Critical Success Factors for Software Outsourcing Partnership (SOP): A Systematic Literature Review

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ABSTRACT— Software outsourcing partnership (SOP) is mutually trusted inter-organisational software development relationship between client and vendor organisations based on shared risks and benefits. SOP is different to conventional software development outsourcing relationship, SOP could be considered as a long term relation with mutual adjustment and renegotiations of tasks and commitment that exceed mere contractual obligations stated in an initial phase of the collaboration. The objective of this research is to identify various factors that are significant for vendors in conversion of their existing outsourcing contractual relationship to partnership. We have performed a systematic literature review for identification of the factors. We have identified a list of factors such as 'mutual interdependence and shared values', 'mutual trust', 'effective and timely communication', 'organisational proximity' and 'quality production' that play vital role in conversion of the existing outsourcing relationship to a partnership.

Keywords: Systematic Literature Review; Software Development Outsourcing partnership, Client-Vendor Relationship.

I. INTRODUCTION

Software outsourcing partnership (SOP) is a mutually trusted inter-organisational software development relationship between client and vendor organisations to achieve shared goals of the partners involved. A SOP is different to ordinary software development outsourcing (SDO) relationship. This is because in conventional outsourcing relationship a client contracts software development work to a vendor who provides services for remuneration whereas SOP is the enhanced form of conventional outsourcing relationship. SOP could be considered as a long term relation with mutual adjustment and renegotiations of tasks and commitment that exceed mere contractual obligations stated in an initial phase of the collaboration. SOP aims to offer many benefits including long term relationship between client and vendor organisations, flexible and based on shared goals, risks and benefits. Usually a successful software development outsourcing (SDO) relationship may lead to SOP [1]. According to Kishore et al [1] outsourcing relationships can

be categorized into four types. These are (1) Support, (2) Alignment, (3) Reliance, and (4) Alliance, a relationship in which trust is high and contractual control is low. Outsourcing partnership is a kind of an alliance relationship[2, 3]. Partnership is a relationship that goes beyond contract. Partnership can be defined as *"a tailored business relationship based upon mutual trust, openness, shared risk, and shared rewards that yield a competitive advantage, resulting in business performance greater than would be achieved by the firms individually"* [4]. Organisations generally establishes SOP with counterpart organisation after recognising the limitation of contractual outsourcing relationship, as contractual relationship bears a number of barriers as reported in the literature which is listed in TABLE 1.

TABLE 1 LIST OF BARRIERS IN CONTRACTUAL RELATIONSHIP

Barriers in contractual relationship	Related Literature
Difficulties in writing a complete contract	[5]
Investment from both parties on relation specific assets	[5]
Strict term and fixed amount in contract	[5]
Many clients wants to implement total IT outsourcing	[5]
Insufficient Management of the risk associated with complex software projects in Contract	[6]
Uncertainty because of unrealistic estimation of cost, manpower and time in contract	[6]
It will be hard to apply the results because the outcome often do not match the actual results	[6]

According to Ross et al [7] research to date does not tell us why partnership is important, whether there are situations in which partnership is not necessary, or whether organisation management approaches can substitute for partnership. Many firms state that they are involved in a strategic partnership but few firms act like strategic partners. The strategic partnership label is meaningless without these demonstrated behaviours [8].

To overcome aforementioned problems a number of client organisations have established strong relationships with their vendor organisation like UPS and Motorola [9, 10], Kodak, IBM and DEC [11], SDB and Hi Sun [12], IBM and USAA [11, 13] and EDS and Xerox [13].

SOP is considered more beneficial as compared to conventional outsourcing relationship because it provides

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the mechanism for (1) Protecting relationship specific assets investments and promote further investments, (2) Sustaining long-term relationships, (3) Better dealing with uncertainty and (4) Reducing risks [5].

However, despite the importance of SOP, no sufficiently comprehensive outsourcing partnership models for the formation and management of an outsourcing partnership can be found. Similarly no systematic review has been carried out on SOP practices in general and the identification of factors that have a significant positive impact on client organisations in particular. This study approaches the subject from a vendor's viewpoint and aims at filling some of the research gaps by establishing such a model based on the literature survey and evaluated and complemented by empirical evidences. To do this we intend to address the following research questions:

RQ1. What are the critical success factors, as identified in the literature, to be developed by software outsourcing vendor organisations which assist in converting the exiting outsourcing relationship into partnership with client organisation.

RQ2. How are these factors related to the size of organisations?

This paper is organised as follows. Section II describes the background. Section III describes the research methodology. In Section IV findings from the systematic literature review are presented and analysed with some discussion. Section V describes the limitations; Section VI provides the conclusion and future work.

II. BACKGROUND AND MOTIVATION

Referring to the various risks found in outsourcing relationships, several research gaps can be found in the field of outsourcing partnership. Kinnula [14] presented a summary of the key research areas of outsourcing partnership: (1) Motivation towards outsourcing partnership (this area focuses on differences between contractual relationship and partnering relationship, drivers behind partnership, benefits and risks in outsourcing partnership, etc.), (2) Scope of outsourcing partnership (this area includes topics such as total or selective outsourcing, long-term or short-term relationship, service or asset transferring partnership, etc.), (3) Performance measurement of outsourcing partnership (this area includes evaluating, verifying, and improving performance, etc.), (4) Decision-making frameworks (this area focus on finding factors, criterion for decision to establish partnership or not etc.), and (5) Partnership success (this includes process and management issues, contract making, procedures for building and sustaining outsourcing partnership etc.).

A number of researchers have tried to address some of the issues of SOP, e.g (Yuan Sun et al [15] , En-lin Li [16], Roses et al [17], Kumar and Thangavelu [6], Kinnula [14, 18], Kedia et al [19] and Bowersox et al [20] etc). Summary of some of these research works are presented as follow:

According to Bowersox et al [20] in order to achieve mutual advantages greater than the firms would achieve individually, a long-term partnership process is formed where partners with common goals work closely together, make joint decisions, share information, resources, risks, and accomplish mutual beneficial outcomes.

A study was conducted in the USA in which a partnership model was presented to manage the outsourcing partnership [21]. The focus of the study was on the identification of factors affecting SOP relationship. The main findings of the study were trustworthiness and culture distance. A similar study was conducted by Kinnula et al [18] to examine the SOP formation and have proposed outsourcing partnership life cycle model. Sehic and Gilani [22] worked on strategic partnership model (SPM) in which they identified internal forces (such as cost, resource, strategy organisational perspective, history and competitive positioning) and external forces (such as competitive, political, social and technology). Kumar and Thangavelu [6] have proposed Software Outsourcing Service Provider Relationship Model (SOSPRM).

The work in this paper complements work previously done in this domain like,[17],[18],[23] and [24]. Most of the existing studies focus on the topics of 'outsourcing relationship', 'partnership quality', 'role of partnership in outsourcing success' and 'outsourcing trust'. Outsourcing partnership and outsourcing trust are important areas to address. The knowledge about these factors will also contribute in improving vendors' readiness towards conversion of existing outsourcing relationship to a partnership. Formulizing range of criteria used by SDO client organisation for promoting the existing outsourcing relationship with the SDO vendor organisation to partnership is the primary focus of our research project. Understanding the SOP factors will provide advice to SOP practitioners on what factors to implement when developing SOP strategies. Research in this area is expected to provide useful information for SOP stakeholders.

In this paper we present an exploratory study in which a SLR is conducted to identify which factors have a positive impact on the SDO clients in the promotion of SDO vendors to SDO partner.

III. RESEARCH METHODOLOGY

We have used a systematic literature review (SLR) process [25] as the main approach for data collection. To find relevant data on the basis of research questions, the SLR helps to investigate and assess it by using the methodical way from the primary studies.

A SLR protocol was written to describe the plan for the review, which was published in IOSRJCE [26]. The major steps in our methodology are:

A. Search Strategy, and Search

The search strategy for the SLR is a plan to construct search terms by identifying population, intervention and outcome. An initial scoping study was conducted to determine the resources to be searched and the search terms to use for each resource, using the following trial search string on ScienceDirect digital library:

(Partnership OR "Outsourcing partnership") AND ("Software outsourcing" OR "IT outsourcing" OR "IS outsourcing").

The information salvaged through trial search string was used as a guidepost for the development and validation of the major search terms. The following final search string was used:

((Partnership OR "Joint-venture" OR "Outsourcing partnership" OR collaboration OR GSD OR "Global software Development" OR Alliance) AND ("Software outsourcing" OR "information systems outsourcing" OR "information technology outsourcing" OR "IS-outsourcing" OR "IT-outsourcing" OR "distributed software development") AND (factors OR drivers OR motivators OR elements OR characteristics OR parameters OR promotes OR upgrade OR leads OR convert OR transfer OR Enter OR establish OR builds) AND (vendors OR "Service-provider" OR developer OR clients OR outsourcer OR buyer OR customer OR consumer OR "service receiver"))

The final list of resources searched and the number of publications found for each resource are listed in TABLE 2. Further details of the finally selected papers are given in the Appendix.

TABLE 2: DATA SOURCES

Resource	Total Results	Primary Selection	Final Selection
IEEEXplore	1.273	44	33
ACM	1.158	40	20
ScienceDirect	880	38	26
Google Scholar	2,209	40	24
CiteSeer	226	09	06
SpringerLink	194	09	02
Total	6,240	180	111

B. Publication Selection

1) Inclusion Criteria: Inclusion criteria are used to determine which piece of literature (papers, technical reports, etc.) found by the search term will be used for the data extraction. The criteria are listed below:

- Studies that are reported in English language only.
- Studies that describe criteria for an outsourcing relationships establishment/promotion/conversion.
- Studies that evaluate vendor's capabilities for outsourcing partnership.

2) Exclusion Criteria: Exclusion criteria are used to determine which piece of literature found by the search term will be excluded. The criteria are listed below:

- Studies that are not relevant to the research questions.
- Studies that do not describe the factors that cause continuation/termination/formation of the existing software outsourcing relationships.

3) Selecting Primary Sources: The planned selection process had two parts:

a) *Initial selection:* It is performed by reviewing the title, keywords and abstract.

b) *Final Selection:* It is performed by reviewing the full text of the papers

C. Publication Quality Assessment

The quality checklist contains the following questions:

- Is it clear how the factors for up-gradation/promotion existing outsourcing relationship between clients and vendors were identified?
- Is the author(s) seems biased to publish positive results more than negative results?
- Is there sufficient data/sample size/evidences to support the findings?

Each of the above factors are marked as 'YES' or 'NO' or 'NA'.

D. Data Extraction

The review was undertaken by the authors in a team work. The inter-rater reliability test was performed after the data extraction. From each paper we extracted a list of quotes, where each quote described a list of factors. Further details of the "Data Extraction" are given in the SLR protocol already published [26].

E. Data Synthesis

A primary reviewer with the help of secondary reviewer has performed data synthesis. At the end of the Data extraction phase described in section III-D, we had identified a list of factors from the sample of 111papers. The primary researcher reviewed these in order to derive a list of categories to classify these factors and initially a list of 39 categories was identified. These were reviewed and some of these categories were merged together and finally we got a list of 26 factors as shown in TABLE 3.

IV. RESULT

A. Factors Identified through Systematic Literature Review

In order to answer RQ1 TABLE 3 shows a list of success factors (SFs) identified through the SLR that can lead outsourcing vendors towards partnership with their client organisations. A factor with high frequency/percentage means that these factors are generally applicable or recognised factors in the literature. 'Mutual interdependence and shared values' (68%) is the most common SFs identified in our study. By Mutual interdependence and shared values we mean Common aims and objectives, sharing risks, benefits and shared ownership. This interdependence has a clear bidirectional nature – often in practice vendor organisation is strongly dependent on the realisation of agreed service. According to Alexandrova [27] it is considered as important SF of the outsourcing partnership as it presumes "goal symmetry" between the outsourcer and vendor organisations. Having clearly identified common organisational goals both parties should benefit from external input which is expected to provide a long-term impact on the success of the relationship. Lee [28] defined outsourcing partnership as "An inter-organisational relationship involving a long-term commitment between a client and vendor where both parties collaboratively work towards shared goals, while sharing both risks and rewards".

TABLE 3 LIST OF SUCCESS FACTORS.

S.NO	Success Factors	Frequency N=111	%	Sources (List given at the Appendix)
1	Mutual interdependence and shared values	76	68%	*1,4,6,7,8,9,12,13,14,17,18,19,20,21,22,23,27,28,29,31,33,34,35,37,38,39,40,41,42,43, 45,46,47,49,50,51,52,53,54,55,56,57,60,61,67,68,69,70,71,72,73,75,76,78,79,82,83,8 4,85,86,87,89,9+2,93,94,97,98,99,101,102,103,104,106,107,109,111*
2	Mutual trust	66	59%	*1,3,4,8,9,10,11,12,13,14,15,18,20,21,22,23,26,29,31,32,33,34,36,39,40,41,46,47,48,4 9,50,52,53,55,56,61,62,63,64,66,67,73,76,83,86,87,88,89,90,92,93,95,96,97,98,99, 101,102,103,104,105,106,107,108,109,111*
3	Effective and timely communication	64	58%	*1,4,9,11,12,13,17,22,25,26,27,29,30,31,33,36,37,38,40,41,42,43,45,46,47,49,50,52,53 ,55,59,61,62,63,64,67,69,70,73,74,76,77,78,79,80,82,85,86,87,88,90,91,93,94,97,98,1 01,103,104,105,107,108,109,110,111*
4	Quality production	63	57%	*1,2,4,5,6,8,9,10,11,16,18,19,20,21,23,24,25,26,28,29,31,32,36,37,38,41,42,43,44,45,4 6,47,49,52,53,56,57,60,61,62,65,68,73,75,76,78,79,84,86,87,88,90,93,95,97,98,99, 100,101,103,104,105,110*
5	Organisational proximity	58	52%	*1,4,7,8,9,10,17,18,19,20,21,22,23,24,25,27,29,31,32,33,34,37,38,39,45,47,49,50,55,5 9,60,61,62,70,71,73,74,76,78,82,83,84,86,87,88,90,93,95,96,97,98,102,104,107,108,1 09 ,110,111*
6	3C (Coordination, Cooperation and Collaboration)	56	50%	*1,6,7,9,11,12,13,15,22,27,29,31,32,33,34,35,36,38,39,40,41,42,43,45,46,47,49,50,53, 54,55,61,62,64,67,69,70,76,78,83,84,85,86,87,89,93,94,95,96,99,101,103,107,108, 109,110*
7	Flexible Service Level Agreements (FSLA)	48	43%	*6,12,13,18,20,22,23,25,27,29,33,34,38,39,42,46,47,48,50,52,54,58,59,60,61,62,69,70, 72,73,74,76,78,82,83,85,86,87,88,89,90,91,102,103,104,105,106,110*
8	Bidirectional transfer of knowledge (BTK)	43	39%	*7,8,10,12,14,15,18,23,26,33,37,38,39,40,43,46,47,49,50,52,54,58,60,63,69,75,77,78,8 2,84,86,87,91,95,101,102,103,104,105,107,108,110,111*
9	Long-term commitments	41	37%	*3,4,10,12,13,18,20,22,23,25,29,31,32,33,37,47,48,49,50,53,54,58,64,65,66,69,70,76,7 8,87,89,93,94,95,97,99,101,103,105,107,108,111*
10	Joint management infrastructure	37	33%	*1,8,12,13,16,18,19,20,27,28,37,38,46,47,48,49,52,55,56,58,59,67,73,74,78,82,85,87,9 3,98,101,102,104,105,109,110,111*
11	Cross-cultural understanding and sensitivity	36	32%	*1,5,7,12,22,25,29,30,31,33,38,41,46,47,49,50,52,60,61,63,67,69,70,76,78,80,82,83,86 ,88,90,98,105,107,109,110*
12	Success stories of previous projects	35	32%	*8,9,12,13,19,22,29,32,35,36,37,40,44,45,46,50,57,59,65,67,70,73,75,78,79,81,84,88,8 9,90,92,93,99,107,108*
13	Access to new technologies, markets, and complementary skills	34	31%	*6,9,16,17,26,29,31,32,33,35,37,43,49,52,56,57,58,67,69,71,73,74,77,79,81,87,95,96,9 7,99,100,102,103,104*
14	Governance and control	34	31%	*7,12,13,15,18,22,25,26,27,28,29,32,33,37,38,39,40,46,48,50,62,65,71, 74,75,85,87,88,92,98,102,104,105,110*
15	Financial stability and relation specific investment	28	25%	*6,7,17,20,24,27,29,34,37,43,45,51,55,67,73,78,83,85,87,88,90,93,94,97,100,104,107, 111*
16	Organisational transparency and receptivity	27	24%	*1,4,7,8,10,12,14,15,26,27,29,33,34,39,43,46,53,76,78,87,91,94,99,101,103,104, 106*
17	Flexibility and reliability	27	24%	*6,8,17,21,24,29,31,34,38,42,45,46,49,50,52,54,59,61,72,76,79,82,97,98,106,107,110*
18	Spurring innovation	26	23%	*8,21,22,24,26,27,29,31,38,41,42,43,52,55,57,69,75 ,76,77,83,87,97,99,102,103,104*
19	Win-Win strategy	21	19%	*1,2,7,8,9,10,20,26,27,37,45,52,55,62,78,83,101,102,104,107,109*
20	Effective relationship management	18	16%	*1,20,21,24,37,52,59,60,73,74,78,82,93,94,101,102,105,110*
21	Constructive conflicts resolution mechanism	17	15%	*1,12,13,18,20,23,37,47,49,58,62,76,93,97,103,107,109*
22	Top management engagement	17	15%	*7,20,25,27,29,31,32,37,47,49,58,62,87,91,93,108,111*
23	Social Networking	15	14%	*1,12,15,26,34,38,59,61,67,77,88,90,104,109,110*
24	New business opportunity	13	12%	*8,27,37,40,56,70,73,83,84,87,95,97,104*
25	Honesty and openness	13	12%	*13,15,17,22,26,32,33,42,55,83,88,97,102*
26	Human resource management	7	6%	*14,28,38,47,59,60,62*

Similarly 'mutual trust' (59%) is the 2nd most cited SF in our findings. Mishra [29] has defined trust as "…one party's willingness to be vulnerable to another party based on the belief that the latter party is 1) Competent, 2) Open, 3) Concerned, and 4) Reliable". Mutual trust and transparency leads to the establishment of long-term relationship between client and vendor organisations" [30]. The degree of trust between the partners compensates any potential drawbacks of the formal contracting and the lack of strong defences clauses in the outsourcing agreement [27].

It was also found that 58% of the articles in our study have cited 'effective and timely communication' as a generally recognised SF to be addressed by vendor organisations for the development of partnership with their clients. By 'effective and timely communication' we mean exchanging status of the efficiency and effectiveness between partners. According to Webb and Laborde [31] effective and efficient communication between client and vendor organisations gives them an opportunity for the development of mutual understanding, respect and qualities, which can greatly upsurge the permanence of an outsourcing relationship. In view of [32] effective communication between outsourcing partners is assumed to be of crucial importance for the successful relationship. This SF is emphasized widely in the literature as a core

determinant of the outsourcing partnership's success since it amplifies the level of understanding and the adequate information exchange [27]. It is typically considered that communications concern mainly the client organisation that should provide facilitating information to the vendor. However, the opposite is also of importance since the client decreases its degree of control over the outsourced services and functions. This way, an ineffective communication from the vendor can obstruct the outsourcing relationship [27].

It was likewise found that 57% of the papers in our study have quoted 'quality production' can lead outsourcing vendors towards partnerships with their clients. By quality production we mean capability and expertise, technology and core competencies of a vendor in providing the required service quality. Organisations have to consider taking the advantage of outsourcing strategies, not only to utilize the cost advantages but also to benefit from the improved quality that offshore vendors provide [33].

More than half of the articles in our study described 'organisational proximity' (52%) as a generally applicable SF that have a positive impact on outsourcing clients. By organisational proximity we mean strategic compatibility, business and technology understanding and language symmetry (refer to situations where both partners speak the same language). Organisational proximity is defined as "belonging to the same space of references and manifested by shared representations, norms, standards and work practices" [34].

Similarly half of the articles in our study have described '3C' as SF for outsourcing partnership. By '3C' we mean coordination, cooperation and collaboration. Literature reveals that the current inter-organisational trend is changing from competition to coordination, cooperation and collaboration [35].

B. Comparison of the factors across different company size

Our sample size in the SLR is composed of 111 articles; however, 105 articles have mentioned the organisation's size as shown in TABLE 4. Using the organisation size definition provided by the Australian Bureau of Statistics [36] , we divided the papers/articles based on the prescribed data into four categories: 1) Small (0–≥19 employees), 2) Medium (20–≥199 employees), 3) Large (200+ employees) and 4) Mixed. By mixed we mean combination of two or more categories. Our results indicate that out of 26 SFs, 20 SFs have been reported in the small-sized organisations. The remaining seven factors have zero frequency for small organisations. Among these 26 SFs, 6 SFs have been cited in ≥50% of the articles. These 6 SFs are 'success stories of previous projects'-67%, 'mutual trust'-59%, 'quality production'-83% 'organisational proximity'-52%, 'effective and timely communication'-50% and 'cross-cultural understanding and sensitivity'-50%. It is to be noted that the factors 'quality production'-83%,'mutual trust'-67%' and 'success stories of previous projects'-67% have the high citation in small organisation category. This means that to promote the relationship into partnership for

future outsourcing projects vendors need to produce quality software products by improving their software development capabilities. Moreover the SFs 'cross-cultural understanding and sensitivity' and 'access to new technologies, markets, and complementary skills' both have 50% citations in small organisation which show that these factors are critical for small sized vendor organisations. This may be the reason that small organisations are at the initial stage towards outsourcing partnership.

For medium-sized organisations we found 24 SFs in the literature. Twelve SFs have been identified in ≥50% of the articles. The SFs 'quality production' and 'mutual interdependence and shared values' have the highest percentage (100%), 'organisational proximity', 'joint management infrastructure' have the second highest percentage (83%) in the medium sized organisations which indicate that medium sized organisations should concentrate on developing quality products, strategic compatibility, cultural fit, business and technology understanding and language symmetry through effective management. These factors are necessary in the developing stage of outsourcing partnership. The results show that medium sized organisations are in the developing stage of SOP.

For larger organisations we found 26 out of 26 SFs in the literature. Six SFs have been cited in≥50% of the articles. These SFs also having the overall percentage/frequency ≥50%. This means that outsourcing partnership is usually formed in the large organisations i.e all the generally applicable or recognised factors are found for large organisation in the literature, which confirms the findings of the previous studies e.g Kinnula et al [18] suggest that large software companies are moving from contract to partnership in order to outsource work that is not directly related to their core business activities. Usually client organisations outsource their IT or software development work as their non-core activities to counterpart organisations. The remaining six SFs are 'mutual interdependence and shared values', 'mutual trust', 'quality production', 'organisational proximity', 'effective and timely communication' and '3C (coordination, cooperation and collaboration)' with percentages 67%, 56%, 52%, 55%, 62% and 56% respectively.

For mixed type organisations we also found 26 out of 26 SFs in the literature. Five SFs have been cited in≥50% of the articles. 'Mutual interdependence and shared values' and 'mutual trust' both have the highest percentages of 74% and 67% respectively; the other three factors are 'effective and timely communication', 'quality production' and 'organisational proximity' with percentages 52%, 56 % and 52 % respectively.

Because of the ordinal nature of the data we have used the linear by linear association chi-square test in order to find significant differences between factors identified in different size of company. The linear by linear association test is preferred when testing the significant difference between ordinal variables because it is more powerful than Pearson chi-square test [37].

Success Factors	Occurrence in SLR (n=111)								Chi-square Test (Linear-by-Linear Association) α = .05		
	Small (N=06)		Medium (N=06)		Large (N=66)		Mixed (N=27)		X^2	df	p
	Freq	%	Freq	%	Freq	%	Freq	%			
Mutual interdependence and shared values	2	33	6	100	44	67	20	74	0.782	1	0.377
Mutual trust	4	67	4	67	37	56	18	67	0.013	1	0.911
Effective and timely communication	3	50	3	50	41	62	14	52	0.065	1	0.799
Quality production	5	83	6	100	34	52	15	56	2.509	1	0.113
Organizational proximity	2	33	5	83	36	55	14	52	0.814	1	0.367
3C (Coordination, Cooperation and Collaboration)	1	17	2	33	37	56	13	48	0.999	1	0.318
Flexible Service Level Agreements (SLA)	2	33	2	33	30	45	10	37	0.447	1	0.504
Bidirectional transfer of knowledge (BTK)	1	17	3	50	28	42	9	33	0.001	1	0.975
Long-term commitments	1	17	4	67	28	42	7	26	0.475	1	0.491
Joint management infrastructure	1	17	5	83	18	27	10	37	0.232	1	0.630
Cross Cultural understanding and sensitivity	3	50	1	17	24	36	6	22	0.853	1	0.356
Success Stories of Previous Projects	4	67	2	33	18	27	9	33	0.782	1	0.337
Access to new technologies, markets, and complementary skills	3	50	2	33	23	35	6	22	1.787	1	0.181
Governance and control	1	17	1	17	20	30	8	30	2.612	1	0.106
Financial stability and Relation specific investment	2	33	2	33	18	27	5	19	1.260	1	0.262
Organizational Transparency and Receptivity	1	17	1	17	18	27	7	26	0.086	1	0.770
Flexibility and reliability	0	0	1	17	18	27	7	26	0.585	1	0.445
Spurring Innovation	2	33	1	17	19	29	3	11	1.735	1	0.188
Win-Win strategy	0	0	3	50	12	18	6	22	0.079	1	0.778
Effective Relationship management	0	0	4	67	9	14	4	15	0.187	1	0.665
Constructive Conflicts Resolution Mechanism	0	0	3	50	6	9	8	30	0.316	1	0.574
Top management engagement	0	0	3	50	11	17	3	11	1.026	1	0.311
Social Networking	2	33	0	0	9	14	3	11	0.372	1	0.542
New Business Opportunity	0	0	1	17	11	17	1	4	0.753	1	0.386
Honesty and openness	1	17	0	0	9	14	3	11	0.265	1	0.607
Human Resource Management	0	0	1	17	4	6	2	7	.023	1	0.880

We have identified no significant difference across company size (small, medium, large and mixed) for the identified 26 SFs as shown in TABLE **4**. One possible reason of this may be the sample size for small and medium size is low.

V. LIMITATIONS

How valid are our findings of success factors in the conversion process of outsourcing vendors? One possible threat to internal validity is that for any specific article, its reported success factors may not in fact have described the underlying cause. We have not been able to independently control this threat. The authors of these studies were not supposed to report the original reasons why these success factors were used during the promotion/conversion of vendors. Regarding threat to external validity, it is also possible that in some studies there may have been a tendency for particular kinds of SFs to be reported. Many of the contributing studies were self-reported experience reports, case studies and empirical studies which may be subject to attribution, reporting or publication bias. During the data extraction phase, we found several papers lacking sufficient and clear details regarding company size.

We found many similarities in our findings and findings by other people [14],[17],[18] ,[23],[24], [27] this provides some support for generalisation. Further the identified SFs will be validated through empirical study with relevant experts in the industry. For the conduction of empirical study a similar approach will be followed as used by other researchers [38, 39].

VI. CONCLUSION AND FUTURE WORK

This research proposes that outsourcing vendor-client relationship needs to move beyond that of a contractual arrangement, into more of a collaborative partnership that engenders trust for mutual benefit. Drawing on the related literature, 26 SFs are listed in total. Six of these SF were ranked as critical success factors (CSFs) based on the citation>= 50%. We suggest that vendors involved in outsourcing relationship should focus on these SFs in order to have a positive impact on outsourcing clients and to convert their existing conventional outsourcing relationship into outsourcing partnership. We have also compared the identified success factors across the reported datasets for the company size (small, medium, large and mixed).

This paper contributes to only one component of the Software Outsourcing Partnership Model (SOPM), i.e. the identification of the CSFs. In second phase of the research, the identified success factors will be validated through empirical study in the outsourcing industry and to provide some advices (practices). The eventual outcome of the research is the development of SOPM to assist outsourcing vendors in gauging their competence for SOP activities.

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Appendix: List of Finally Selected Papers

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