buildings, office layouts, internet access and sewer and water system, and sufficient resources including hardware and software to maintain large development projects.
- 57% of studies have cited that **quality of products and services** has a positive impact on client organisations.
- Nearly half of researches mentioned **efficient outsourcing relationships management** as an important factor for client organisations. This shows that establishing reliable relationships can help to ensure the successful outcome of outsourcing projects and long lasting relationships between clients and vendors
- The complete list of barriers is presented in Table 1. Frequency that each barrier appear on the 122 researches analyzed by the systematic review is on column Freq.

Success Factor	Freq (n=122)	%
Costsaving	84	69
Skilled Human Resource	82	67
Appropriate Infrastructure	73	60
Quality of Products and Services	69	57
Efficient Outsourcing Relationships Management	69	48

Success Factor	Freq (n=122)	%
Organisations track record of successful projects	53	43
Efficient Project Management	47	39
Efficient Contract Management	45	37
SPI Certification	41	34
Knowledge of the Clients Language and Culture	39	32
Timely Delivery of the Product	30	25
Knowledge Exchange	25	21
Data Protection Laws	23	19
Financial Stability	14	12
Company Size (Large and Medium)	8	7
Risk Sharing	8	7
Pilot Project Performance	6	5
Vendors Responsiveness	6	5
Political Stability	3	3
Overseas Offices	2	2
Soft Deliverable	1	1
IndustryUniversity Linkage	1	1

- Comparison of the barriers identified in three continents (Asia, America and Europe) indicates that there are more similarities than differences between the barriers.
- 20 factors are cited in Asia, 19 factors in America and 19 factors in Europe.
- Only one significant difference between the three continents has been found (**efficient contract management**). The percentage of **efficient contract management** is low in Asia (18%) while it has high percentages in America (42%) and in Europe (55%).
- Researches show that **costsaving, skilled human resource** and **appropriate infrastructure** are the most important factors in all three continents. **Efficient outsourcing relationships, efficient project management** and **SPI certification** are important factors in Asia (58%, 45% and 39%) and Europe (45%, 45% and 35%). **Quality of products and services** and schedule (**Timely Delivery of the Product**) are important factors in America (58% and 33%) and Europe (65% and 35%). Organisation’s track record of successfulprojects is important in Asia (55%).
- The results also indicate that factors such as **Company size, Political stability, Financial stability, Industryuniversity linkage, Overseas offices** and **Risk sharing** ar not important for client organisations in Asia, Europe and America.

Keywords:

Software Outsourcing
Software Offshoring
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/slrs

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.

To access other evidence briefings on software engineering:

cin.ufpe.br/eseg/briefings

For additional information about ESEG:

cin.ufpe.br/eseg