CHAPTER 4 INTERPRETATION

This chapter contains discussions on qualitative and quantitative analysis of the information collected by conducting interviews and collecting data through questionnaires. Data from all the respondents is compiled in a format that is required for using analysis tool like SPSS. Information collected in interviews is compiled and presented in the form of case studies. The data that is collected by conducting survey is also compiled for further analysis. Initially tests such as Kaiser-Meyer-Olkin (KMO) and Cronbach Alpha Reliability test are carried out to verify sample adequacy for further analysis. This is followed by the non-response bias test which verifies the consistency in responses over a period of time. Data is collected separately from three different levels of professionals in an organization. A graphical presentation is prepared using bar charts for discussing the overall response from the respondents to each question. This is followed by statistical analysis and hypotheses verification.

Exploratory factor analysis and confirmatory factor analysis are used for verifying relations among factors. This analysis provides ranking and relevance of various parameters and questions asked under each parameter in the descending order. The outcome from this analysis is also used for verifying the hypotheses defined earlier.

4.1 Case Studies

As a part of this study, several interviews were conducted of professionals at all levels in companies. Questions used during interviews were extracted from questionnaires. Professionals who were interviewed were directly involved in outsourced contracts hence their comments and opinions are very important. Interviewees refused to answer certain questions hence they were either modified or reframed.

Total six case studies, four case studies on telecom operators and one each on IT service provider and one on infrastructure provider, are presented in the next chapter. Four case studies (Telco1, Telco2, Telco3, and Telco4) of key telecom operators in India are discussed based on the responses from professionals and the outsourcing strategies adopted in these companies. Similarly, a case study Infra1 is also discussed, this is about a company that provides hardware and software to telecom operators along with services to support and maintain network infrastructure. A case study, ITS1, is discussed about a company that
provides managed services to telecom operators and several other companies in other sectors globally.

4.1.1 Case Study – Telco1

Telco1 is India’s first truly multinational corporation. Telco1 is a pan-India integrated GSM operator offering 2G and 3G services, and has its own national and international services operations, and Internet Service Providers (ISP) license. With revenue in excess of $4 billion; revenue market share of nearly 15%; and subscriber base of over 121 million in FY 2013, Telco1 ranks among the Top 10 country operators in the world with a traffic of over 1.5 billion minutes a day. Telco1’s robust pan-India coverage is built on a network of over 100,000 2G and 3G cell sites, spread across over 55,000 towns in India.

Using the latest in technology, Telco1 provides world-class service delivery through the most extensive network of customer touch points. Telco1’s customer service delivery platform is ISO 9001:2008 certified, making it the only operator in the country to have this standard certification for all 22 service areas and the corporate office. Telco1 has been a pioneer in introducing customized product offerings for segmented customers. It is the first mobile operator to introduce innovative value added services in the Indian telephony market, and has remained ahead of the industry in data product offerings.

Innovation

Outsourcing has created level playing field for companies competing in the same market place since every company is outsourcing non-core and some of the core processes. It is also noted that competing companies are outsourcing goods and services to the same service providers. It is imperative for competing companies to be innovative and create innovations in goods and services to remain competitive.

All the executives opined that innovations are important and must be part of the contract. They also suggested that capability, capacity, and track record of a vendor who has consistently delivered innovations must be the key selection criterion during the vendor selection process. Most expressed about their concern about lack of awareness among employees about the process of innovations or process of generating intellectual property (IP).
Another area of concern is the ownership of IP. The issue that was discussed was, if IP is created during the execution of the contract then who gets the ownership of IP. A senior executive opined that, ‘Normally company keeps IP rights in such development. Normally it is done on revenue sharing basis’. This can create serious disagreements between the client and vendor management and also could prove to be demotivating factor for vendor teams.

Contract formulation is important in outsourcing as focus remains on contract terms and conditions during the execution phase of the contract. Another executive expressed that, ‘This has to be covered under the contract. As innovation is part of business process, it may not rise to intellectual rights, etc. Moreover outsourcing is to be treated as a partner relation than a vendor relation’. It was noted that everyone is convinced about the importance of innovations and need of creating innovations in outsourced contracts but the focus remains on delivering service level agreements as defined in the contract.

**Contract Formulation**

Entire execution of the outsourced contract is driven by the terms and conditions defined in the contract. Contract addresses not only the service level agreements between the client and the vendor but it also specifies terms of payments, mode of payments, mechanism of escalation, identification of risks and risk mitigation, legal process in case the disputes between the two parties could not be resolved by discussions, and project management methodology.

There was strong agreement among participants that middle level management must be part of the process of formulation of the contract, defining service level agreements, and the process of selection of vendors. Execution and implementation of the contract is mostly undertaken by the middle management and operational staff.

Participants also expressed that contract must specify expectations about innovations expected during execution of the contract. It was also expressed that funding for promoting innovations must be included in the overall cost of the contract.

**Collaboration and Cooperation**

As discussed in previous chapters, the trend in outsourcing is multisourcing, selective sourcing, and shorter duration contracts compared to earlier practice of single sourcing, total
sourcing, and longer duration contracts. In this environment, client expects all the vendors to collaborate and cooperate for delivering end to end performance as well as for creating innovations. High level of trust is extremely essential in multisource environment. Uncertainty about renewal of the contract, rivalry among suppliers, cultural differences are some of the factors that have adverse impact on building high level of trust among teams.

Culture plays an important role for creating conducive atmosphere for collaboration and cooperation. Since companies are outsourcing to service providers in various countries, local cultural differences could be misunderstood, working practices may be different, and socio economic impacts could be different. Hence employees working in a diverse set up need to be provided with sensitivity training. A manager expressed, ‘Cultural differences are generally seen to impact the initial phase of the engagement. After a stipulated time, both parties understand each other, and the job becomes easier. But if due to any reason, cultural differences are not sorted out, it will adversely impact any engagement. Communication from Day 1 is a vital part. In fact a communication strategy is a must in such kind of environment’.

**Strategic Partnership**

Company has established strategic partnership with several service providers. Entire IT operation management of the company has been outsourced to a vendor. There is a strong agreement among the members of the management that information sharing and information security are areas of concern still multi-sourcing is preferred against single sourcing. Management also expects service providers to use best practices during the execution of the contract.

In most of the outsourcing contracts, clients transfer employees from their payroll to vendor’s payroll. This results in changes in roles and responsibilities of employees who are retained by the client. Employees do leave organization due to these changes as new roles and responsibilities may not be preferred for future growth. Contracts usually have clauses which vendors are expected to implement for ensuring retaining seniority of services of employees, protect salaries, provide benefits and perks, and provide career growth path for the employees that are transferred to vendor’s payroll. ‘Normally there is an agreement between client and vendor that they will take their employees. Even it has to be done; it is with prior approval on case to case basis’, was commented by a Vice President in the company.
Since there are serious repercussions for employees, it is an issue that needs to be addressed by Human Resource management department. When this was discussed with President of the organization, he commented, ‘No – this can be managed through a well-orchestrated employee transition process. The company HR has to play a key role in mapping current employees profile with new partner job profiles. This entire activity has to be handled by the HR team of both the organizations. A clear structured 3 to 6 months on boarding process also to be prepared before transition’.

A strategic partner is expected to support business strategy of the client and must ensure that actions of vendor teams are in sync with the strategy of the client. A senior official from the company commented that, ‘Clear service level agreements must be in place with all vendors/partners. They should be part of strategy planning exercise’. This view was echoed by other members in the team also.

**Enhance Competitive Position**

Service providers are expected to enhance the competitive position of clients hence the decision of outsourcing is not based on a single issue of reducing operational and capital cost. Most interviewees expressed their concern about sharing of information or leaking of strategic information to other clients. Companies plan using their existing resource more effectively and be agile to be competitive by outsourcing goods and services.

As vendors continue to help in enhancing the competitive position of the sourcing organizations, there is a risk of ‘vendor lock’ as switching services back in-house or to another vendor becomes prohibitive due to high cost involved and loss of competitive position. This is addressed by defining proper clauses in the contract; a senior official expressed that, ‘Have clear cut clauses and governance mechanism in place’. Another official stated that, ‘should be part of the contract and proper exit clause will take care of this’.

**Findings**

It is obvious from the opinions expressed by the professionals at Telco1 that strategic partnership is a must with vendors so that vendors become partners in the success of the business at the same time share risks due to underperformance. Due to new trends in
sourcing arrangements, collaboration and cooperation among vendors is critical else there is a risk of ‘blame game’ and eventually end users of the business suffer due to poor quality of products or services.

Innovation must be an integral part of the contract and must be adequately funded and supported by senior management. Middle level management and operational staff must be involved in the process of vendor selection and defining service level agreements. It was also expressed that Telco1 plans to continue outsourcing aggressively and focus on core business of customer acquisition and churn management.

4.1.2 Case Study – Telco2

The vision statement of Telco2 is to become the most loved brand, enriching lives of millions by 2015, says the chairman of the company. Established in 1995, as a public limited company, Telco2 stands among the top 4 mobile service providers globally with approximately 20.97 crore subscribes and a market share of 28.41%.

In India, the company's product offerings include 2G, 3G and 4G wireless services, mobile commerce, fixed line services, high speed DSL broadband, IPTV, DTH, enterprise service including national and international long distance services to carriers. In spite of being the largest mobile service provider in India (based on number of customers) Telco2 reported 14th consecutive decline in quarterly profit with an ARPU (average revenue per user) increase of only 4% from the previous quarter.

In order to understand more about the company, data was collected by conducting online surveys and by conducting personal interviews. The interviews were held at the Head Office of Telco2 in Delhi. The data was acquired from the senior, middle and operational level staff of the company.

Innovation

Outsourcing being highly competitive, vendors are expected to be innovative and add substantial value to clients. All the executives opined that, clients consider innovation in terms of improvement at operational level and process related or service enhancement as the key driving force for the execution of their contract and overall business. However most executives expressed concern about employees not aware of the process of innovation and the
process for capitalising innovations by filing for patents. All the executives opined that the senior management was responsible to help the employees understand the benefits of innovation. A senior executive at Telco2 stated that ‘innovation is must for business (client and vendor) else businesses lose its shine/edge within 2-3 years and go into oblivion/extinct due to losses’.

Another major concern discussed was if the vendor provides innovations and they have substantial impact on operation then who owns the intellectual property rights or is there a provision for revenue sharing. The impact of innovation can be quantified by the tangible value that is generated by increase in revenue; increase in customer satisfaction etc. A senior executive said ‘If the major portion of the innovation is coming from vendor side then they should own the IP of the same. These scenarios are rare and if they exist then many arrangements for compensations like gain share, revenue share etc. are available’.

Another senior executive opined that, ‘In most scenarios innovation is triggered from the client organisation and the vendor normally enables that IP issues are always addressed as per contract’, hence it is important to address such issues in the terms and conditions of the contract during contract formulation.

**Contract Formulation**

Contracts must have clear mention for creating innovations, proper funding and ownership for innovations. The middle management strongly recommended rewards and recognition to promote innovation. Middle managers should be consulted for contract preparation, vendor selection and defining the SLA’s.

All the middle level executives opined that the terms and conditions should be clearly specified in the contract when it comes to deliverables including expected level of innovation.

A senior executive opined that “The current IP or future IP brought by vendor or joint IP created during long term of contract and their treatments are all as per the contract hence no more discussion is required’. Another senior executive said ‘construct contract in total outsourcing is very important, output based payment may be good during growth phase, however during maturity same contract construct provide strong impedance for agility and flexibility and lacks innovation’.
It became obvious in the entire discussion that everything in outsourcing is driven by the terms and conditions defined in the contract as clients expect vendors to deliver them at highest quality.

**Collaboration and Cooperation**

In a multi sourcing environment, where many vendors have to work in sync to meet the overall objective and goal of the organisation, cooperation and collaboration is imperative. The senior executives strongly agreed that the value addition would be limited while working with a single vendor as against multiple vendors. They opined that multi sourcing will favour end to end delivery and innovations.

The client and the vendor have to be closely associated to create solutions of highest standard. The middle level executives opined that there should be trust and transparency in information sharing must be created among teams. High level of trust is essential in a multi sourcing environment.

Another area of concern was if cultural differences have an impact on strong collaborations and how culture and communication play a vital role in creating highly collaborative environment. A middle level executive stated that ‘cultural differences can cause miscommunication’. There could be ‘delays in decision making, non-collaborative approach, absence of single window and ownership and delay in achieving required results, hence communication plays a vital role’. It was also expressed that timely communication from the management is very important and employee should not assume anything while executing the contract.

**Strategic Partnership**

Among the varied models that are implemented by various companies, strategic partnership model seems to be the most favoured presently as both parties can have major stake in the success says the middle level management of **Telco2**. The senior level executives at **Telco2** opined that they expect the vendor partner to invest in the operations and also share the risks with them. Having strategic partnership with multiple vendors in an outsourcing environment would be advisable for collaborative innovations.
It is a business imperative that all the vendor partners know and understand the business strategy for ensuring service and value addition and that they work in sync with the company’s business strategy. Hence participation of vendors in strategy discussions is desired. A senior executive stated that “this is a must for success of any strategic outsourcing relationship. Also any organisation should have multiple strategic partners for IT and there should be clear distinction between a vendor and a strategic partnership. The strategic partners can be brought in sync by proper governance and by making them a part of annual IT planning exercise”.

Another senior executive said that "Multiple vendors are being selected based upon their real core competency which is in line with the business strategies. Also companies need to balance these acts with proper governance framework (3 tier-3 ways vendor management framework”).

In most outsourcing agreements, employees working for client in ICT management will move to vendor’s operations. The question to executives was, does this have an adverse impact on delivering highest quality of service? A senior executive dismissed this concern by stating that “we don’t see any concern on this, as per agreements, vendor employees get more and also get job security under transfer agreements(for minimum 3 years) provided their performance are at PAR”.

Another senior level executive opined that, “in most of the cases employees managing ICT stand to gain from the badge change due to outsourcing as they get more opportunities, training etc. and become main stream revenue earning employees rather than a support function employee”.

**Enhance Competitive Position**

Companies outsource most of the core and non-core services in order to utilise the resources more effectively. The senior management believes that the outsourcing decision should not be driven by a single factor of reducing operational costs; it is all about competency whether to build them internally or to hire them.

They also opined that outsourcing creates low competency in house which leads to higher switching costs and vendor lock situation. It is imperative that vendors understand the
strategic depth in business in creating differentiation to maintain competitive advantage for clients.

A senior executive opined that, “in complete outsourcing with scope flexibility- vendors tend to go low for LOW cost solution whereas business is looking for optimised solution in terms of speed/quality of delivery/ cost. These three cannot be achieved in any complete outsourcing contract, hence need to have proper balance of in-house and vendor support, company must own its IT assets to have speed and control and to avoid vendor lock”.

Another executive suggested zero/minimum exit fee as a measure to avoid vendor lock. “There should be upfront agreement of transition in the contract with revenue critical resource transition and have full control over architecture, design, source code and documentation”.

**Findings**

In this highly competitive market it is imperative that client and the vendor innovate in order to survive their businesses without losing the edge. The senior executives are responsible for creating awareness about innovation process among the middle management and capitalising those innovations by filing patents. Rewards and recognition along will proper funding will encourage innovation among middle managers.

The issues regarding current/ future/joint intelligence property brought about by the vendor during execution of a project should be clearly addressed in the terms and conditions of the contract.

In a multi-source environment, the vendor has to work in sync with the client’s business strategy to achieve organisational goals. Cultural differences may cause miscommunications and delays in decision. Professionals at Telco2 expect the vendor to invest in the operations and share risk along with them. For collaborative innovations multiple strategic partnerships were recommended. While outsourcing the company must own its IT as the company tends to lose its control and flexibility due to outsourcing.
4.1.3 Case Study – Telco3

Telco3 is India's foremost and truly integrated telecommunications service provider. The Company has a customer base of above 118 million including over 2.6 million individual overseas retail customers. Telco3 corporate clientele includes over 39,000 Indian and multinational corporations including small and medium enterprises and over 290 global, regional and domestic carriers. Telco3 has established a pan-India, next generation, integrated (wireless and wire line), convergent (voice, data and video) digital network that is capable of supporting best-of-class services spanning the entire communications value chain, covering over 21,000 cities and towns and over 400,000 villages. Telco3 owns and operates the world's largest next generation IP enabled connectivity infrastructure, comprising over 280,000 kilometers of fibre optic cable systems in India, USA, Europe, Middle East and the Asia Pacific region.

As a part of this research, data collection was performed by conducting surveys as well as holding one on one session with select officials in the company involved in outsourcing and external vendor management. These sessions were held in the main office of Telco3. The process of conducting these sessions involved researcher asking set of questions which were a combination of open ended and structured questions. As discussed in the previous chapters, metrics are identified for senior management and middle management officials for conducting survey as well as for framing questions during interviews. The focus remains on innovation in outsourced contracts. The researcher made notes during the discussion which are discussed in the case study.

Innovation

An interesting discussion revealed that senior executives in Telco3 believe that certain level of innovation is happening during the execution phase of the contract but when the question was posed to be more specific, senior managers could not provide very precise information. There was also disagreement among them about what is published in the research material as against what the reality is regarding lack of innovations in outsourced projects. There was a unanimous agreement among all of them that innovations need to be championed from the senior management and vendors must be adequately rewarded.
Employees must be aware of the process for IP creation and the process to protect it from getting copied without due benefits to creators of the IP. A senior executive agreed with the fact that most employees are not aware about this process hence there may be many innovations happening in the projects but they are not getting documented, protected, and capitalized. There was unanimous agreement that innovations by vendors are considered as an important parameter while signing a contract or at the time of renewal of the contract. One of the senior executives mentioned that, ‘We always go beyond what is specified in the contract and we always try to be innovative although it may not be mentioned in the contract. This is purely for the competitive reason’.

As discussed previously, innovations could simply bring improvement in the existing processes that are outsourced or enhance features or capability of products. The question of owning IP or sharing gains with vendors is important as client policies regarding this could potentially set the environment during the execution of the contract. An executive expressed, ‘Innovation is a part process enhancement and increasing efficiency. Vendors with the contract agreed between them and organization’. Senior managers at Telco3 opined that IP that is created while working together with vendor teams is the property of client and any gains from it do not need to be shared with vendors.

**Contract Formulation**

In outsourced projects vendors are expected to deliver what is mutually agreed on in the contract. A contract addresses multiple areas related to the project and vendor delivery is focused primarily on SLAs defined in the contract. Before the contract is signed by both the parties; client defines all the SLAs in the contract which invites negotiations, data validity regarding SLAs, verification of the current level of services delivered by in-house teams, etc. It is necessary as in-house teams could be highly aggressive in defining SLAs which will be difficult to meet. Inputs for defining SLAs come from various cross functional teams that are involved in the process or the function that is to be outsourced. These teams usually are not happy with the management decision of outsourcing hence they define SLAs which will be difficult or impractical to meet by the vendor teams.

If vendor teams consistently fail in meeting expected level of SLAs, client team negotiates with vendor management to dilute the level of SLAs to be met. In certain circumstances, client may want to change modify or add new SLAs to the contract and vendor teams must be
ready for that. The middle management members in **Telco3** did not subscribe to this practice. When the question was posed about making necessary changes in the contract to promote innovation, the members did not agree to this proposal. There was a strong agreement among members that middle level managers must be part of the team at the time of formulating a contract. Most middle management executives expressed that they are not consulted in the contract formulation process while they are expected to execute the contract. There was agreement on the fact that contract must define evaluation procedure and tools and techniques used for evaluating deliverables from vendor teams and ensure that they are in sync with the line of business.

**Collaboration and Cooperation**

Collaboration and cooperation cannot happen unless there is a high level of trust and transparency while working together. In a multi-sourced environment there could be multiple vendor teams working with client teams. Managers at **Telco3** strongly promote collaborative culture and expect higher level trust and transparency among teams. Outsourcing decision creates uncertainty and insecurity among employees in the sourcing organization which could be prohibitive for creating trust as vendor teams could be seen as adversary by the client teams while employees who have been transferred to vendor payroll may see this as an opportunity for their career growth. Vendors work with multiple clients globally creating more opportunities for employees than what they had before as a single support department in the sourcing organization.

Clients are working with service providing companies established in different countries hence culture and communication plays a vital role in successful execution of outsourced contracts, especially in a multi-sourced environment. It is imperative that various teams involved in the execution of the contract must go through sensitivity training and also cultural awareness sessions so that the environment remains harmonious. A middle level manager commented, “Cultural differences present a key challenge in strong collaboration since customers and their behaviour is largely influenced by cultures. While essentially most of the vendors are focusing on being global, to succeed in local markets it is extremely important that we know and understand implications of culture”.
Strategic Partnership

Executives expressed that in a multi-sourced environment information security is not a serious issue and it is well understood by both sides that necessary checks and balances must be implemented in the system so that there is no information leakage. Also there was a total agreement on the fact that in strategic partnership client expects vendors also to invest during the execution of the contract and share rewards and risks with the client. It was expressed that there is no need to have strategic partnership with all the vendors in a multi-sourced environment. Vendors are expected to develop best practices and use that learning for improving processes which are outsourced to them by clients. Executives could not agree unanimously to this as some disagree to the fact that clients need to develop best practices to be used in outsourced projects.

Outsourcing decision creates changes in organization structure, reporting structure, and changes in roles and responsibilities for the employees of the departments which are connected to the function or the process that is outsourced. Usually this results in reduction of the headcount in the sourcing organization and movement of employees to the vendor organizations as per the terms and conditions of the contract.

A senior executive expressed that, “transition needs to be handled maturely making employees understand the benefits of such movement and deliverables”. Similar opinion was echoed by another executive saying, “Establishing clear-cut guidelines as well as scope of work/activities on the roles and responsibilities of each stakeholder will go a long way in minimizing of these issues”.

It is expected by clients that when a strategic partnership is formed with vendors, vendor teams and management actions will be supportive and in sync with the strategy of clients. A President in the organization expressed that, “All vendors work for the common goal of the organization. This becomes their KRA and deliverable to produce the expected results keeping organizational goal in mind “.

A Deputy General Manager expressed similar opinion saying, “Establishing clear vision of the organizational business strategy and sharing it with the vendor partners and ensuring regular interactions with them will help ensure they are in sync with our strategy”.
Enhance Competitive Position

As discussed in previous chapters, mere cost saving is not the only key driver for outsourcing anymore, clients expect vendors to work together in collaborative way and create value for the company which will help in enhancing competitive position of clients in the market place. Questions were framed to understand if this is truly happening and if there are any issues or concerns for clients. Most executives agree with the facts that outsourcing enhances competitive position of client by shrinking design cycle of products/services, provides better control on projects, and makes organizations more agile and efficient. Clients can realign existing in-house resource for designing and developing next generation products/services and reengineer processes for additional cost saving.

While there was agreement for several issues related to enhancing competitive position, executives differ in their opinion about vendors exploiting clients during contract renewal realizing that the cost involved would be prohibitive for switching to another vendor or moving outsourced products/services in-house. Some of the executives expressed their concern about leakage of important information to competitors harming competitive position. Service providers understand this concern and have put in checks and balance in the process to ensure that information sharing is limited to unclassified information only. One of the senior executives disagreed that outsourcing moves competencies to the vendor teams. It is noted that outsourcing provides access to skills and competencies which are not available in-house. As a part of terms and conditions in the contract, in some cases client employees are transferred to vendor payroll hence in-house competencies move with employees to vendor teams.

Executives strongly disagreed for providing rights to IP to vendor teams and also for sharing rewards with vendors which are the result of innovations by vendor teams. This was a surprise finding in the thought process of the management in Telco3. As discussed before vendor may exploit the situation at the time of renewal of the contract, also known as ‘vendor lock’, an executive expressed that this can be addressed by formulating proper service agreement and non-disclosure agreement with vendors.
Findings

There was strong agreement among senior management members that strategic partnership with multiple vendors is required in a multisource environment. Members also agreed to the fact that outsourcing does help in improving competitive position of the client. Collaboration is an imperative for working together and also for creating innovations. An environment must be created for high level of trust among teams for working together.

Contract formulation is a critical task for outsourced projects which resonated among all the members but some disagreed that certain level of flexibility is needed for changing SLAs or adding new SLAs to the contract. Lack of innovation and awareness among employees about IP creation was expressed as a serious concern. The company management has planned to continue with aggressive outsourcing due to competitive reasons and also for reducing operational expenses.

4.1.4 Case Study-Telco4

Telco4 is a British Multinational Telecommunications company headquartered in London. It is the world’s 2nd largest mobile telecommunication company in terms of both subscribers and 2013 revenue. Telco4 had 434 million subscribers as of 31 March 2014.

Serving the needs of an enterprise, Telco4 Business solutions is a total communications offering that caters to all their voice and data, wireless and fixed line requirements. With the advantage of global expertise and experience and knowledge of local markets, the business is run through Telco4 global enterprise, SME division, National Corporate and key accounts.

Telco4 has been awarded the most admired Telecom operator and best 3G operator at the recent Telecom Operator Awards 2012. The company also received the globally recognised prestigious ‘product of the year 2012’ consumer award for its app store in mobile service category. In another survey conducted by Neilson, Telco4 was the only telecom player in the Top 10 ‘Most Trusted Youth Brands’ in India. Telco4 also features in Top 10 ‘Most Trusted brands in India’ for 2011, in a survey conducted by a leading financial daily.

The service provider now has more than 124,000 total antenna sites, of which around 28,000 are 3G sites. Telco4 has posted an 11.7% growth in its revenue with Rs 20,746.9 crore for the April-September quarter and an Average Revenue Per User (ARPU) growth of 1%. 
Innovation

Most of the senior level professionals at Telco4 believed that their clients consider innovation as a key driving force for vendor selection, execution of contract and overall business. All the senior executives agreed that they are responsible for inspiring their employees to innovate by creating awareness, capitalizing innovation and giving rewards and recognition.

Addressing the issue of owning the intellectual property right, a senior executive at Telco4 stated that ‘whether the vendor or the client owns the Intellectual property right is pretty much stated in the contract. We have seen all combinations- vendor owning IP, Client owning IP, as well as joint IP ownership’.

Another Executive stated that ‘Normally, substantial innovations arising out of clients business, if paid for by the client, are clients IP right. Otherwise it will be right to use without royalty for the client and the IP right will belong to the vendor. This actually depends on how the contracts are negotiated’.

The middle management expressed that the vendor and the client employees are mostly working in reactive mode and hardly have time and funds to work on next generation of solutions. Hence it is necessary to allocate appropriate budget for innovation. Employees must be awarded for their successful ideas and be sensitized and trained on IP creation. They must be explained positive implications of IP for business and maintaining competitive position in market place.

Strategic Partnership

Strategic partnership with multiple vendors in a multi-sourcing environment would be advisable for collaborative innovations, stated the senior management at Telco4. It was suggested that vendors can develop best practices and use them globally for all clients.

Information security concern arises since same vendor manages the network and processes for many competing operators. However most of the senior employees dismissed it, although some believed it to be a serious concern. All the employees strongly agreed that they expect the vendor partner to invest in their operations and also share the risks along with the client.

Outsourcing agreements cause employees working for client ICT to move to vendor operations which may lead to certain level of attrition and the client may lose critical mass
which would have been useful for the vendor. To this a senior employee at Telco4 stated that “the truly deserving and good performers are invariably accommodated and retained. For the other employees it could be an unsettling period”. Another employee said, ‘Typically the vendors take equal care for client’s employees. For the employees it is an advantage to be able to work for a technology company rather than an end-user company”.

In order to ensure that the multiple vendors are in harmony with the client’s business strategy, it is imperative to make the vendors aware of the client’s business strategy. This could be achieved by formal and informal interactions, said one of the senior level professional.

“Typically we do vendor briefings every year to talk to them about the strategies for the following year and the priorities. Post this we do the initiative-wise discussion with related vendors’. ‘Focused 1-2 day interactive workshop wherein the senior team of client and vendor interact and where the client senior management presents its strategy and focus for the year ahead will enable both teams to understand their common goal better and face the market together”, stated another senior level executive.

**Enhance Competitive Position**

Even though in a multi-vendor environment there is always risk that some of the important data could be leaked to the competitor, outsourcing is inevitable because it provides cost saving, access to special skills and competencies, shortened design cycle and better control on projects. It is imperative that the vendors understand the strategic depth in business in creating differentiation to maintain competitive advantage for clients.

However outsourcing leads to low in house competency leading to higher switching costs. In order to avoid such situations a senior employee at Telco4 suggested that,“Substantial control on choice of technology should be retained by the client. The design, architecture and engineering skills should be retained within the client’s organisation”. Another employee suggested, “Create a multi-vendor environment and a strong in-house leadership team”. Provision to avoid vendor lock should be embodied in the contract to avoid vendor lock situations.

**Collaboration and Cooperation**
Client and vendor have to be closely associated to create solution of highest standard. In a multi-sourced environment, many vendors have to work in sync to meet the overall objective and goal of the organization. High level of trust is extremely essential for multi-source environment.

Another concern was whether cultural differences play a vital role in creating highly collaborative environment. A senior executive at Telco4 stated that “cultural differences do matter and matter a lot. A rigid, highly contract and water-fall oriented vendor tends to fail badly in a client that has more agile iterative culture to technology. Soft cultural differences tend to have impact on level of communication, interaction and hence resulting trust”

Another senior executive said, “Vendors culture and processes play a vital role in deciding relationship with client. Geography also plays role on this. Approach of Indian and Non-Indian vendors will be completely different in approaching clients and communication play extremely critical role for long term relationships”.

**Contract Formulation**

Contract formulation plays a very important role in avoiding future disputes related to Intellectual property rights and also about vendor lock situations and hence contract should specify clearly these terms and conditions. Most of the middle management at Telco4 believed that to ensure high level of quality of service contracts should not only stress on SLA’s but also have the flexibility for restructuring the contract for promoting innovation.

Contract should have a clear mention for creating innovations, proper funding ownership for innovations and rewards and recognition programs in order to encourage the employees to innovate. The contracts should have performance evaluation of IT and innovations from business point of view.

Generally, the senior management is responsible for contract formulation and vendor selection. The middle management is completely ignored by the senior management in doing so. However the middle level management strongly recommended that they should be consulted for contract preparation, vendor selection and defining the SLA’s.
Findings

At Telco4, the employees recommended that adequate rewards and recognition programs for the client’s internal employees would boost innovation. Issues regarding Intellectual Property such as vendor owning IP, client owning IP or joint IP should be clearly addressed in the contract to provide clarity on its treatment.

Professionals at Telco4 strongly believed that the vendor partner should invest in operations and also share risks with the client. Vendor briefings or a focussed 1-2 day interactive workshop wherein the senior management of client and Vendor interact will enable the teams to understand their common gaols better. Outsourcing leads to cost reduction, however it may cause low in-house competency leading to higher switching costs.

At Telco4 the client and vendor are closely associated in order to create solutions of highest standards. Telco4 believes that cultural differences between the client and the vendor play a very vital role for long term relationship. There should be proper terms and conditions specified in the contract when it comes to deliverables including expected level of innovation.

4.1.5 Case Study- Infra1

Infra1 was founded by a young telegraph instrument maker who worked in a firm that made telegraph equipment for Swedish government agency. Headquartered in Stockholm, Sweden Infra1 is a multinational provider of communication technology and services.

The vision statement of Infra1 talks about a networked society, where every person and every industry is empowered to reach their full potential. Infra1 connects everyone, wherever they may be because the company believes in networked society, a society where every person and every industry is empowered to reach their full potential through global collaboration.

The company’s offerings include software and infrastructure for telecommunications and IP networking equipment, mobiles, fixed broadband and cloud, cable TV, IPTV and video systems. Infra1 owns the industry’s strongest intellectual property rights portfolio with about 35000 patents granted in 2012. Infra1 has about 117,508(September 2014) employees coming from diverse backgrounds, experience, ideas and perspectives. Infra1 believes that
diversity brings them closer and helps them make a difference and is the building block of the company.

**Innovation**

In case of a company like Infra1 innovation is built into the system. Infra1 is engaged in designing and developing, testing, and providing technology systems complied with global telecom standards. These systems contain state of the art hardware and software hence IP is created in the process which leads to several patents. Innovative approach to be adopted is highly recommended by management and conducive environment is created for employees. Infra1 is a product company and not a service provider company. It is expected that Infra1 will create innovations for clients like Telco companies who procure hardware and software for deploying services. The middle level management in Infra1 agrees that innovations created while working with Telco as clients provides them an advantage for developing better systems and solutions for clients.

The training department or HR in Infra1 needs to organize classes for employees which will equip them for relationship management, services management, and understanding processes of telecom operators. In multisourced environment Infra1 is expected to work with other service providers and manage end to end processes for clients. It is often observed that employees in the client company show resistance to change especially when innovation leading to a new IT or process solution is introduced by vendor teams. Hence client employees also need to be sensitized and trained for collaborative working for creation of IP.

The senior employees were asked that if Infra1 team provides innovations and have substantial impact on the operation of the client then who owns the intellectual property rights and is there a provision for revenue sharing? One of the senior employee said ‘this needs to be bonded in the initial contract, in case not then vendor should share the innovation details with benefit before implementation, then other commercial factors can be taken into consideration’. Another employee said ‘this is an evolving area and leading approach is yet to be identified’. ‘Yes for sure, this will improve partnership’, quoted another executive.
Contract Formulation

Telco management prefers to have control and flexibility in resourcing, skill building, and delivery timelines, operational expenses etc. and Infra1 is expected to deliver them. However this may also lead to certain level of loss of flexibility in control for the client. In order to avoid such loss of control, the terms and conditions must be clearly defined in the contract.

To ensure high level of quality of service, the contracts should not only stress on SLA’s but also have the flexibility for restructuring the contract for promoting innovations. The contracts should have a clear mention for creating innovations, proper funding, ownership for innovations and rewards and recognition for promoting that type of culture among middle level employees, agreed the senior management.

The middle level employees stated that the middle level managers should be consulted during selection of the vendor, contact formulation and also when defining the SLA’s. Contracts should have performance evaluation of IT and innovations from business point of view.

The employees at Infra1 strongly agreed that strategic relationship between clients and vendor has multiple contracts related to SLA’s, innovative solutions, risk and revenue sharing arrangements etc. There should be proper terms and conditions specified in the contract when it comes to deliverables including expected level of innovation. Infra1 has signed very innovative contracts with telecom operators, the terms and conditions in these contracts expect Infra1 to share risks as well as rewards and also invest along with the client.

Collaboration and Cooperation

Collaboration and cooperation is a challenge for Infra1 in a multisourced environment. The company focuses only on the network infrastructure which includes various hardware elements used in the network and software which is deployed in this hardware. The entire task of managing network infrastructure is single sourced from Infra1. Client expects as terms and conditions in the contract that company Infra1 will deploy necessary hardware and software required by the client for expanding the subscriber base. This means Infra1 has to invest own funds and resources for this deployment and in the return the client shares risks and rewards with Infra1 in return.
A telecom operator outsources goods and services to various companies hence Infra1 has to work in collaborative way with all the others. In such an environment there could be a tendency on the part of some vendor teams to ‘pass the buck’ to others and not to own up the share of responsibility. This is a major challenge in a multisourced environment. The client and vendor management should have a proper mechanism and escalation process in place for conflict resolution by co-operation.

Culture and communication plays a vital role in creating highly collaborative environment agreed the professionals at Infra1. ‘In today’s converged world, the market is truly ‘global’ for any large conglomerate or there is enough potential for any SME organisation as well. Cultural synergies have always been an added advantage when it comes to connecting between organisations as the amalgamation of cultures proves to be a catalytic force much needed for any long term business association. The biggest example of this is the Indian IT industry which thrives on global outsourcing businesses.’ says a senior level employee at Infra1.

“Knowing the environment in which your client operates is absolutely essential. What works well in one global region may not work at all- as such communication channels need to be tailored to suit the needs. So culture and communication go hand in hand when it comes to making an IMPACT”, quoted a middle level manager.

**Strategic Partnership**

The senior level employees in Infra1 strongly agreed that having strategic partnership with multiple vendors in a multi-sourcing environment would be advisable for collaborative innovation. Value addition would be limited while working with a single vendor as against multiple vendors. It is imperative that all the vendors are in sync with the business strategy and goal of the client organisation and are working towards achieving those goals. Senior executives at Infra1 suggest participation of vendors in its strategy discussion so that they can understand their business strategy and add value during contract evaluation.

Among the various working models that are implemented by various companies, strategic partnership model seems to be the most favoured presently as both the parties can have major stakes in the success. Since telecom operators have assigned responsibility of managing entire network infrastructure to Infra1, the relationship is definitely strategic in nature as the companies, the operator and Infra1 share risks and rewards. The clients expect the vendor
partner to invest in the operation and also share the risks. Client and vendor have to work as partners and manage relationship as a single unit agreed both senior as well as the middle level employees at Infra1. Vendors can develop best practices and use them for all the clients globally.

One area of concern was, in most of the outsourcing agreements clients and vendor have an understanding that employees working for client in ICT management will move to vendors operations. In such scenario, employees are concerned about their seniority, salary, new roles and responsibilities etc. This will result in certain level of attrition and the client may lose critical mass which would have been useful for the vendor. Managing networks require highly specialized knowledge and skills as employees must understand standards and their implementation in network elements. Similarly the vendor teams are under pressure to ensure that the down time of network meets stringent requirements. A senior level executive dismissed the concern of losing critical skills due to outsourcing by stating that, “no, it is to me successfully managed by disciplined change management process. Certain attrition is always estimated and taken into consideration. They do not derail the project”. “The contract needs to be binded accordingly” said another executive.

‘In multi-source environment, to make certain that the multiple vendors are working in sync with client business strategy, “communicate effectively the relevant portion of the strategy to ensure alignment”, advised a senior level employee. Another employee said “defined contract, vendor certification, NDA, WLA and SLA”.

**Enhance Competitive Position**

There are number of companies like Infra1 who offer managed services for the networks. Telecom operators are adopting almost similar working and business models for outsourcing goods and services creating level playing field for the competition. Telecom operators need to leverage supply chain for gaining competitive advantage. Hence Infra1 like companies must help clients in enhancing their competitive position that will improve top line and bottom line of clients. Enhancing competitive position of a telecom operator will mean, maintaining network up 99.999% of the time, reducing mean time between failures (MTBF), and reducing mean time to repair (MTTR), providing excellent customer experience, and reducing operational expenses.
Research indicates that outsourcing decision should not be driven by a single factor of reducing operational cost. It is all about competencies whether to build them internally or hire them, said the middle level employees. It is imperative that vendors understand the strategic depth in business in creating differentiation to maintain competitive advantage for clients.

Low in-house competency may lead to a vendor lock situation. To resolve such an issue what measures should be taken and what are the implications of these measures? To this a senior level employee said ‘ensuring vendor lock delivery documentation and no IPW with vendor for own products. Vendors should deliver technology that is asked for. Dividing services among vendors so that monopoly is not created’

**Findings**

The HR or learning and development departments along with the senior management of the company have the responsibility to build training programs, build processes for IP creation etc. and encourage the middle level employees to innovate by giving rewards and recognition. In order to avoid conflicts, there should be proper terms and conditions specified in the contract when it comes to deliverables including expected level of innovation.

**Infra1** looks at cultural differences as an added advantage when it comes to connecting between organisations as the merger of cultures helps build stronger long term business association. In a multi-source environment, in order to ensure that the multiple vendors are working in sync with client’s business strategies, it is essential that they communicate effectively. Since telecom operators outsource responsibility of managing entire telecom network to a single company like **Infra1**, the relationship must be strategic in nature and both client and vendor work as partners.

**4.1.6 Case Study – ITS1**

**ITS1** offers innovative and customer-centric information technology services and solutions that enable Enterprises, Associates and the Society to Rise. **ITS1** is a USD 3.4 billion company with 95,300+ professionals across 51 countries, providing services to 649 global customers including Fortune 500 companies. The company offers Consulting, Enterprise and Telecom solutions, platforms and reusable assets connect across a number of technologies to deliver tangible business value to various industry sectors.
**ITS1** is a part of the USD 16.5 billion conglomerate that employs more than 180,000 people in over 100 countries. The Group operates in the key industries that drive economic growth, enjoying a leadership position in tractors, utility vehicles, after-market, information technology, and vacation ownership.

**ITS1** aims to be among the top three leaders in each of the chosen market segments while fostering innovation and inclusion. The company claims to achieve top quartile growth by contributing to customers' success, by enabling employees to realize their potential and by creating value for all stakeholders.

**Innovation**

**ITS1** is a major service provider to telecom operators globally. The services provided are primarily governed by the terms and conditions signed by the client and **ITS1** teams. Most senior and middle management professionals who were interviewed at **ITS1** mentioned that teams at **ITS1** always try to exceed level of services as stipulated in the contract. As far as innovations in the outsourced goods and services are concerned, the primary reservation expressed was sharing of information from the client side. The senior management may consider **ITS1** as a strategic partner but it rarely trickles down in action at the middle level and operational staff. The teams on the client side perceive us threat to their jobs hence the level of collaboration is limited.

Ownership of intellectual property rights was discussed with the professionals at **ITS1** as it is related to rewards and motivation for innovations. A senior executive did agree that it is a sticky issue between clients and vendors and commented, ‘This is based on a fair system right now but this requires to be defined for better innovations. The quantification on innovation on business can be done using certain stretch targets on KPIs apart from regular SLA targets’. He also commented that, ‘There is no fair system in place currently. Ideally, the IP rights should be shared’.

Another senior executive was concerned that clients always want total ownership for the IP that is created while working on their contracts. He commented, ‘This is on case by case basis. We have largely observed that our customers like to have all the IP solely owned by them even in case of outsourcing/partnered developmental works. In very rare cases, customers are willing to share the IP with us in disclosures’.
Innovations need strong collaboration so that new solutions or improvements in processes could be in sync with the business strategy. The senior and middle level management at ITS1 categorically expressed that teams are constantly innovating but they face strong resistance for acceptance from client teams for implementation and issues get escalated which further deteriorates the environment. ITS1 teams bring out innovations in reducing the operational cost and managing projects more effectively on their own side as they are also constantly under the pressure to reduce cost of operation for improving margins and profitability.

**Contract Formulation**

Most professionals interviewed expressed concerns about the formulation of the contract although contracts are discussed in details before they are signed. Professionals in the middle level management were not happy as they believe that there is a serious disconnect between the thinking of the senior management and issues involved in implementation at the middle level or at the operational level. They also expressed their discontent at the process of defining service level agreements in the contract as client teams tend to be excessively aggressive in defining these agreements and expectations to be delivered. Several times these are never delivered by the internal teams in the past when the processes or goods were managed in-house.

Contracts are primarily focusing on cost reduction and meeting service level agreements. Although some did mention that clients have started adding clauses related to level of innovation expected but adequate funds are not allocated and also the level of freedom that is required to create innovations is rarely provided. The result is, teams are mostly busy in fire fighting and rarely brainstorm for improving goods and services. Some professionals even mentioned that there is more stress given on mechanism of escalation or legal process in the contract than innovations.

**Collaboration and Cooperation**

ITS1 is working with number of clients globally, in some cases entire contract is with ITS1 while in other cases ITS1 teams are working with other service providers. In either case, the management at ITS1 firmly believes that collaboration and cooperation among teams is important. The management defines intra and inter teams collaboration and in both cases and
the professionals discussed what is expected from the management. There are several issues related to creating collaborative environment as discussed before but all the interviewees agreed that high level of trust is required. Information sharing among teams is important for collaborative work irrespective of affiliations. Information sharing is better at the senior or middle level management while it is a challenge at the operational level.

**ITS1** teams are working in a multisourced environment for some of the clients. Teams affiliated to service providers do not always work in a transparent way and some professionals even agreed to the fact that due to strong rivalry among them, failure in delivering end to end services happens due to non-cooperation of certain teams in the group. Clients sign contracts with multiple service providers as each service provider has a niche in certain domain but the element of uncertainty always exists at the time of renewal of the contract. **ITS1** management shared that they always exceed customer expectations and go beyond that what is signed in the contract. This is also true for creating innovative solutions. There are levels of escalations in the team and in the organization but the operational teams at **ITS1** always try to resolve issues at their level.

**Strategic Partnership**

As outsourcing continues to evolve and expand new working models are emerging. Some of these working models include setting up of an off shore development centre (ODC), dedicated development centre (DDC), joint ventures, and build-operate-transfer (BOT) centre. As discussed in the previous chapters form of relationship between client and vendor is driven by multiple factors such as duration of the contract, supply market risk, and nature of skills and competencies sourced from vendor. Strategic partnership is the preferred model as earlier models were primarily for providing cost savings. Cost structure has also changed over a period of time as salaries have gone up almost neutralizing cost advantage that was offered earlier. Clients are sourcing services from external vendors for getting access to niche set of skills and competencies, sharing risks and rewards, having better flexibility and control in managing projects, and focusing on the core line of business. This all translates into creating strategic partnerships with multiple vendors. The senior management at **ITS1** firmly believes in this.

A strategic partner is expected to perform and deliver goods and services that are in sync with the business strategy of the client. This implies that vendor and client teams must have joint
strategy meetings. The senior and middle management professionals at ITS1 opined that this
does not happen very often and there are strong reservations on the part of client management
to share business strategies with vendors. Operational staff complained that they don’t even
understand or know what client’s business strategy is as they are mostly busy in reactive
mode of working and rarely proactive. There was a strong opinion that everything is driven
by contract terms and conditions.

Enhance Competitive Position

Outsourcing has created a level playing field for companies so companies who remain
competitive, innovative, and agile will stay ahead of the curve. Clients are expecting that
vendors to help them in achieving this. Competitive position could be enhanced by improving
internal processes, designing and delivering innovative products/services at affordable price
points for the end users, partnering with creative and agile companies, and implementing
collaborative working models conducive for creating innovations. The team at ITS1 believes
that every contract is an opportunity for them to prove their worth and for helping their client
to be successful. That only will ensure continued business and renewed contracts. Middle
level and operational teams take an extra effort for understanding client processes and
provide process reengineering solutions.

Senior professionals at ITS1 also shared that they have started insisting clients to have
provisions in the contract that will promote value addition by employees on both sides. Some
of these are rewards and recognition programs, supporting patenting process, providing
employees visibility to the management, and offering challenging tasks. Most senior
executives expressed that, “The IPR should be co-owned’, ‘IPR are driven by from what is
signed up with the customer and extend the same to vendor partners. Neither clients nor
vendors pay any royalty”. From these comments and other observations, it seems IPR is a
serious issue for enhancing level of innovations in outsourced contracts.

Findings

ITS1 management prefers to establish strategic partnership with clients and believes that
mutual win-win relationship is created out of this partnership. The team also believes that
innovations must be an integral part of contract as well as deliverable from the vendor. Since
clients depend on sourcing organizations for value addition beyond just the cost savings,
environment must be collaborative and conducive for cooperation. **ITS1** middle level managers are not happy with the level of their engagement while contracts are formulated.

### 4.1.7 Summary of Case Studies

It is obvious from the opinions expressed by the professionals that strategic partnership is the most preferred working relationship between client and vendors. Even though this is desirable, clients in their own interest will decide on the type of relationship based on the supplier market risk. Vendors expect joint ownership and sharing of benefits created by the IP during the contract period. Most professionals in client organizations disagree with this hence it could be a potential irritant in the relationship as well as act as a demotivating factor for vendor teams to be innovative. Almost all the clients agree that multisourcing is the right strategy and that will eliminate possibility of vendor lock at the time of renewal of contracts. Another important discussion on contract formulation revealed that quantification methods for innovations do not exist and contracts are primarily SLAs based. All the professionals strongly believe that collaboration and cooperation is a must in multisourced environment.

Middle level manager expressed their lack of involvement in the initial stages of the decision making process for outsourcing goods and services. They are usually on the receiving end for the execution and implementation of the terms and conditions in the contract. They strongly believe that middle level management and operational staff must be part of the team for contract formulation. Innovation must be an integral part of the contract and must be adequately funded and supported by the senior management. Operational level staff must be provided with adequate amount of training on creation of intellectual property, documentation related to the process of patenting, and cultural sensitivities. It was noted that all of them agree that cultural differences and communication practices do have impact in the overall execution of the contract in a multisourced environment. An environment must be created for high level of trust among all the teams.

Senior and middle level professionals expressed that outsourcing does create level plain field for all the companies hence innovations become critical for clients to stay ahead of the curve and be competitive. Vendors working on outsourced contracts do enhance competitive position of clients in many ways such as shrinking product and services design cycle, making clients more agile, saving cost hence investments could be made in new and upcoming areas in technology, and enter in new markets by working with vendors globally.
4.2 Perspective of Management on Innovations in Outsourcing

The decision of outsourcing products/services has impacts at various levels in an organization and precisely due to that reason; three separate questionnaires were prepared targeting each level of employees separately. There are different issues and concerns at each level in an organization from the concept stage till the execution of the contract. The survey was conducted in targeted companies such as telecom operators, telecom infrastructure providers, and IT services companies. The responses from these respondents were compiled and graphical representation is prepared for all the questions under each parameter.

4.2.1 Perspective of Senior Management on Outsourcing

Outsourcing is a highly strategic decision which has potential repercussions across the organization. Sourcing products/services from various suppliers has enabled executives to focus on core line of business, improve profitability and efficiency of the operation, and become more competitive. The parameters selected for conducting survey for seeking information from senior executives in various companies are, strategic partnership, flexibility and management control, Innovations, enhance competitive position, technology catalyst, and value addition. These parameters impact level of innovations in an organization which enables to enhance competitive position. The collected data is analysed and the results are discussed.

Strategic Partnership

Increasing number of companies is forming strategic relationship with their vendors. Although the contracts are for much shorter duration than what they used to be few years ago and clients are sourcing products/services from multiple vendors, there are certain vendors who are considered as strategic by the management. Clients are looking at partners to participate in business strategy, future expansion, entry in new markets, revenue enhancements, resource management, and many other areas in an operation. Mostly senior management is involved in these decisions hence several questions were posed to them related to creating strategic partnership with vendors in outsourcing.
<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there information security concerns as the same vendor manages the</td>
<td>3</td>
<td>44</td>
<td>11</td>
<td>33</td>
<td>8</td>
</tr>
<tr>
<td>network and processes for many competing operators as well?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you expecting your vendor partner to invest in the operation and</td>
<td>43</td>
<td>43</td>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>also share risks with you?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you believe that having strategic partnerships with multiple vendors</td>
<td>28</td>
<td>50</td>
<td>6</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>in a multisourcing environment would be advisable for collaborative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>innovations?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vendors can develop best practices and use them for all the clients</td>
<td>14</td>
<td>36</td>
<td>17</td>
<td>33</td>
<td>0</td>
</tr>
<tr>
<td>globally. There is no need to have an exclusive strategic partnership.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 4.1 Responses for Strategic Partnership

**Figure 4.1: Response for ‘Strategic Partnership’**

- **Strongly Agree**
  - 3
  - 43
  - 28
  - 14

- **Agree**
  - 44
  - 43
  - 50

- **Neither Agree nor Disagree**
  - 11
  - 6
  - 6
  - 17

- **Disagree**
  - 33
  - 6
  - 17

- **Strongly Disagree**
  - 8
  - 3
  - 0
  - 0

- Are there information security concerns as the same vendor manages the network and processes for many competing operators as well?
- Are you expecting your vendor partner to invest in the operation and also share risks with you?
- Do you believe that having strategic partnerships with multiple vendors in a multisourcing environment would be advisable for collaborative innovations?
- Vendors can develop best practices and use them for all the clients globally. There is no need to have an exclusive strategic partnership.
The responses to the questions under ‘Strategic Partnership’ are tabulated in the Table 4.1 while the graphical representation is presented in Figure 4.1. The numbers in the Table 4.1 are expressed in terms of percentage of responses for each question. It is observed from Figure 4.1 that information security continues to be a major concern for almost half of the respondents. This could be due to several reasons such as vendors working with multiple clients including competitors. In case of strategic relationship between the client and vendor almost 90% respondents expect vendors to invest with client. Clients expect vendors to invest in building capacity and the talent pool which vendors could tap into. Large numbers of clients have started multisourcing while several of them earlier had contracts with single vendors. While clients are working with multiple vendors, the challenge or the critical decision for clients is to either have strategic relationship with a single vendor or to have strategic relationship with every vendor in a multisourced environment. Almost 80% respondents believe that clients can have strategic relationship with multiple vendors. Each vendor is expected to develop best practices which will mutually help both parties in optimizing the outcomes; this must happen irrespective of client having strategic relationship.

It is noted from the data in Figure 1 that respondents are split in their opinion although there seems to be an opinion that supports earlier argument that clients don’t need to have strategic relationship with vendors to develop best practices to be used for multiple clients.

When senior management takes certain strategic decisions such as outsourcing, certain level of restructuring is expected to happen and which may impact few employees. Attrition is one such thing that is always taken into account as it is expected that few employees will leave the company. The senior management must have a mitigation plan to constrain attrition to the acceptable levels. It is the responsibility of the organization to define new roles and responsibilities for the employees who will be part of restructured client team. Selection of vendor(s) must be through an exhaustive process by taking into account supplier risk, market risk, internal competencies, vendor track record, vendor organization, and ensuring that employees will find a proper fit in the vendor organization.

Employees also realize that they have better opportunities with the vendor organization as their role in the client organization has limited scope for growth. The client organization may be highly non-technical while vendor organization will be highly technology focused and will work with clients globally. This creates more diverse opportunities for employees to build their careers.
Every organization has strategies at the business level which translates down to operational plans at business unit’s level. These plans are primarily focused on expansion and growth of the business, entry in new markets, product development, marketing plans, etc. Outsourcing most times is driven by such strategy and plans. Client does not need to share all the strategies and plans with the vendor organization for ensuring that vendor team’s deliverables are in sync with either business strategies or functional level plans. If the IT management is outsourced then vendor organization must ensure that deliverables are in sync with functional level plans for the core functions in the company.

**Flexibility and Management Control**

Flexibility in managing projects, designing and developing products/services, managing resource are some of the important controls required by managers for effectively managing projects. Sometimes it could be difficult to have level of desired flexibility due to several internal and external factors. Vendors do provide this while working with clients. Most vendors have designed global delivery models and provide control on the execution of the contract during various stages in the implementation. The responses to the questions under ‘Flexibility and Management Control’ are tabulated in the Table 4.2 while the graphical representation is presented in Figure 4.2. The numbers in the Table 4.2 are expressed in terms of percentage of responses for each question.
### Table 4.2 Response for Questions on Flexibility and Management Control

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is having flexibility in control of projects one of key factors in your decision on outsourcing?</td>
<td>17</td>
<td>56</td>
<td>11</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Do you think total outsourcing will take away flexibility in control?</td>
<td>17</td>
<td>19</td>
<td>11</td>
<td>47</td>
<td>6</td>
</tr>
<tr>
<td>Management likes to have control upon resourcing, skill building, delivery timelines, operational expenses, etc.</td>
<td>20</td>
<td>60</td>
<td>11</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Vendors who manage IT and other outsourced projects provide better alignment with business strategy than the internal teams.</td>
<td>8</td>
<td>19</td>
<td>44</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>Are you concerned that you may not actually have the desired level of control over a contract period and the vendor might exploit you down the road?</td>
<td>6</td>
<td>20</td>
<td>9</td>
<td>57</td>
<td>9</td>
</tr>
</tbody>
</table>
Figure 4.2 Responses for Flexibility and Better Management Control

**Figure 4.2: Response for ‘Flexibility and Better Management Control’**

- **Strongly Agree**
  - 17
  - 17
  - 20
  - 8
  - 6

- **Agree**
  - 56
  - 60
  - 19
  - 19
  - 20

- **Neither Agree nor Disagree**
  - 11
  - 11
  - 11
  - 9

- **Disagree**
  - 17
  - 47
  - 25
  - 6

- **Strongly Disagree**
  - 0
  - 6
  - 3
  - 3
  - 9

- Is having flexibility in control of projects one of key factors in your decision on outsourcing?
- Do you think total outsourcing will take away flexibility in control?
- Management likes to have control upon resourcing, skill building, delivery timelines, operational expenses, etc.
- Vendors who manage IT and other outsourced projects provide better alignment with business strategy than the internal teams.
Another important key driver for clients to outsource products/services has been achieving flexibility in managing as well as having better control. Companies are expected to be agile and respond much faster to the business dynamics. If internal structure or processes do not provide the level of flexibility required to respond to the changes then obviously working with an external vendor would always be preferred. Management needs flexibility for building up required skills and competencies, quick resource ramp and ramp down, delivery timelines, and access to infrastructure.

In Figure 4.2, an overwhelming number of respondents support the argument that outsourced projects provide better level of flexibility to management. While this is a positive indicator, there is a concern that the vendor might try to take control of the outsourced project and try to exploit at a later stage. Most respondents disagree strongly suggesting it is a collaborative relationship for mutual win-win. It is always discussed that vendors might exploit clients but the data clearly shows disagreement as clients don’t believe that exploitation will occur in a collaborative environment.

**Innovation**

Innovations could be the ones which provide incremental improvement in the existing products/services or a paradigm shift. It is a business imperative to have innovations for companies to stay ahead of the curve. As outsourcing continues to increase and more companies outsource non-core functions, it is creating a level plain field for the players. In such a scenario, companies must nurture culture for innovation, enhance awareness about creation of intellectual property among employees, set up processes and procedures that will encourage employees to innovate, and recognize and reward employees.

Several questions were asked to respondents regarding above points. Since the environment is of multiple vendors and contracts are for shorter duration it is to be investigated if outsourced projects are creating innovations. Contracts are primarily focusing on meeting service level agreements (SLA) hence employees on both sides; client and vendor are busy in day to day operations. The responses to the questions under ‘Innovation’ are tabulated in the Table 4.3 while the graphical representation is presented in Figure 4.3. The numbers in the Table 4.3 are expressed in terms of percentage of responses for each question.
Table 4.3 Responses for Questions on Innovation

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovations are created during the implementation phase of outsourced contract.</td>
<td>11</td>
<td>42</td>
<td>22</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Clients consider innovation as the key driving force for the execution of their contract and overall business.</td>
<td>17</td>
<td>69</td>
<td>6</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>It is noted in published research that not much innovation happens in outsourced contracts.</td>
<td>6</td>
<td>25</td>
<td>36</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>Senior Management should be responsible to help employees know the benefits of innovation.</td>
<td>53</td>
<td>44</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>It is noted that most of the employees in a company are not aware of the process of innovation and the process to capitalize innovations by filing for patents.</td>
<td>17</td>
<td>56</td>
<td>19</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Clients must have adequate rewards and recognition programs for internal employees and vendor for being innovative at all levels.</td>
<td>56</td>
<td>39</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Since Innovations in outsourced contracts is critical, it is used as an important metric in the selection of a vendor.</td>
<td>11</td>
<td>72</td>
<td>11</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Innovations could be improvements at operational level, process related, products or service enhancements, and business related.</td>
<td>50</td>
<td>44</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 4.3: Response for ‘Innovations’

- Innovations are created during the implementation phase of outsourced contract.
- Clients consider innovation as the key driving force for the execution of their contract and overall business.
- It is noted in published research that not much innovation happens in outsourced contracts.
- Senior Management should be responsible to help employees know the benefits of innovation.
- It is noted that most of the employees in a company are not aware of the process of innovation and the process to capitalize innovations by filing for patents.
- Clients must have adequate rewards and recognition programs for internal employees and vendor for being innovative at all levels.
- Since Innovations in outsourced contracts is critical, it is used as an important metric in the selection of a vendor.
- Innovations could be improvements at operational level, process related, products or service enhancements, and business related.
Outsourcing has been increasing across all industry verticals in past couple of decades. Escalating operational and capital expenses continues to be a primary concern for the management hence outsourcing non-core processes or functions helps in controlling these expenses. While similar strategies are adopted by most companies, companies need to be innovative to maintain competitive edge. Level of innovations must be high in companies as that only will provide a differentiator. One of the key drivers for outsourcing as per the data is clients expect high level of innovations in products/services that are outsourced.

Innovations must happen at all levels with close collaborations between the vendors and clients. The data reveals that employees are aware of the processes for innovation. It is imperative for the management to policies to reward and recognize innovations by employees on sides, client and the vendor. Figure 4.3 shows almost unanimous opinion in this regard.

Companies expect innovations to happen during the execution stage of the contracts while most contracts are primarily driven by meeting SLAs. An interesting observation is made in Figure 4.3 that majority of respondents don’t believe that the level of innovations in outsourced contracts is low while opposite is observed.

Intellectual Property (IP) created from innovations could be vendor created, client created or jointly created. IP creation and ownership must be clearly defined in the contract since that is the document mutually agreed upon and signed by both the parties. Ownership of IP is an extremely important element in the contract and for promoting creation of IP.

Other important issue that needs attention is how to quantify IP. This also needs to be defined in the contract by defining key performance indicators (KPI), tools used for performance measurement, bench marks used, etc. Some of the KPIs could be improvement in products/services, reduction of customer churn, reduction in efforts, reduction in wastage, reduction in revenue leakage, and shrinking of design cycle time.

Most innovations may happen during the execution phase of the contract. Vendors may have created certain innovations while working on projects in the past, these could be useful for present clients as well. In such case, the issue of ownership of IP does not arise at all as it is owned by vendors. If these innovations have helped in bringing improvement in the current projects then clients must discuss benefits sharing arrangement with vendors.
**Enhance Competitive Position**

Companies can enhance competitive position by reducing cost of operation and investing more in research and development. Customer experience is the most important indicator of how well products/services are received by end users. Improvements in processes, enhanced customer base, offering products/services at competitive prices, and introducing newer products which have proper evolution path are some of the factors that enhance competitive position of the company.

Clients expect to enhance their competitive position in the market place by partnering with their vendors. Vendors must collaborate and work with each other for delivering end to end service to clients. Clients and vendors must ensure that their respective teams are properly integrated. The responses to the questions under ‘Enhance Competitive Position’ are tabulated in the Table 4.4 while the graphical representation is presented in Figure 4.4. The numbers in the Table 4.4 are expressed in terms of percentage of responses for each question.

Figure 4.4 displays the data related to enhancing the competitive position of the client by outsourcing products/services. Overwhelming number of respondents, almost 90 percent, believe that outsourcing helps company in being highly agile and reduce or shorten design cycles by providing access to niche skills faster and better control on projects. Clients also believe that outsourcing helps in focusing more on core functions or process hence resource utilization could be optimized.

It is noted that almost equal number of respondents claim that information security or leakage of sensitive information on the projects is either a concern or otherwise. This may be explained by the fact that over the years vendors have matured internal processes and have installed proper checks and balances for
Table 4.4 Response for Questions on Enhance Competitive Position

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outsourcing provides cost savings, access to special skills and competencies, shortened design cycle, and better control on projects. This helps companies in becoming more agile and efficient.</td>
<td>36</td>
<td>53</td>
<td>8</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Companies continue to outsource most of the non-core and core services because then resources are more effectively utilized.</td>
<td>31</td>
<td>60</td>
<td>3</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Many vendors work with your competitors. Is it concerning that some of the important data could be leaked to your competitors?</td>
<td>6</td>
<td>42</td>
<td>22</td>
<td>31</td>
<td>0</td>
</tr>
<tr>
<td>Outsourcing creates low competency in house, which leads to higher switching costs and vendor lock situations.</td>
<td>11</td>
<td>50</td>
<td>14</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>Research indicates that outsourcing decision should not be driven by a single factor of reducing operational cost. It is all about competencies whether to build them internally or to hire them.</td>
<td>43</td>
<td>54</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Research indicates that outsourcing decision should not be driven by a single factor of reducing operational cost. It is all about competencies whether to build them internally or to hire them.</td>
<td>46</td>
<td>46</td>
<td>3</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>It is imperative that vendors understand the strategic depth in business in creating differentiation to maintain competitive advantage for clients.</td>
<td>46</td>
<td>46</td>
<td>6</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
Outsourcing provides cost savings, access to special skills and competencies, shortened design cycle, and better control on projects. This helps companies in becoming more agile and efficient.

Companies continue to outsource most of the non-core and core services because then resources are more effectively utilized.

Many vendors work with your competitors. Is it concerning that some of the important data could be leaked to your competitors?

Outsourcing creates low competency in house, which leads to higher switching costs and vendor lock situations.

Research indicates that outsourcing decision should not be driven by a single factor of reducing operational cost. It is all about competencies whether to build them internally or to hire them.

Research indicates that outsourcing decision should not be driven by a single factor of reducing operational cost. It is all about competencies whether to build them internally or to hire them.

It is imperative that vendors understand the strategic depth in business in creating differentiation to maintain competitive advantage for clients.
Ensuring that projects related information handled in the best interest of clients. Outsourcing products/services does impact adversely in-house skills and competencies over a period of time as vendors build them for providing services to clients. If it is noted that the vendor is not delivering services at expected quality levels then the options left for a client are either switching the vendor or bringing products/services in-house. The decision of switching services in-house is not very easy due to loss of skills and competencies lost over a period of time and time and investments required to rebuild them internally. While this is true, a large majority believes that one of the key drivers for outsourcing is quick access to required skills and competencies instead of building them internally.

Vendors must understand that clients have outsourced products/services not simply to reduce operational cost but also to help them maintaining competitive edge in a competitive space. It is likely that vendor may be working for companies who are competitors and that is precisely a challenge to vendors in providing innovations so that clients maintain competitive edge.

There are new trends in outsourcing as earlier contracts were signed with a single vendor and the duration used to be 8-10 years. This is changing as the new contracts are signed with multiple vendors and be of shorter duration. This helps in avoiding vendor lock and also ensures that all the vendors remain competitive and deliver value to clients. There are varied opinions when this question was asked to respondents.

Some believe that vendor lock must be addressed through terms and conditions in the contract while some believe that client should not allow vendors to use specific hardware or software that vendor has developed instead use open source and open platform. Interestingly, few opined that client should not outsource core processes and competencies while the new trend suggests otherwise. It was also expressed that client must retain process building and control and technology in-house and only outsource activities for which SLAs are clearly defined. In such contracts even if innovations are recognized and awarded, the primary focus will remain on simply meeting SLAs. Vendor lock prevents smooth hand off or knowledge transfer forcing client to stay with the same vendor even if the performance of the vendor is below expectations.

Since there are multiple vendors offering services at competitive prices, vendor would do everything to get contract extended or expanded. Usually vendor lock may prevent client in
switching to another vendor or to bring processes in-house. In both the cases the investment and cost may be prohibitive and vendor will exploit it.

**Technology Catalyst**

It is observed many times that employees pose resistance for change. Improvements in processes are brought by using increased level of automation and use of IT tools. The IT departments have responsibility of ensuring that proper tools and technology is provided for business processes. If services are outsourced, vendor teams provide necessary change and act as technology catalyst. Either due to insecurity or lack of adaptability for newer technologies internal employees resist changes but vendors may be successful in bringing out that change. The responses to the questions under ‘Technology Catalyst’ are tabulated in the Table 4.5 while the graphical representation is presented in Figure 4.5. The numbers in the Table 4.5 are expressed in terms of percentage of responses for each question.

It is noted in the published research and also in practice that IT teams functional and operational plans are not in sync with the business strategy and year on year operational as well as capital expenses continue to increase while the ROI on IT investment is far less than expectation. The response from the survey as shown in Figure 4.5 seems to indicate otherwise hence it could be argued that there is disconnect between what senior level management and IT teams.

Similarly management believes that outsourcing products/services is not creating ‘hollow corporations’. If this were the case then switching cost should not be an issue for switching services in-house. In case of telecom operators, almost all the services, functions, and processes are outsourced except brand management and marketing.
<table>
<thead>
<tr>
<th><strong>Table 4.5: Responses for questions on 'Technology Catalyst'</strong></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outsourcing is an option available only if Internal IT teams are not able to provide cost effective and better solutions to their company.</td>
<td>0</td>
<td>28</td>
<td>11</td>
<td>44</td>
<td>17</td>
</tr>
<tr>
<td>It is noted in research that a serious disconnect exists between the IT spend, ROI, and IT alignment with business strategy.</td>
<td>3</td>
<td>45</td>
<td>24</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>Excessive (non-core and some core services) outsourcing is making companies as ‘hollow corporations’ with hardly any core competencies in-house.</td>
<td>6</td>
<td>25</td>
<td>28</td>
<td>39</td>
<td>3</td>
</tr>
<tr>
<td>In a multisourcing environment cooperation and collaboration is imperative. Multisourcing may potentially impact end to end delivery and innovations adversely.</td>
<td>6</td>
<td>39</td>
<td>31</td>
<td>25</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 4.5 Response for Technology catalyst

Figure 4.5: Response for ‘Technology Catalyst’

- Outsourcing is an option available only if internal IT teams are not able to provide cost-effective and better solutions to their company.

- It is noted in research that a serious disconnect exists between the IT spend, ROI, and IT alignment with business strategy.

- Excessive (non-core and some core services) outsourcing is making companies as 'hollow corporations' with hardly any core competencies in-house.

- In a multisourcing environment cooperation and collaboration is imperative. Multisourcing may potentially impact end-to-end delivery and innovations adversely.
There seems to be an agreement that clients do believe that it is a challenge to have a collaborative working among multiple vendors and also creating innovations in products/services that are outsourced. There could be several reasons for that such as competition among multiple vendors, insecurity of renewal of contracts, lack of information sharing among vendors, and lack of accountability for end to end solution.

**Value Addition**

As outsourcing has evolved over the years and client’s expectations have changed from vendors, a clear value addition is a must from vendors during the execution of the contract. As vendors learn from the existing processes and services, it is expected that vendor teams will actively participate in designing and developing new products/services.

Relationship with vendors is highly strategic in nature hence deliverables from vendors are expected to be in sync with the strategy. Many times, value addition could be in the form of enhancing predictability in the decision making process of the management. This can happen when strict timelines are met by the vendors and high quality outcome is provided. The responses to the questions under ‘Value Addition’ are tabulated in the Table 4.6 while the graphical representation is presented in Figure 4.6. The numbers in the Table 4.6 are expressed in terms of percentage of responses for each question.

Reduction in operational cost has been one of the key drivers in outsourcing for years but the cost arbitrage is disappearing fast as salary structures are changing. This definitely has been the case for Indian IT companies who are providing services. Over a past decade or so, clients have realized this change but outsourcing continues hence clients expect clear value addition in terms of innovations, risk sharing, investments from vendors and access to niche set of skills and competencies.

Figure 4.6 data reinforces client’s expectations as almost 90% respondents claim that they expect clear value addition beyond savings in cost from outsourced contracts. It is noted earlier in the discussion that clients face several difficulties in collaborative working in multisourced environment but the Figure 4.6 shows contradictory statement in the form that clients are neither for nor against multisourcing. There is one very positive and encouraging observation that can be made from Figure 4.6 that most clients are
Table 4.6 Response for Questions on Value Addition

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outsourcing is highly competitive hence vendors are expected to be innovative and add substantial value to clients.</td>
<td>47</td>
<td>42</td>
<td>8</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Value addition would be limited while working with a single vendor as against multiple vendors.</td>
<td>11</td>
<td>31</td>
<td>25</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>Is the organization willing or ready to allow participation of vendors in your strategy discussions so that they can understand business strategy and add value during contract implementation.</td>
<td>22</td>
<td>64</td>
<td>8</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 4.6 Responses for Questions on Value Addition

Figure 4.6: Response for ‘Value Addition’

- Outsourcing is highly competitive hence vendors are expected to be innovative and add substantial value to clients.

- Value addition would be limited while working with a single vendor as against multiple vendors.

- Is the organization willing or ready to allow participation of vendors in your strategy discussions so that they can understand business strategy and add value during contract implementation.
Willing to allow vendors to participate in their strategy meetings so that they also know clients business strategy and how they can contribute value in outsourced contracts that will be in sync with the strategy. The concern here may be again is the leakage of information.

4.2.2 Perspective of Middle Management on Outsourcing

Perspective of middle level managers in the entire process of outsourcing and contract execution phase is important to know. The research indicates that middle level managers are usually not part of the process of outsourcing decision which later creates problems in the execution stage. Similar is the case with the operational level staff as well. Middle level managers work with operational staff during execution stage and report progress to senior managers.

The focus of this entire investigation is to understand level of innovation in the outsourced products/services. Hence the factors selected are, Collaboration and Cooperation, Contract Formulation, Environment and Awareness for Innovations, Working Model, Resistance For Change, Skills and Competencies. The implementation of the contract is based on the terms and conditions signed by the both parties. The middle level management is usually tasked to ensure that rest of the organization follows the strategic direction provided by the senior management while operational staff works closely with vendors for delivering the agreements mutually agreed upon in the contract. The middle management must ensure that employees are aware of expected level of innovations from them, have awareness about creation of intellectual property and the processes and policies to govern them. It is also observed that employees may provide resistance for change as outsourcing creates a level of insecurity about jobs and this may have adverse impact in creation of innovations in products/services.

Collaboration and Cooperation

As the trend in outsourcing contract continues to be of shorter duration with multiple vendors, it is imperative that vendors collaborate and cooperate with client teams. Innovations are not the responsibility of vendor teams alone; both client and vendor teams need to work together closely. Since there are multiple vendors for the same client, it is likely that they might compete against each other instead of collaborating. This may be because of the insecurity of getting contract extension or getting contract expanded with new products/services added in the contract. Similarly information sharing could be a challenge
without which collaboration may not be possible. Vendor teams are expected to work together for delivering end to end service although pieces or parts may have been outsourced to different vendor teams. The responses to the questions under ‘Collaboration and Cooperation’ are tabulated in the Table 4.7 while the graphical representation is presented in Figure 4.7. The numbers in the Table 4.7 are expressed in terms of percentage of responses for each question.

In Figure 4.7 it is noted that all the respondents are totally unanimous in their opinion that client management needs to create positive environment which is highly transparent for all the teams so that teams feel to be part of the process. Similarly teams must trust each other because if they don’t trust each other and do not collaborate with each other, total end to end delivery of services will be impacted and eventually the client may not renew or extend the contract.

The middle management members must take operational staff as well as senior management in confidence to ensure that deliverables are met along with timelines while senior management gets a periodic dashboard showing expected results in outsourced contracts. Client teams also must take peer teams in confidence on the vendor side.

Culture and communication do play a vital role in collaboration. Teams with diverse backgrounds from various companies work in a collaborative environment for delivering an end to end solution to the client. So culture and communication need to be addressed in two ways, one when vendor teams have diverse backgrounds and other is when vendor has employees of diverse background in the same team.
### Table 4.7: Responses for questions on ‘Collaboration and Cooperation’

<table>
<thead>
<tr>
<th>Response</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client and vendor have to be closely associated to create solutions of highest standard.</td>
<td>77</td>
<td>23</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>There should be more trust and transparency in information sharing to be created by client among teams.</td>
<td>65</td>
<td>35</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>In a multisourced environment, many vendors have to work in sync to meet the overall objective and goal of the organization.</td>
<td>62</td>
<td>38</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>High level of trust is extremely essential for multisource environment. Uncertainty, competitive positioning, etc are factors that have diverse impact on building high level of trust amongst teams.</td>
<td>48</td>
<td>52</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 4.7: Response for ‘Collaboration and Cooperation’

- Strongly Agree: 77
- Agree: 65
- Neither Agree nor Disagree: 62
- Disagree: 48
- Strongly Disagree: 23

Client and vendor have to be closely associated to create solutions of highest standard.

There should be more trust and transparency in information sharing to be created by client among teams.

In a multisourced environment, many vendors have to work in sync to meet the overall objective and goal of the organization.

High level of trust is extremely essential for multisource environment. Uncertainty, competitive positioning, etc are factors that have diverse impact on building high level of trust amongst teams.
In case both of these scenarios impacts will be different. Vendor is expected to manage internal teams but what is critical for collaboration is managing inter vendor teams with diverse cultural background and also geographical locations. At any given time, it is likely that vendor teams could be located in different parts of the world in different time zones and that brings yet another element that needs to be managed. It is observed that Western culture is highly individualistic while Asian culture is more team oriented hence results are presented like wise and it also gets reflected in collaboration or lack of it.

Communication is equally important. Proper communication at right time can solve many problems and eliminate unnecessary misunderstandings hence escalations resulting from that. Communication messages are different at different levels in the organization as communication can happen at peer level, from senior level to rest of the organization, and inter vendor teams at these levels. Cultural differences can be handled by effective communication. Most problems could be resolved by simply people communicating with each other and that drives collaboration.

**Contract Formulation**

Contract formulation is one of the most critical tasks in outsourcing. Multiple teams such as finance, IT, process, customer support, supply chain, and legal are involved in this task. Each team contributes various sections in the contract formulation. Every contract contains service level agreements (SLA) to be met by the vendors.

Contracts also have sections dedicated for expected level of innovation from the vendors. In case multiple vendors are involved, contract formulation is even more critical. Each vendor must have clearly defined deliverables and they must be broken down and integrated properly so that SLAs can be met for end to end delivery of the service. The contract must have legal clauses to provide guidelines in case the situations could not be resolved between the client and vendor teams even after they are escalated to the senior management. The contract needs to spell out all the payment terms and conditions but most importantly it must have commitment for promoting and recognizing innovations created by vendor teams as well as client teams.

As global teams are involved in the execution of the projects, contracts need to take into consideration proper jurisdiction in case litigations are to be filed in the court of law for
resolution of conflicts. The responses to the questions under ‘Contract Formulation’ are tabulated in the Table 4.8 while the graphical representation is presented in Figure 4.8. The numbers in the Table 4.8 are expressed in terms of percentage of responses for each question.

Figure 4.8 indicates that members in the middle management must be taken into confidence and must be part of the decision making process of outsourcing. Since the focus of this investigation is about innovations created in the outsourced products/services, it is imperative that key sections of the contract specify expectations from vendor teams and also define mechanism through which these contributions would be recognized. Evaluation procedure needs to be set up and needs to be mutually agreed upon as potential results from innovations need be quantified so that benefits could be shared between client and vendor.
Table 4.8 Responses for Questions on Contract Formulation

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>To ensure high level of Quality of Service contracts should not only stress on SLAs but also have flexibility for restructuring the contract for promoting innovation, if needed.</td>
<td>23</td>
<td>42</td>
<td>15</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>Contracts must have clear mention for creating innovations, proper funding, ownership for innovations, and rewards and recognition programs for promoting that type of culture.</td>
<td>20</td>
<td>76</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Middle level managers should be consulted for contract preparation, vendor selection, and defining SLAs.</td>
<td>46</td>
<td>42</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Strategic relationship between vendor and clients have multiple contracts related to SLA’s, innovative solutions, risk and revenue sharing arrangements, etc.</td>
<td>15</td>
<td>62</td>
<td>23</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>There should be proper terms and conditions specified in the contract when it comes to deliverables including expected level of innovation.</td>
<td>50</td>
<td>46</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Contracts should have performance evaluation of IT and innovations from business point of view.</td>
<td>38</td>
<td>54</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>
To ensure high level of Quality of Service contracts should not only stress on SLAs but also have flexibility for restructuring the contract for promoting innovation, if needed.

Contracts must have clear mention for creating innovations, proper funding, ownership for innovations, and rewards and recognition programs for promoting that type of culture.

Middle level managers should be consulted for contract preparation, vendor selection, and defining SLAs.

Strategic relationship between vendor and clients have multiple contracts related to SLA’s, innovative solutions, risk and revenue sharing arrangements, etc.

There should be proper terms and conditions specified in the contract when it comes to deliverables including expected level of innovation.

Contracts should have performance evaluation of IT and innovations from business point of view.
A conducive environment must be created for employees to think beyond the obvious and think out of box so that innovations could be implemented which will provide incremental improvement in the outsourced products/services and also end user experience could be enhanced. Contracts primarily based on SLAs will be prohibitive for vendor teams to think innovatively as their performance will be strictly judged by meeting SLAs. In the Figure 4.8 almost 100 percent respondents believe that contract formulation is the key for promoting innovations.

**Environment and Awareness for Innovations**

The central issue that is of the focus in this research is innovation. As discussed in Chapter 2 on the literature survey, it is noted that the level of innovation is very low in outsourced projects. This is an important issue as given the level plain field to all the companies who are outsourcing products/services, innovations are mandatory to stay competitive. Hence staff members in various companies were questioned about the environment that is available to client and vendor teams for creating innovations and the level of awareness that exists about intellectual property (IP) creation among employees.

For an organization to be innovative, the senior leadership needs to champion it while ensure that middle and operational leadership is adequately supported by planning and organization. In case of outsourced contracts, this commitment must be reflected by investment allocation. Employees must be made aware of importance of creating innovations and the procedures for capturing IP well in time. The responses to the questions under ‘Environment and Awareness for Innovations’ are tabulated in the Table 4.9. The graphical representation is presented in Figure 4.9. The numbers in the Table 4.9 are expressed in terms of percentage of responses for each question.

Figure 4.9 shows that almost 65 percent respondents believe that employees are mostly working in reactive mode which is fighting fire every day and trying to meet SLAs. This means critical staff is well familiar with products/services and in the middle band has no time to think or brainstorm and come up even with incremental level of innovations. Overwhelmingly almost 90 percent believe that it is the responsibility of the client management to create proper environment which will include setting up labs, equipping labs with required hardware and software, providing employees time for brainstorming, and allocating budgets.
<table>
<thead>
<tr>
<th>Response to Questions on ‘Environment and Awareness for Innovations’</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor and Client employees are mostly working in reactive mode and hardly have time and funds to work on next generation of solutions.</td>
<td>27</td>
<td>38</td>
<td>23</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Companies who get outsourced projects needs to invest on creating necessary infrastructure such as proper labs, access to software and hardware, access to literature, etc.</td>
<td>54</td>
<td>35</td>
<td>8</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Companies have to ensure appropriate budgets for innovative solutions which could be awarded for successful ideas to employees.</td>
<td>27</td>
<td>69</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IP that is created can be jointly owned by client and the vendor using revenue sharing model, etc.</td>
<td>23</td>
<td>42</td>
<td>27</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Employees need to be sensitized and trained on IP creation. They must be explained positive implications of IP for the business and for maintaining competitive position in the market place.</td>
<td>38</td>
<td>54</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 4.9 Responses for Environment and Awareness for Innovations

Figure 4.9: Response for ‘Environment and Awareness For Innovations’

- Vendor and Client employees are mostly working in reactive mode and hardly have time and funds to work on next generation of solutions.
- Companies who get outsourced projects needs to invest on creating necessary infrastructure such as proper labs, access to software and hardware, access to literature, etc.
- Companies have to ensure appropriate budgets for innovative solutions which could be awarded for successful ideas to employees.
- IP that is created can be jointly owned by client and the vendor using revenue sharing model, etc.
- Employees need to be sensitized and trained on IP creation. They must be explained positive implications of IP for the business and for maintaining competitive position in the market place.
Ownership of IP that is created during execution of the contract must be addressed in the contract. Another issue that needs to be addressed regarding ownership of IP is, if ownership changes if employees are working onshore or offshore? This also needs to be discussed and is properly addressed in the contract. There are several issues such as who owns the patents, who gets the royalty, and if any revenue is generated due to innovative ideas then who gets the major share of it. Almost 90 percent respondents believe that IP must owned jointly.

**Working Model**

Over the years companies have matured their delivery models. They have learned from their mistakes and have implemented proper checks and balances in the execution of the projects. As teams are placed in various countries while working on the same project, project management methods are implemented for optimum utilization of resource, identification of available skills and competencies in these locations, managing working with time differences, and understanding and sensitizing employees about cultural sensitivities and communication mechanisms. Client’s teams may expect vendor teams to follow their processes and ensure that client teams make necessary adjustments. Although this is probably acceptable practise, client teams must be open to learn from vendor teams if there are better ways of doing things. Similarly client and vendor teams need to work closely with each other.

The responses to the questions under ‘Working Model’ are tabulated in the Table 4.10 while the graphical representation is presented in Figure 4.10. The numbers in the Table 4.10 are expressed in terms of percentage of responses for each question.

All the ‘satellite’ teams of vendors must be properly integrated with client teams. Teams working on the contract could be potentially located at various locations globally hence they work in different time zones. Due to this contract management turns out to be a challenge for client teams. Before outsourcing, client managers mostly have their teams based locally or in familiar locations but once products/services are outsourced there could be a feeling among them of losing control on the project. Hence use of latest project management tools is imperative. Also placing vendor project manager onshore with client teams is desirable and is committed by vendors in the contract.
Table 4.10 Responses for Questions on Working Model

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>In outsourced contracts middle level managers have to work closely for operational delivery to ensure ROI is delivered.</td>
<td>56</td>
<td>44</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Amongst the varied models that are implemented by various companies, Strategic partnership model seems to be the most favoured presently as both parties can have major stakes in the success.</td>
<td>31</td>
<td>62</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Client and vendors have to work as partners and manage relationship as a single unit.</td>
<td>73</td>
<td>27</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 4.10 Responses for Working Model

Figure 4.10: Response for ‘Working Model’

- Strongly Agree: 56, 31
- Agree: 62, 27
- Neither Agree nor disagree: 0, 0
- Disagree: 0, 0
- Strongly Disagree: 0, 0

- In outsourced contracts middle level managers have to work closely for operational delivery to ensure ROI is delivered.
- Amongst the varied models that are implemented by various companies, Strategic partnership model seems to be the most favoured presently as both parties can have major stakes in the success.
- Client and vendors have to work as partners and manage relationship as a single unit.
Figure 4.10 shows almost 100 percent respondents believe that client and vendor teams must be properly integrated and they all should work as a single unit. There may be cultural issue involved but they need to be sorted out through sensitization programs or training.

There are no models or algorithms for measuring vendor performance. Due to this many times there could be difference of opinion as vendor would be happy with delivery as SLAs are met or the performance delivered is very much in sync with KPIs. On the other hand client may not agree and this may cause delay in payments or revenue realization for vendor. Reduced number of customer escalations or customer trouble tickets could be another KPI for measuring vendor performance for outsourced products/services. It is difficult to realize impact on the top line or bottom line brought in by vendor but certain parameters could be devised related to reduced customer churn, enhanced customer experience, and accuracy in results, etc. If a simple case of process reengineering is concerned than one can look at ‘process as is’ and ‘process to be’ and compare data collected from these two different scenarios which could be translated into optimal use of resources, reduction wastage, improved process cycle, etc.

There are no models to measure impacts created by innovation as well so quantifying impact of innovations is yet another challenge. There could be few indicators such as award of patent to the company, improved performance of products/services that are outsourced, and extension of product life cycle.

There are no generic models for multi-vendor engagement in a single contract hence contract formulation becomes the guiding documents. Client must create cross-functional teams with due participation of client and vendor teams. Client can also engage a consultant from a third party who will work with all the teams. Documentation and periodic meetings such as monthly, quarterly or fortnightly among various client and vendor teams are highly recommended. On the client side there could be contract manager, KPI manager, SLA manager, finance and legal team while vendor may have accounts manager, relationship manager, onsite manager, delivery manager who will map into client organization for periodic meetings.

Transparency in managing projects is another key element in any working model. A strong Contract governance framework must be implemented and must be followed by both sides.
Senior management must keep tabs on the contract during execution phase and monitor dashboard for expected levels of performance from vendors and value addition.

**Resistance for Change**

Innovations in processes may require changes which may impact human resource, requirement for new skills and competencies, use of new technology, and changes in roles and responsibilities. It is observed that changes are well received by employees but there are few who resist the change and are happy with the status quo. Improvements brought in to the processes due to innovations save operational expenses, make processes more efficient and productive, and make them more agile. Resistance for acceptance of change for positive results is primarily due to ill feeling and sense of insecurity among client employees at the operational level. The responses to the questions under ‘Resistance for Change’ are tabulated in the Table 4.11 while the graphical representation is presented in Figure 4.11. The numbers in the Table 4.11 are expressed in terms of percentage of responses for each question.

It is noted during interviews that the relationship between client and vendor teams are always strained and there is a lack of cooperation from client teams at operational level. Vendor teams are subjected to multiple levels of approvals for information access and sharing to work products/services. This impacts the overall performance and vendor faces difficulties in meeting SLAs. Usually, client will downsize the team as vendor takes over the responsibility or may transfer some of the employees on the payroll of vendor. The feeling of insecurity may be very high before the contract is signed and may even get worst when the company announces restructuring plans. Employees in the sourcing organization start to react to such communication mostly in negative way. The middle management is in an extremely precarious position as managers have to follow the marching orders from the senior management and take operational staff in confidence so that the transition is smooth.
Table 4.11 response for Questions on Resistance to Change

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is noted that employee show resistance for change especially when a new IT solution is introduced in a company.</td>
<td>23</td>
<td>50</td>
<td>15</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Outsourcing leads to sense of insecurity amongst client employee This then leads to poor information sharing, inappropriate collaboration, etc.</td>
<td>15</td>
<td>54</td>
<td>15</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Client and vendors have to work as partners and manage relationship as a single unit.</td>
<td>54</td>
<td>46</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>It is likely that resistance may be higher in the initial phase of implementation but when the project reaches the stage of maturity, the resistance may be less.</td>
<td>23</td>
<td>62</td>
<td>4</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>
Figure 4.11: Response for ‘Resistance For Change’

- Strongly Agree: 23
- Agree: 50
- Neither Agree nor Disagree: 62
- Disagree: 15
- Strongly Disagree: 8

It is noted that employees show resistance for change especially when a new IT solution is introduced in a company.

- Outsourcing leads to a sense of insecurity amongst client employees. This then leads to poor information sharing, inappropriate collaboration, etc.
- Client and vendors have to work as partners and manage relationships as a single unit.

- It is likely that resistance may be higher in the initial phase of implementation but when the project reaches the stage of maturity, the resistance may be less.
Figure 4.11 data overwhelmingly supports these concerns. Outsourcing may not be the popular decision even for the senior management but it may be the business imperative for remaining competitive. Middle management members and operational staff may react differently but if these decisions are communicated properly by explaining what is at stake and employees may not react negatively.

**Skills and Competencies**

Outsourcing decision earlier was primarily driven by cost reduction but over the years key drivers have changed. One of the key drivers has been access to niche skills and competencies in shorter span of time. Companies find difficult to build all the niche skills or even skills required in future projects, companies have started depending on vendors to fulfil these needs. Vendors have realized an opportunity hence the working models are designed to ensure that clients are provided with skills in general as well as in niche areas. The resource based view looks at an organization as a bundle of assets and recommends building required skills and competencies for all the core processes in-house.

The responses to the questions under ‘Skills and Competencies’ are tabulated in the Table 4.12 and the graphical representation is presented in Figure 4.12. The numbers in the Table 4.12 are expressed in terms of percentage of responses for each question.

(Prahalad et al., 1990) have expressed that core competencies must never be outsourced and must be built internally. Companies today have been outsourcing even core processes hence competencies. There are certain disadvantages of outsourcing in general such as cost escalation, poor quality output, hidden cost, vendor exploitation, loss of competencies, high switching cost but most of these could be managed well if the client team manages contracts efficiently. Loss of core competencies may have long term impacts as company might lose competitive advantage.

Figure 4.12 indicates that large numbers of respondents agree with the recommendations of researchers like (Prahalaad et al., 1990). At the same time it also suggests that HR department or learning and development department has a critical role in building required skills among employees. The department must work closely with the business units and also engage with customers in understanding their short term and long term needs and plan it accordingly.
Table 4.12: Response for questions on ‘Skills and Competencies’

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outsourcing has to be looked from the perspective of competencies and not cost. Management must make efforts to build required competencies in-house for long term benefits.</td>
<td>31</td>
<td>38</td>
<td>15</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Lack of competencies can make things impractical to be developed in-house, if outsourcing competencies disappear from within the company.</td>
<td>23</td>
<td>58</td>
<td>12</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>HR or learning and development department have the responsibility to build training programs, build process for IP creation, etc.</td>
<td>12</td>
<td>69</td>
<td>12</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Vendors have the advantage of having competencies in niche areas where they can deliver to the client more efficiently.</td>
<td>42</td>
<td>58</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 4.12 Responses for Skills and Competencies

Figure 4.12: Response for ‘Skills and Competencies’

- Outsourcing has to be looked from the perspective of competencies and not cost. Management must make efforts to build required competencies in-house for long term benefits.
- Lack of competencies can make things impractical to be developed in-house, if outsourcing competencies disappear from within the company.
- HR or learning and development department have the responsibility to build training programs, build process for IP creation, etc.
- Vendors have the advantage of having competencies in niche areas where they can deliver to the client more efficiently.
4.2.3 Perspective of Operational Staff on Outsourcing

The operational staff is the front line that interacts with vendor teams for day to day work. The operational team provides L1-L3 level application support, software programming, hardware design and processor programming, software and hardware testing, unit testing, system integration and many other functions. Level 1 (L1) support usually involves substantial changes in application software while Level 2 (L2) is manageable by the customer support staff. L1 level involves software developers involvement. Level 3 (L3) level customer support is handled without any changes to the application software but mostly by menu based instructions.

Operational staff has functions depending on the industry sector and the processes or services that are outsourced. It is also noted during interviews that the frustration level and confusion tend to be high in operational staff. It may be partly due to either lack of communication, lack of involvement in decision making or high level sense of insecurity.

The decision of outsourcing impacts this level in an organization most as majority of employees could be declared redundant forcing loss of jobs or transfer to vendor if vendor has agreed to in the contract. There could be change in roles and responsibilities and many employees may leave as the new role may not be very challenging and may not provide expected career track. While this is all true management expects employees at this level to be more creative and work in close collaboration with vendor teams.

The key set of metrics used in the interviews are such to understand key concerns of operational teams when they are expected to work in a new environment and still deliver best performance and be innovative collaborating with vendor teams.

Roles and Responsibilities

Roles and responsibilities of employees change, especially on the client side, once products/services are outsourced. Human resource department plays a key role in the entire process. Since this sort of decision creates certain level of uncertainty in the organization, employees react negatively if they are not taken in confidence and explained business need for such a decision. An organization goes through restructuring as vendors take responsibility for owning up the processes. Client organization does not need resource at a
previous level as the staff becomes redundant. Cost reduction remains as one of the key drivers hence client management reduces the headcount on the payroll.

The skeleton team that is put in place by client primarily has functions like SLA management, contract management, relationship management, finance and accounting, and legal issues management. Most of the operational team gets impacted as the functions move to vendor teams. Certain level of training also may be involved on the client side for new roles and responsibilities. The responses to the questions under ‘Roles and Responsibilities’ are tabulated in the Table 4.13 while the graphical representation is presented in Figure 4.13. The numbers in the Table 4.13 are expressed in terms of percentage of responses for each question.

Respondents were asked several questions related to changes in roles and responsibilities post outsourcing. Almost all the respondents as shown in Figure 4.13, that is, almost 100 percent agree that employee are happy post outsourcing and are very clear about their new roles. One of the possible reasons is that employees who get transferred to the vendor teams have better chance of career tracks compared to the ones available on the client side post outsourcing. In case of several vendors, vendors provide services to number of clients globally which provides new and increasing number of opportunities to employees as against simply providing support in the client organization before outsourcing.
### Table 4.13 Response for Questions on Roles and Responsibilities

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you absolutely clear about your role and responsibility post outsourcing?</td>
<td>13</td>
<td>88</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Do you believe that in the new role there are enough challenges for you and the nature of work is highly satisfying and motivating?</td>
<td>25</td>
<td>63</td>
<td>0</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>It is noticed that transition phase takes substantial time and is very critical.</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Outsourcing causes a major change in the role and many times it is relationship management, contract management or SLA’s management.</td>
<td>38</td>
<td>63</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vendor and client employees may need to switch places of work that helps to develop understanding of working practices, culture and overall efficiency.</td>
<td>50</td>
<td>38</td>
<td>0</td>
<td>13</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 4.13 Responses for Roles and Responsibilities

Figure 4.13: Response for ‘Roles and Responsibilities’

- **Strongly Agree**: 13, 25, 50, 50, 88, 63, 63
- **Agree**: 0, 25, 25, 38, 0, 0, 0
- **Neither Agree nor disagree**: 0, 0, 0, 0, 0, 0, 0
- **Disagree**: 0, 0, 0, 0, 13, 13, 0
- **Strongly Disagree**: 0, 0, 0, 0, 0, 0, 0

**Questions and Responses**

- Are you absolutely clear about your role and responsibility post outsourcing?
- Do you believe that in the new role there are enough challenges for you and the nature of work is highly satisfying and motivating?
- It is noticed that transition phase takes substantial time and is very critical.
- Outsourcing causes a major change in the role and many times it is relationship management, contract management or SLA’s management.
- Vendor and client employees may need to switch places of work that helps to develop understanding of working practices, culture and overall efficiency.
Employees on the client side have limited functions but they remain to be critical from the perspective of managing contract with multiple vendors. As senior management has a major stake in the success of execution of the outsourced projects, the skeleton team may be small in size but has high visibility to the executive management.

**Thinking Out of Box**

Thinking out of box is the key for innovating. Innovation could bring incremental improvement at operational level or provide end users enhanced experience while some innovations could bring a paradigm shift. In most cases clients expect employees to bring in incremental improvements as the focus still remains on SLAs. Several clients are sceptical of outsourcing core competencies and in house initiatives for forward looking work. Employers have realized that they must create an environment and provide resources to existing employees to think in an unconventional way but when it comes to outsourcing to multiple vendors, challenges remain for collaborative innovations. The responses to the questions under ‘Thinking Out of Box’ are tabulated in the Table 4.14 while the graphical representation is presented in Figure 4.14. The numbers in the Table 4.14 are expressed in terms of percentage of responses for each question.

In Figure 4.14 an interesting observation could be made which suggests that employees believe in creating innovations, believe in working in collaborative environment, and also believe that management expects them to be innovative. What is not happening is the commitment from senior and middle management of allocating adequate funds and allowing employees time to brainstorm. This contradiction could be one of the key reasons for having less number of innovations being created in outsourced projects.
Table 4.14: Response for questions on ‘Thinking Out of Box’

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the management encourage employees enough to think out of box so that employees at the operational level could come up with innovative solutions for implementation?</td>
<td>25</td>
<td>50</td>
<td>13</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>The internal teams get smaller post outsourcing. Members in the team can manage outsourced contracts and work with vendor teams for innovative solutions.</td>
<td>25</td>
<td>50</td>
<td>25</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Innovative solutions require strong collaborative environment for all members from the client and vendors.</td>
<td>63</td>
<td>38</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Does the management support with adequate funding that is required for R&amp;D or for working on innovative solutions?</td>
<td>13</td>
<td>38</td>
<td>25</td>
<td>25</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 4.14 Response for ‘Thinking Out of Box’

- Does the management encourage employees enough to think out of box so that employees at the operational level could come up with innovative solutions for implementation?
- The internal teams get smaller post outsourcing. Members in the team can manage outsourced contracts and work with vendor teams for innovative solutions.
- Innovative solutions require strong collaborative environment for all members from the client and vendors.
- Does the management support with adequate funding that is required for R&D or for working on innovative solutions?
Cooperation and Competition

For any company to make sure that all the vendors collaborate for an end to end delivery and also create innovations, it is important that they remain competitive but cooperate at the same time. It is likely that vendors may compete with each other and in the process there may be lack of information sharing, blame each other or pass the buck or look at other vendor to solve problems. There could be a tendency on the part of operational staff of vendors to adopt non-cooperation with staff of other vendors due to rivalry, especially when the contracts are due for renewal. The responses to the questions under ‘Cooperation and Competition’ are tabulated in the Table 4.15 while the graphical representation is presented in Figure 4.15. The numbers in the Table 4.15 are expressed in terms of percentage of responses for each question.

Vendor process must integrate with the processes of the client. The client has responsibility of creating an environment where vendors would feel secured enough to perform at their maximum capacity and collaborate. Figure 4.15 data indicates that almost 100 percent respondents believe that there should be trust among vendors. This is the most critical requirement because if the trust level is high then other issues such as collaboration, information sharing, supporting each other etc. will happen as routine. Due to competition and the level of insecurity, creating trust is a challenge. This is where client management could help vendor teams and create an environment that will be conducive. Insecurity exits as the contract models have changed over the years. Clients are awarding short term contracts which means vendors are under pressure to ensure that the contracts are renewed and also expand. Each vendor will try to position competitively when renewal phase approaches closer.
Table 4.15 Response for Questions on Cooperation and Competition

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client teams may not have been in favour of outsourcing which might be creating certain friction in working. All this may not be very conducive for collaborative innovations.</td>
<td>25</td>
<td>38</td>
<td>0</td>
<td>38</td>
<td>0</td>
</tr>
<tr>
<td>Information sharing is highly critical in a collaborative environment. This requires high level of trust among teams.</td>
<td>38</td>
<td>50</td>
<td>13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Escalation mechanism has to be in place and should be known to all the teams. SLA delivery as committed should be in place for fast turnaround and on time delivery.</td>
<td>88</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Client and vendor should be involved in building conducive environment to design innovative solutions.</td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 4.15 Responses for Cooperation and Competition

Figure 4.15: Response for ‘Cooperation and Competition’

- Client teams may not have been in favour of outsourcing which might be creating certain friction in working. All this may not be very conducive for collaborative innovations.
- Information sharing is highly critical in a collaborative environment. This requires high level of trust among teams.

- Escalation mechanism has to be in place and should be known to all the teams. SLA delivery as committed should be in place for fast turnaround and on time delivery.
- Client and vendor should be involved in building conducive environment to design innovative solutions.
Working relationship at operational level is critical for the success of outsourced project. Respondents expressed that there should be frequent exchange of information and meetings between client and vendor teams. Another important factor that was expressed was the trust between the teams. Although the decision of outsourcing is taken at strategic level, it is the operational staff that executes the contracts. Outsourcing does create certain changes in the client organization hence there could be lack of trust and sense of non-cooperation in the early stage of contract execution. Respondents also expressed that there should be healthy communication between the teams and working should be transparent.

**Empowerment**

It is observed, especially at the operational level employees complaining that they are simply not empowered by the management while excellent results are expected. Empowerment could be in various ways. If management wants to encourage innovations then prompt recognition from the peers either on the client or vendor side is absolutely necessary. Financial empowerment up to certain level is also important. Operational level staff expects to be empowered and senior management expects that it is not misused or abused hence proper checks and balances are required in the system. The responses to the questions under ‘Empowerment’ are tabulated in the Table 4.16 while the graphical representation is presented in Figure 4.16. The numbers in the Table 4.16 are expressed in terms of percentage of responses for each question.

The data in Figure 4.16 shows that almost 80 percent operational staff believes that they are not empowered enough by the management. Similarly 76 percent believe that it is the middle management that is empowered more compared to operational staff. Empowerment at the middle level is necessary as these teams are responsible for implementing the business strategy and also ensure that the operational staff delivers. It still does not mean that operational staff need not be empowered.
Table 4.16: Response for questions on ‘Empowerment’

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational staff is not so much empowered for accountability which is extremely essential, if outsourced projects have multiple vendors.</td>
<td>13</td>
<td>63</td>
<td>25</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vendor teams or staff members being empowered can also lead to slow decision making and low spirit of collaboration.</td>
<td>25</td>
<td>38</td>
<td>13</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Usually middle management is more empowered than operational staff which may not be a healthy mindset for innovation.</td>
<td>13</td>
<td>63</td>
<td>13</td>
<td>13</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 4.16 Responses for Questions on Empowerment

Figure 4.16: Response for ‘Empowerment’

- **Operational staff** is not so much empowered for accountability which is extremely essential, if outsourced projects have multiple vendors.
- **Vendor teams or staff members** being empowered can also lead to slow decision making and low spirit of collaboration.
- **Usually middle management** is more empowered than operational staff which may not be a healthy mindset for innovation.
More than 60 percent stated that lack of empowerment slows down decisions at operational level and kills the spirit of collaboration on both sides, that is, client and vendor teams. This can adversely impact the drive for creating innovations.

Alignment with Business Objectives

Published research material and also interaction with senior managers revealed that when it comes to designing and developing solutions for existing problems or enhancing automation, output from IT teams is not in sync with the business strategy. Employees who work in IT are expected to be familiar with new state of the art hardware and software and also must be able to design and develop in-house tools for enhancing productivity and efficiency. It is not always necessary that one has to invest in the state of the art platforms if solutions could be devised by using existing platforms. While there seems to be a strong opinion that suggests IT teams are mostly in toying with ideas using latest platforms which cost more but solutions designed by IT teams may not be necessarily in sync with business strategy. The responses to the questions under ‘Alignment with Business Objectives’ are tabulated in the Table 4.17 while the graphical representation is presented in Figure 4.17. The numbers in the Table 4.17 are expressed in terms of percentage of responses for each question.

Figure 4.17 shows and validates what is expressed above. Almost 90 percent believe that there is disconnect between the decisions taken at senior level and participation of the operational staff in that process. Outsourcing is a decision which impacts most at the operational level. This probably creates further disconnect between the senior management and the operational staff. Similarly 100 percent believe that once the decision is taken by the management to outsource, internal IT teams must be provided an opportunity to compete with the external vendors. It is observed that many times internal IT teams quotes are much lower than external vendors.
### Table 4.17 Response for Questions on Alignment with Business Objectives

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outsourcing decision is usually taken at senior management level. This disconnect with operational staff may create lack of understanding and appreciation.</td>
<td>25</td>
<td>63</td>
<td>0</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Communication is highly important when a strategic decision is taken by the senior management. Employees must be explained impacts at all levels of an operation.</td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Internal IT teams must be provided fair opportunity to compete with external service providers.</td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>One of the drivers for outsourcing is not enough ROI on operational and capital expenditure involved in IT and misalignment with the business strategy.</td>
<td>13</td>
<td>75</td>
<td>13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Operational staff is involved more in day to day fire fighting and have rarely any time to think about or for ensuring that vendor delivery is in and or out of sync with strategy.</td>
<td>25</td>
<td>75</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 4.17: Response for ‘Alignment with Business Objective

- Outsourcing decision is usually taken at senior management level. This disconnect with operational staff may create lack of understanding and appreciation.
- Communication is highly important when a strategic decision is taken by the senior management. Employees must be explained impacts at all levels of an operation.
- Internal IT teams must be provided fair opportunity to compete with external service providers.
- One of the drivers for outsourcing is not enough ROI on operational and capital expenditure involved in IT and misalignment with the business strategy.
- Operational staff is involved more in day to day fire fighting and have rarely any time to think about or for ensuring that vendor delivery is in and or out of sync with strategy.
This may not be reason enough for the management to still select internal IT team for the job since this is the same IT team which was thought to be not performing cost effectively and not aligned with the business strategy. Outsourcing is expected to infuse new thought process and new thinking of doing things. It is a surprise finding that overwhelmingly 100 percent respondents from operations expressed that there is disconnect between the IT team deliverables and alignment with the business strategy.

**Culture and Communication**

In an increasing global environment employees are working across the boundaries and cross cultures. Service providing vendors for outsourced contracts are from various countries across continents. This sort of environment necessitates that employees are sensitive to other cultures, are provided adequate training, and develop patience and tolerance to learn from each other and collaborate. Organizational hybridity and organizational intelligence are important elements for any organization to optimise performance in a collaborative environment. The responses to the questions under ‘Culture and Communication’ are tabulated in the Table 4.18 while the graphical representation is presented in Figure 4.18. The numbers in the Table 4.18 are expressed in terms of percentage of responses for each question.

Culture simply does not consist of working together and respecting each other but there are multiple factors such as the body language, use of words and phrases and their expected interpretation, awareness of different meanings attached to words and phrases, table manners, formation of messages, working practices, value system, organizational structures and levels of hierarchy, importance attached to designations and levels, etc. All these and many other factors are important to be well understood since teams with diverse cultures are expected to work for the same client.

Internal communication on the client side is critical as serious human resources issues are involved in the outsourcing decision. Not only employees must be taken in confidence but they need to be explained by the senior management the business imperatives and the business strategy and the decision of outsourcing. Communication from the middle management to operational staff is also important as most of the execution and implementation of the contract is done by operational staff.
Communication with vendor teams is equally important as roles are mapped in the vendor organization to interface and work together at peer level in the client organization. Escalation if required will also come under communication as multiple teams may be involved. Communication must be crisp, clear and to the point with proper understanding of use of words and phrases and their meaning. The tone of the message may also indicate the seriousness behind it. Almost 100% respondents resonate with these issues as shown in Figure 4.18.
Table 4.18 Response to Questions on Culture and Communication

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is likely that service providers could be from different parts of the world hence different culture, different work styles, managing in time zones, etc.</td>
<td>38</td>
<td>50</td>
<td>13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Collaborative work environment is the most desirable for creating innovative solutions.</td>
<td>38</td>
<td>63</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 4.18 Responses for Culture and Communication

Figure 4.18: Response for ‘Culture and Communication’

- Strongly Agree: 38, Agree: 50
- Neither Agree nor Disagree: 63
- Disagree: 13

- It is likely that service providers could be from different parts of the world hence different culture, different work styles, managing in time zones, etc.
- Collaborative work environment is the most desirable for creating innovative solutions.
Since multiple vendor teams are working for a single client which each team may come with different culture of geopolitical situation hence it is recommended that every member in the team is sensitized to festivals and holidays of other members and even wish them well. If the level of communication is low and not at the right time, it creates speculation among operational teams and each member reacts differently. In the process focus on the project at hand suffers. Usually operational staff is most vulnerable due to outsourcing but the level of insecurity could be reduced with timely communication from the management.

It is noted that there is a serious lack of culture for innovation in outsourcing. Operational staff looks up to senior and middle management for creating a conducive environment and platform for employees to create innovations. Some of them stated that senior members in the team should mentor juniors so that together they could create innovations. Team work and collaborative atmosphere is desirable by all.

4.3 Data Reliability Tests

The primary data is collected over a period of time. It is important to ensure that the data that is used for analysis is pre-processed and the sample size is also adequate. The sample size cannot be less than desired else the results will be erroneous. Similarly if the sample size is too large then the statistical significance of every parameter gets enhanced to the level that it becomes difficult to analyse and rank them as per the level of relevance and importance (Cooper and Schindler, 2001). In the following sections, first reliability tests are conducted before additional analysis is carried out.

4.3.1 Kaiser-Meyer-Olkin (KMO) Test

The Kaiser-Meyer-Olkin (KMO) is the measure of sample adequacy. Although the sample size and number of responses are sufficient to carry out analysis, KMO provides the measure of sample adequacy (MSA) for appropriateness for Factor analysis. Table 4.19 shows the KMO measure for each parameter for the respective level of the staff in an organization.
### Table 4.19 Kaiser-Meyer-Olkin Test

<table>
<thead>
<tr>
<th>Parameter</th>
<th>KMO Measure</th>
<th>Parameter</th>
<th>KMO Measure</th>
<th>Parameter</th>
<th>KMO Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Partnership</td>
<td>0.592</td>
<td>Collaboration and Cooperation</td>
<td>0.749</td>
<td>Roles and Responsibilities</td>
<td>0.606</td>
</tr>
<tr>
<td>Flexibility and Management Control</td>
<td>0.65</td>
<td>Contract Formulation</td>
<td>0.707</td>
<td>Thinking out of Box</td>
<td>0.561</td>
</tr>
<tr>
<td>Innovations</td>
<td>0.721</td>
<td>Environment and Awareness for Innovations</td>
<td>0.727</td>
<td>Cooperation and Competition</td>
<td>0.641</td>
</tr>
<tr>
<td>Enhance Competitive Position</td>
<td>0.709</td>
<td>Working Model</td>
<td>0.659</td>
<td>Empowerment</td>
<td>0.571</td>
</tr>
<tr>
<td>Technology Catalyst</td>
<td>0.711</td>
<td>Resistance for Change</td>
<td>0.639</td>
<td>Alignment with Business Objectives</td>
<td>0.622</td>
</tr>
<tr>
<td>Value Addition</td>
<td>0.511</td>
<td>Skills and Competencies</td>
<td>0.594</td>
<td>Culture and Communication</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Based statistical algorithms (Kaisen, 1974) recommended values 0.5 are just adequate, values between 0.7-0.8 are acceptable, and values above 0.9 are superb. From the KMO measure for each parameter as shown in the Table 4.19, the values vary between 0.5 (just adequate) to 0.749 (acceptable) hence the sample adequacy is satisfactory to conduct further analysis on the data.

### 4.3.2 Cronbach Alpha Reliability Test

Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. A "high" value for alpha does not imply that the measure is unidimensional. If, in addition to measuring internal consistency, to provide evidence that the scale in question is unidimensional, additional analyses can be performed. Technically speaking, Cronbach's alpha is not a statistical test - it is a coefficient of reliability (or consistency).
Table 4.20: Cronbach Alpha Reliability Test

<table>
<thead>
<tr>
<th>Parameter</th>
<th>No. Of Items</th>
<th>Cronbach Alpha</th>
<th>Parameter</th>
<th>No. Of Items</th>
<th>Cronbach Alpha</th>
<th>Parameter</th>
<th>No. Of Items</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Partnership</td>
<td>4</td>
<td>0.507</td>
<td>Collaboration and Cooperation</td>
<td>4</td>
<td>0.762</td>
<td>Roles and Responsibilities</td>
<td>4</td>
<td>0.588</td>
</tr>
<tr>
<td>Flexibility and Management Control</td>
<td>5</td>
<td>0.53</td>
<td>Contract Formation</td>
<td>6</td>
<td>0.672</td>
<td>Thinking out of Box</td>
<td>4</td>
<td>0.514</td>
</tr>
<tr>
<td>Innovations</td>
<td>8</td>
<td>0.64</td>
<td>Environment and Awareness for Innovations</td>
<td>5</td>
<td>0.705</td>
<td>Cooperation and Competition</td>
<td>4</td>
<td>0.546</td>
</tr>
<tr>
<td>Enhance Competitive Position</td>
<td>7</td>
<td>0.619</td>
<td>Working Model</td>
<td>3</td>
<td>0.692</td>
<td>Empowerment</td>
<td>3</td>
<td>0.541</td>
</tr>
<tr>
<td>Technology Catalyst</td>
<td>4</td>
<td>0.615</td>
<td>Resistance for Change</td>
<td>4</td>
<td>0.558</td>
<td>Alignment with Business Objectives</td>
<td>5</td>
<td>0.566</td>
</tr>
<tr>
<td>Value Addition</td>
<td>3</td>
<td>0.503</td>
<td>Skills and Competencies</td>
<td>4</td>
<td>0.513</td>
<td>Culture and Communication</td>
<td>2</td>
<td>0.571</td>
</tr>
</tbody>
</table>

Cronbach’s alpha reliability coefficient normally ranges between 0 and 1. However, there is actually no lower limit to the coefficient. The closer Cronbach’s alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale.

\[
\text{Cronbach's alpha coefficient} = \left( \frac{rk}{1 + (k - 1)r} \right)
\]

Where, \( k \) is the number of items considered and \( r \) is the mean of the inter-item correlations the size of alpha is determined by both the number of items in the scale and the mean inter-item correlations.

While increasing the value of alpha is partially dependent upon the number of items in the scale, it should be noted that this has diminishing returns. It should also be noted that an alpha of .8 is probably a reasonable goal. It should also be noted that while a high value for Cronbach’s alpha indicates good internal consistency of the items in the scale, it does not mean that the scale is unidimensional. Factor analysis is a method to determine the dimensionality of a scale (Gliem and Gliem, 2003).
Cronbach Apha was computed using SPPS and using the data for all three levels. The data used in the analysis is the one that is obtained from the survey. The data in the Table 4.20 indicates that in most cases Cronbach alpha is on the lower side and as discussed above number of items under variable could be larger and the correlation among the variable should be lower. The nature of this study is such that it is likely that the correlation among variables would always be on the higher side. Hence Factor analysis was conducted to understand level of relations among variables and for identifying which variables are dominant.

4.3.3 Non-Response Bias Test

Request to take survey was mailed to 300 potential respondents in each level and as expected the early response was limited in numbers. Subsequently an extensive follow up effort was undertaken to obtain responses from others. Hence there was a time difference between the early set of responses and responses after follow up. Non-response bias is the difference between the responses of the early respondents and late respondents (Lambert and Harrington, 1990). To account for non-response bias, comparison was conducted of the responses of early and late waves of returned survey.

The final data was ranked by the date the responses were received. A sample of 20 percent from the early wave (mean 1) and 20 percent from the late wave (mean 2) were selected. The difference between mean 1 and mean 2 must be greater than 0.05 for ensuring non-response bias. The results of the non-response bias test are shown in the Table 4.21. The tests were performed on these two groups of responses. The results indicate that there are no significant differences within the 95% confidence interval.
Table 4.21: Non-Response Bias Test Results

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Paired Differences</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility and management control</td>
<td>-0.57500</td>
<td>0.56980</td>
<td>0.14245</td>
<td>-0.87682</td>
<td>-0.27138</td>
<td>4.03654</td>
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<td>0.05108</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovations</td>
<td>-0.30499</td>
<td>0.44481</td>
<td>0.11120</td>
<td>-0.54171</td>
<td>-0.06767</td>
<td>2.73996</td>
<td>15.00</td>
<td>0.05519</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhance Competitive Position</td>
<td>-0.32738</td>
<td>0.47837</td>
<td>0.11959</td>
<td>-0.58229</td>
<td>-0.07248</td>
<td>2.73748</td>
<td>15.00</td>
<td>0.05527</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology Catalyst</td>
<td>-0.29688</td>
<td>0.61687</td>
<td>0.15422</td>
<td>-0.62558</td>
<td>-0.03183</td>
<td>1.92505</td>
<td>15.00</td>
<td>0.07340</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Value Addition</td>
<td>-0.33333</td>
<td>0.65546</td>
<td>0.16387</td>
<td>-0.68260</td>
<td>0.01594</td>
<td>2.03419</td>
<td>15.00</td>
<td>0.06001</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Strategic Partnership</td>
<td>-0.39938</td>
<td>0.71279</td>
<td>0.17820</td>
<td>-0.73920</td>
<td>0.2045</td>
<td>2.01672</td>
<td>15.00</td>
<td>0.06199</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaboration and Co-operation</td>
<td>-0.12500</td>
<td>0.36515</td>
<td>0.09129</td>
<td>-0.31957</td>
<td>-0.06957</td>
<td>1.36931</td>
<td>15.00</td>
<td>0.19106</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Contract Formulation</td>
<td>-0.14583</td>
<td>0.42109</td>
<td>0.10527</td>
<td>-0.37022</td>
<td>0.07855</td>
<td>1.38530</td>
<td>15.00</td>
<td>0.18622</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment and Awareness for Innovations</td>
<td>-0.27500</td>
<td>0.67676</td>
<td>0.16919</td>
<td>-0.63562</td>
<td>0.08562</td>
<td>1.62540</td>
<td>15.00</td>
<td>0.12490</td>
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<td></td>
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</tr>
<tr>
<td>Working Model</td>
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<td>0.61914</td>
<td>0.15478</td>
<td>-0.37158</td>
<td>0.28825</td>
<td>-0.26919</td>
<td>15.00</td>
<td>0.79145</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistance for Change</td>
<td>-0.37500</td>
<td>0.81650</td>
<td>0.20412</td>
<td>-0.81008</td>
<td>0.06008</td>
<td>1.83712</td>
<td>15.00</td>
<td>0.08605</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skills and Competencies -</td>
<td>-0.35938</td>
<td>0.65172</td>
<td>0.16293</td>
<td>-0.70665</td>
<td>-0.01210</td>
<td>2.20570</td>
<td>15.00</td>
<td>0.05342</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.4 Discriminant Validity

Validity is the extent to which a scale or set of measures accurately represents the concept of interest. Discriminant validity is the degree to which two measures of the same concepts are correlated. The correlation should be low, demonstrating that the summated scale is sufficiently different from other concept.
Table 4.22: Discriminant Validity

<table>
<thead>
<tr>
<th>Parameters</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Partnership (1)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility and management control (2)</td>
<td></td>
<td>.271*</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovations (3)</td>
<td></td>
<td>.149</td>
<td>.241*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Enhance Competitive Position (4)</td>
<td></td>
<td>.232*</td>
<td>.227*</td>
<td>.317**</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Technology Catalyst (5)</td>
<td></td>
<td>.079</td>
<td>.292**</td>
<td>.206**</td>
<td>-.025</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Value Addition (6)</td>
<td></td>
<td>.256*</td>
<td>.285**</td>
<td>.232**</td>
<td>.169</td>
<td>.174</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Collaboration and Cooperation (7)</td>
<td>.085</td>
<td>-.169</td>
<td>.072</td>
<td>-.069</td>
<td>-.001</td>
<td>-.085</td>
<td></td>
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</tr>
<tr>
<td>Contract Formulation (8)</td>
<td>-.097</td>
<td>.030</td>
<td>.049</td>
<td>.063</td>
<td>.031</td>
<td>.015</td>
<td>.469*</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Environment and Awareness for Working Model (10)</td>
<td>-.063</td>
<td>-.006</td>
<td>.146</td>
<td>-.029</td>
<td>.015</td>
<td>-.046</td>
<td>.388*</td>
<td>.426*</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistance for Change (11)</td>
<td>-.141</td>
<td>.029</td>
<td>.053</td>
<td>.023</td>
<td>.039</td>
<td>-.049</td>
<td>.312*</td>
<td>.311*</td>
<td>.356</td>
<td>.353</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skills and Competencies (12)</td>
<td>-.058</td>
<td>.102</td>
<td>.093</td>
<td>.038</td>
<td>.094</td>
<td>-.056</td>
<td>.273*</td>
<td>.324**</td>
<td>.410</td>
<td>.307</td>
<td>.348</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rolls and Responsibilities (13)</td>
<td>.002</td>
<td>.160</td>
<td>.155</td>
<td>.173</td>
<td>-.028</td>
<td>.054</td>
<td>.047</td>
<td>.099</td>
<td>.005</td>
<td>-.163</td>
<td>.040</td>
<td>.083</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thinking out of Box (14)</td>
<td>.042</td>
<td>.179</td>
<td>.057</td>
<td>.206</td>
<td>-.008</td>
<td>.042</td>
<td>.103</td>
<td>.092</td>
<td>.020</td>
<td>-.010</td>
<td>.105</td>
<td>.007</td>
<td>.347**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperation and Competition (15)</td>
<td>.005</td>
<td>.144</td>
<td>-.034</td>
<td>.167</td>
<td>-.159</td>
<td>.082</td>
<td>-.094</td>
<td>.150</td>
<td>.030</td>
<td>-.083</td>
<td>-.083</td>
<td>.082</td>
<td>.245</td>
<td>.034</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empowerment (16)</td>
<td>-.018</td>
<td>.174</td>
<td>-.125</td>
<td>.094</td>
<td>-.080</td>
<td>-.014</td>
<td>.209</td>
<td>-.066</td>
<td>-.035</td>
<td>-.058</td>
<td>-.018</td>
<td>-.107</td>
<td>.061</td>
<td>.063</td>
<td>-.013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alignment with business objectives (17)</td>
<td>.043</td>
<td>.125</td>
<td>-.022</td>
<td>.046</td>
<td>-.033</td>
<td>.065</td>
<td>-.082</td>
<td>.034</td>
<td>-.036</td>
<td>-.131</td>
<td>-.048</td>
<td>.040</td>
<td>.233</td>
<td>.005</td>
<td>.361</td>
<td>.290</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culture and communication (18)</td>
<td>.178</td>
<td>.123</td>
<td>-.109</td>
<td>.053</td>
<td>-.055</td>
<td>.028</td>
<td>-.267</td>
<td>-.104</td>
<td>-.217</td>
<td>-.181</td>
<td>-.205</td>
<td>-.048</td>
<td>.047</td>
<td>-.074</td>
<td>.249</td>
<td>.197</td>
<td>.348</td>
<td></td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).
From the Table 4.22 it is obvious that the correlation of a concept with other concepts is very low which ensures discriminant validity. This is yet another confirmation that Factor analysis will further provide results which could be used for designing the framework.

4.5 Exploratory Factor Analysis (EFA)

Factor analysis is a multivariate statistical procedure that is used to 1) Reduce the number of variables, 2) Examine relationship between variables, 3) Detect and assess of a construct, 4) Evaluate the construct validity of a scale, 5) Develop simple analysis and interpretation, 6) Address correlation among variables, (Williams, Brown, Onsman , 2012). In EFA, the researcher has no expectations of the number or nature of the variables as it is exploratory in nature. It allows the researcher to explore the main dimensions to generate a theory, or model from a relatively large set of latent constructs.

In this study, EFA was carried out using SPSS by combining all the parameters that are used for data collection. EFA resulted in ranking variables under each parameter with the respective factor loading. Any variable with the factor loading less than 0.6 was ignored in further analysis. Each Parameter has factor loading greater than 0.6 as shown in Table 4.23, 4.24, and 4.25.

4.6 Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis is used to establish convergent validity and discriminant validity (Fornell and Larcker, 1981). The confirmatory factor analysis enables us to select those variables to be included in the factors before analysing the structural equation model (Hair et al, 2006) or for designing a framework to address the issues brought out in the study.

Factor loadings: Factor Loadings represent the extent to which a factor explains a variable in the factor analysis result. The loadings can range from -1 to 1. If a factor strongly affects a variable the loading would be close to -1 or 1. Standardized factor loadings estimates should be 0.5 or above, ideally 0.7. The rationale behind this rule can be understood in the context of an item’s communality. The square of a standardized factor loading represents how much variation in an item is explained by the latent factor. Thus square of loading of 0.71 equals 0.5. In short, the factor is explaining half the variation in the item with other half being the error variance.
**Scale Composite Reliability:** High value of SCR indicates that there exists internal consistency, which means that all the measures consistently represent the same latent construct (Hair et al., 2006). SCR value 0.7 or higher indicates good reliability. Reliability between 0.6 to 0.7 may be acceptable provided that other indicators of a model’s construct validity are good.

**Average Variance Extracted (AVE):** AVE indicates summary indicator of convergence. This is computed as the total of all squared standardized factor loadings divided by the number of items. In the other words, it is the average squared factor loading. AVE should be 0.5 or greater for adequate convergent validity and it should be computed for each latent construct in a measurement model (Hair et al., 2006).

### Table 4.23 Construct & their reliability indicators, SCR and AVE (Senior Level Staff)

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Factor Loading</th>
<th>Error</th>
<th>SCR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Partnership</strong></td>
<td>Vendor partner should invest in operation and share risks</td>
<td>0.7560</td>
<td>0.2438</td>
<td>0.7673</td>
<td>0.4952</td>
</tr>
<tr>
<td></td>
<td>Vendors can develop best practices and use them for all the clients globally. There is no need to have an exclusive strategic partnership</td>
<td>0.6470</td>
<td>0.3532</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Flexibility and Management control</strong></td>
<td>Total outsourcing will take away flexibility in control</td>
<td>0.7200</td>
<td>0.2803</td>
<td>0.8033</td>
<td>0.4503</td>
</tr>
<tr>
<td></td>
<td>Are you concerned that you may not actually have the desired level of control over a contract period and the vendor might exploit you down the road</td>
<td>0.6530</td>
<td>0.3472</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Is having flexibility in control of projects one of the key factors in your decision on outsourcing</td>
<td>0.6380</td>
<td>0.3621</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Innovations</strong></td>
<td>Innovations could be improvements at operational level, process related, products or service enhancements, and business related.</td>
<td>0.7860</td>
<td>0.2142</td>
<td>0.8464</td>
<td>0.5191</td>
</tr>
<tr>
<td></td>
<td>Senior Management should be responsible to help employees know the benefits of innovation.</td>
<td>0.7020</td>
<td>0.2984</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clients must have adequate rewards and recognition programs for internal employees and vendor for being innovative at all levels.</td>
<td>0.6690</td>
<td>0.3310</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Factor Loadings vary between 0.638 to 0.788, which is greater than the suggested value. The value of SCR is above 0.7 in each of the above cases, which indicates good reliability and the AVE in the analysis is close to 0.5 in all the 6 factors extracted.
Thus the results of the Factor Loadings, SCR and AVE values being close to their ideal values indicate that the constructs of the theoretical framework possess convergent validity.

In the middle level management the analysis shows that the factor loadings vary between 0.637 to 0.837. Thus variables scored more than the expected value of 0.5. The SCR values are greater than 0.7 and AVE is close to 0.5 in all the factors.

The constructs of the theoretical framework in case of middle level staff in this study possess convergent validity.
### Table 4.24: Construct & their reliability indicators, SCR & AVE (Middle Level Staff)

<table>
<thead>
<tr>
<th>Construct and Co-operation</th>
<th>Items</th>
<th>Factor Loading</th>
<th>Error</th>
<th>SCR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>There should be more trust and transparency in information sharing to be created by client among teams.</td>
<td>0.8370</td>
<td>0.1630</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High level of trust is extremely essential for multisource environment. Uncertainty, competitive positioning, etc are factors that have diverse impact on building high level of trust amongst teams.</td>
<td>0.7490</td>
<td>0.2506</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In a multisourced environment, many vendors have to work in sync to meet the overall objective and goal of the organization.</td>
<td>0.7430</td>
<td>0.2565</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Client and vendor have to be closely associated to create solutions of highest standard.</td>
<td>0.7250</td>
<td>0.2747</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract Formulation</td>
<td>Contracts must have clear mention for creating innovations, proper funding, ownership for innovations, and rewards and recognition programs for promoting that type of culture.</td>
<td>0.6900</td>
<td>0.3098</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contracts should have performance evaluation of IT and innovations from business point of view.</td>
<td>0.6560</td>
<td>0.3437</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>There should be proper terms and conditions specified in the contract when it comes to deliverables including expected level of innovation.</td>
<td>0.6560</td>
<td>0.3442</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment and Awareness for Innovations</td>
<td>Employees need to be sensitized and trained on IP creation. They must be explained positive implications of IP for the business and for maintaining competitive position in the market place.</td>
<td>0.7630</td>
<td>0.2367</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Companies who get outsourced projects needs to invest on creating necessary infrastructure such as proper labs, access to software and hardware, access to literature, etc.</td>
<td>0.7320</td>
<td>0.2678</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Companies have to ensure appropriate budgets for innovative solutions which could be awarded for successful ideas to employees.</td>
<td>0.7260</td>
<td>0.2743</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP that is created can be jointly owned by client and the vendor using revenue sharing model, etc.</td>
<td>0.6780</td>
<td>0.3218</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Model</td>
<td>Client and vendors have to work as partners and manage relationship as a single unit.</td>
<td>0.8190</td>
<td>0.1811</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In outsourced contracts middle level managers have to work closely for operational delivery to ensure ROI is delivered.</td>
<td>0.8030</td>
<td>0.1974</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Amongst the varied models that are implemented by various companies, Strategic partnership model seems to be the most favoured presently as both parties can have major stakes in the success.</td>
<td>0.7410</td>
<td>0.2586</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.24: Construct and their reliability indicators, SCR and AVE (For Middle Level Staff)

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Factor Loading</th>
<th>Error</th>
<th>SCR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resistance for Change</td>
<td>It is likely that resistance may be higher in the initial phase of implementation but when the project reaches the stage of maturity, the resistance may be less.</td>
<td>0.7530</td>
<td>0.2470</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Client and Vendor management should have a proper mechanism and escalation process in place for conflict resolution.</td>
<td>0.7010</td>
<td>0.2993</td>
<td>0.8279</td>
<td>0.4881</td>
</tr>
<tr>
<td></td>
<td>Outsourcing leads to sense of insecurity amongst client employee. This then leads to poor information sharing, inappropriate collaboration, etc.</td>
<td>0.6370</td>
<td>0.3626</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skills and Competencies</td>
<td>Lack of competencies can make things impractical to be developed in-house, if outsourcing competencies disappear from within the company.</td>
<td>0.6670</td>
<td>0.3226</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HR or learning and development department have the responsibility to build training programs, build process for IP creation, etc.</td>
<td>0.6650</td>
<td>0.3349</td>
<td>0.7938</td>
<td>0.4362</td>
</tr>
<tr>
<td></td>
<td>Outsourcing has to be looked from the perspective of competencies and not cost. Management must make efforts to build required competencies in-house for long term benefits.</td>
<td>0.6380</td>
<td>0.3618</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 4.25: Construct and their reliability indicators, SCR and AVE (For Operational Level Staff)

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Factor Loading</th>
<th>Error</th>
<th>SCR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roles and Responsibilities</td>
<td>it is relationship management, contract management or SLA’s</td>
<td>0.7070</td>
<td>0.2929</td>
<td>0.7658</td>
<td>0.4902</td>
</tr>
<tr>
<td></td>
<td>Vendor and client employees may need to switch places of work that helps to develop understanding of working practices, culture and overall efficiency.</td>
<td>0.6930</td>
<td>0.3068</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thinking out of Box (Innovation)</td>
<td>Does the management encourage employees enough to think out of box so that employees at the operational level could come up with innovative solutions for implementation?</td>
<td>0.8060</td>
<td>0.1936</td>
<td>0.8071</td>
<td>0.5506</td>
</tr>
<tr>
<td></td>
<td>The internal teams get smaller post outsourcing. Members in the team can manage outsourced contracts and work with vendor teams for innovative solutions.</td>
<td>0.6710</td>
<td>0.3285</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperation and Competition</td>
<td>Client and vendor should be involved in building conducive environment to design innovative solutions.</td>
<td>0.7900</td>
<td>0.2102</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Escalation mechanism has to be in place and should be known to all the teams. SLA delivery as committed should be in place for fast turnaround and on time delivery.</td>
<td>0.7380</td>
<td>0.2619</td>
<td>0.8733</td>
<td>0.5678</td>
</tr>
<tr>
<td></td>
<td>Information sharing is highly critical in a collaborative environment. This requires high level of trust among teams.</td>
<td>0.7310</td>
<td>0.2687</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empowerment</td>
<td>Operational staff is not so much empowered for accountability which is extremely essential, if outsourced projects have multiple vendors.</td>
<td>0.8180</td>
<td>0.1824</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Usually middle management is more empowered than operational staff which may not be a healthy mindset for innovation.</td>
<td>0.7080</td>
<td>0.2924</td>
<td>0.8514</td>
<td>0.5303</td>
</tr>
<tr>
<td></td>
<td>Vendor teams or staff members being empowered can also leads to slow decision making and low spirit of collaboration.</td>
<td>0.6500</td>
<td>0.3505</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alignment with the Business Objectives</td>
<td>Communication is highly important when a strategic decision is taken by the senior management. Employees must be explained impacts at all levels of an operation.</td>
<td>0.7320</td>
<td>0.2682</td>
<td>0.7939</td>
<td>0.4387</td>
</tr>
<tr>
<td></td>
<td>Internal IT teams must be provided fair opportunity to compete with external service providers.</td>
<td>0.6360</td>
<td>0.3644</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>One of the drivers for outsourcing is not enough ROI on operational and capital expenditure involved in IT and misalignment with the business strategy.</td>
<td>0.6140</td>
<td>0.3862</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culture and Communication</td>
<td>It is likely that service providers could be from different parts of the world hence different culture, different work styles, managing in time zones, etc.</td>
<td>0.8360</td>
<td>0.1636</td>
<td>0.8953</td>
<td>0.6996</td>
</tr>
<tr>
<td></td>
<td>Collaborative work environment is the most desirable for creating innovative solutions.</td>
<td>0.8360</td>
<td>0.1636</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Factor Loadings are greater than the expected value of 0.6. The value of SCR is close to 0.8, which is above the ideal value of 0.7 in each of the above cases, which indicates good reliability and the AVE in the analysis is close to 0.5 in all the 6 factors extracted. The constructs of the theoretical framework in case of operational level staff in this study possess convergent validity.

4.7 Regression Analysis

The regression analysis was conducted on the data collected from the survey. The analysis output is shown in Table 4.26. The dependent variable was ‘Enhance Competitive Position’ while all other parameters were considered as independent variables contributing towards the dependent variable. Since the investigation is focused on innovations, competitive position of the client who is outsourcing depends on the contributions of innovations in the entire process.

Following relationship could be written from the regressions analysis output:

\[
\text{Enhance Competitive Position} = 0.178 \times \text{Strategic Partnership} \\
+ 0.060 \times \text{Flexibility and Management Control} \\
+ 0.561 \times \text{Innovations} \\
- 0.046 \times \text{Technology Catalyst} \\
- 0.038 \times \text{Value Addition} \\
+ 0.176 \times \text{Collaboration and Cooperation} \\
+ 0.157 \times \text{Contract Formulation} \\
- 0.143 \times \text{Environment and Awareness for Innovations} \\
- 0.049 \times \text{Working Model} \\
+ 0.168 \times \text{Resistance for Change} \\
- 0.049 \times \text{Skills and Competencies} \\
- 0.069 \times \text{Roles and Responsibilities} \\
+ 0.044 \times \text{Thinking out of Box} \\
+ 0.236 \times \text{Cooperation and Competition} \\
+ 0.036 \times \text{Empowerment} \\
- 0.101 \times \text{Alignment with Business Objectives} \\
+ 0.013 \times \text{Culture and Communication}
\]
Table 4.26 Multi Regression Analysis

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>Constant</td>
<td>.916</td>
<td>.594</td>
<td>1.542</td>
</tr>
<tr>
<td>1. Strategic Partnership</td>
<td>.178</td>
<td>.078</td>
<td>.194</td>
</tr>
<tr>
<td>2. Flexibility and management control</td>
<td>.060</td>
<td>.090</td>
<td>.061</td>
</tr>
<tr>
<td>3. Innovations</td>
<td>.561</td>
<td>.091</td>
<td>.555</td>
</tr>
<tr>
<td>5. Technology Catalyst</td>
<td>-.046</td>
<td>.066</td>
<td>-.061</td>
</tr>
<tr>
<td>6. Value Addition</td>
<td>-.038</td>
<td>.067</td>
<td>-.048</td>
</tr>
<tr>
<td>7. Collaboration and Co-operation</td>
<td>-.176</td>
<td>.087</td>
<td>-.219</td>
</tr>
<tr>
<td>9. Environment and Awareness for Innovations</td>
<td>-.143</td>
<td>.083</td>
<td>-.175</td>
</tr>
<tr>
<td>10. Working Model</td>
<td>-.049</td>
<td>.087</td>
<td>-.062</td>
</tr>
<tr>
<td>11. Resistance for Change</td>
<td>.168</td>
<td>.095</td>
<td>.170</td>
</tr>
<tr>
<td>12. Skills and Competencies</td>
<td>-.049</td>
<td>.093</td>
<td>-.051</td>
</tr>
<tr>
<td>13. Roles and responsibilities</td>
<td>-.069</td>
<td>.075</td>
<td>-.077</td>
</tr>
<tr>
<td>14. Thinking out of Box</td>
<td>.044</td>
<td>.065</td>
<td>.056</td>
</tr>
<tr>
<td>15. Cooperation and Competition</td>
<td>.236</td>
<td>.080</td>
<td>.273</td>
</tr>
<tr>
<td>16. Empowerment</td>
<td>.036</td>
<td>.057</td>
<td>.052</td>
</tr>
<tr>
<td>17. Alignment with Business Objectives</td>
<td>-.101</td>
<td>.087</td>
<td>-.110</td>
</tr>
<tr>
<td>18. Culture and Communication</td>
<td>.013</td>
<td>.063</td>
<td>.018</td>
</tr>
</tbody>
</table>

a. Dependent Variable: 4. Enhance Competitive Position

From the above relationship interesting observations are made. There are parameters which contribute positively while there are parameters which do not contribute at all or may even have some negative impact. The parameters which contribute positively are classified as per the level of management of the respondent in the organization as shown in Table 4.27.

Table 4.27: Parameters Contributing Positively for Enhancing Competitive Position

<table>
<thead>
<tr>
<th>Senior Management</th>
<th>Middle Management</th>
<th>Operational Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Partnership</td>
<td>Collaboration and cooperation</td>
<td>Roles and responsibilities</td>
</tr>
<tr>
<td>Flexibility and Management Control</td>
<td>Contract formulation</td>
<td>Thinking out of box</td>
</tr>
<tr>
<td>Innovations</td>
<td>Environment and awareness for innovations</td>
<td>Cooperation and competition</td>
</tr>
<tr>
<td>Enhance competitive position</td>
<td>Working model</td>
<td>Empowerment</td>
</tr>
<tr>
<td>Technology catalyst</td>
<td>Resistance for change</td>
<td>Alignment with business objectives</td>
</tr>
<tr>
<td>Value Addition</td>
<td>Skills and Competencies</td>
<td>Impact of culture and communication</td>
</tr>
</tbody>
</table>

The findings from the regression analysis are very much in line with the present scenario in the industry. These parameters confirm our research findings that at senior management level executives are looking for more flexibility in managing programs in terms of speedy resource adjustment depending on the number of programs to be increased or decreased. Similarly senior managers prefer to have a strategic relationship with vendors so that they can create innovations for enhancing the competitive position of the organization.

While senior managers are putting stress on innovations and establishing strategic partnership with vendors, middle level managers are clearly saying that contract formulation has positively contributing effect if contracts are formulated with the due importance for innovations during the execution phase of the contract. The contracts are primarily SLAs based which needs to be changed. It is also noticed that resistance for change does contribute
positively which means that middle level managers are more receptive to the changes brought in by new technology and solutions by the vendors.

At Operational staff level the contributions could be very positive if employees are empowered to think out of box which will mean allocation of time and money in the budget. This will enable employees to conduct brain storming sessions together for devising new solutions. Similarly strong cooperation among various teams of multiple vendors will contribute to innovations. At operational level, due to reactive mode of functioning there is a tendency for passing the buck or non-cooperation due to insecurity of the renewal of the contract. There is also a tendency to show one up over the others to score points against other vendor teams.

These findings will be used in designing a framework for enhancing competitive position of the clients by increasing the level of innovation in outsourced products/services.

4.8 Hypotheses Testing

A set of hypotheses are discussed in Chapter 3. These are based on the published research and inputs from the practising professionals. Following hypotheses are reproduced for the discussion in this section:

**Proposition 1**
- $H_0$: Strategic partnership with multiple vendors is the preferred working model for creating innovations.
- $H_a$: Strategic partnership with multiple vendors is not the preferred working model for creating innovations.

**Proposition 2**
- $H_0$: Contracts must focus only on innovations.
- $H_a$: Contracts must not focus only on innovations

**Proposition 3**
- $H_0$: Strong and healthy collaboration between client and vendor teams creates innovations.
• $H_a$: Strong and healthy collaboration between client and vendor teams does not create innovations.

**Proposition 4**

• $H_0$: Employees at operational level need to be empowered to think out of box for creating innovations.

• $H_a$: Employees at operational level need not be empowered to think out of box for creating innovations.

The regressions analysis output is used for testing various hypotheses. The inferences are drawn from the statistical output. Following Table 4.28 discusses the results:
### Table 4.28 Hypothesis Tests

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Parameter</th>
<th>Model</th>
<th>( R^2 )</th>
<th>( F ) Stat</th>
<th>( \beta )</th>
<th>VIF</th>
<th>Test &amp; Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>( H_0 ): Strategic partnership with multiple vendors is the preferred working model for creating innovations</td>
<td>Strategic Partnership (Senior Level)</td>
<td>0.178</td>
<td>1.449</td>
<td>Since ( R^2 ) is 0.516 and ( F ) Stat is greater than 3.0, the model is very strong. The VIF statistics is found to be less than 4 which suggests that the regressions output is free from multicollinearity effect. The unstandardized ( \beta ) coefficient is 0.178 which is significant at ((p&lt;0.05)) indicating strategic partnership is the preferred working model for creating innovations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( H_a ): Strategic partnership with multiple vendors is not the preferred working model for creating innovations</td>
<td></td>
<td></td>
<td></td>
<td>Results: Alternate Hypothesis fails while Null hypothesis is verified and passed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( H_0 ): Contracts must focus only on innovations.</td>
<td>Contract Formulation (Middle Level)</td>
<td>0.157</td>
<td>2.802</td>
<td>Since ( R^2 ) is 0.516 and ( F ) Stat is greater than 3.0, the model is very strong. The VIF statistics is found to be less than 4 which suggests that the regressions output is free from multicollinearity effect. The unstandardized ( \beta ) coefficient is 0.157 which is significant at ((p&lt;0.05)) indicating contracts must insist on innovation creation in addition to meeting SLAs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( H_a ): Contracts must not focus only on innovations.</td>
<td></td>
<td></td>
<td></td>
<td>Results: Alternate Hypothesis fails while Null hypothesis is verified and passed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( H_0 ): Strong and healthy collaboration between client and vendor teams creates innovations</td>
<td>Collaboration and Cooperation (Middle Level)</td>
<td>0.516</td>
<td>6.145</td>
<td>Since ( R^2 ) is 0.516 and ( F ) Stat is greater than 3.0, the model is very strong. The VIF statistics is found to be less than 4 which suggests that the regressions output is free from multicollinearity effect. The unstandardized ( \beta ) coefficient is 0.176 which is significant at ((p&lt;0.05)) indicating collaboration and cooperation among multiple vendors and with the client teams will only create innovations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( H_a ): Strong and healthy collaboration between client and vendor teams does not create innovations</td>
<td></td>
<td></td>
<td></td>
<td>Results: Alternate Hypothesis fails while Null hypothesis is verified and passed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( H_0 ): Employees at operational level need to be empowered to think out of box for creating innovations</td>
<td>Empowerment (Operational Level)</td>
<td>0.136</td>
<td>1.39</td>
<td>Since ( R^2 ) is 0.516 and ( F ) Stat is greater than 3.0, the model is very strong. The VIF statistics is found to be less than 4 which suggests that the regressions output is free from multicollinearity effect. The unstandardized ( \beta ) coefficient is 0.136 which is significant at ((p&lt;0.05)) indicating employees at operational level on client and vendor sides must be empowered to think out of box and must be allowed certain level of freedom to brainstorm ideas.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( H_a ): Employees at operational level need not be empowered to think out of box for creating innovations</td>
<td></td>
<td></td>
<td></td>
<td>Results: Alternate Hypothesis fails while Null hypothesis is verified and passed.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## 4.9 Findings from Qualitative and Quantitative Analysis

<table>
<thead>
<tr>
<th>Construct</th>
<th>Qualitative</th>
<th>Quantitative</th>
<th>Conclusion</th>
</tr>
</thead>
</table>
| Strategic Partnership            | • Most preferred working model as suggested by several interviewees in case studies  
• Vendor partner should invest in operations and share risks  
• Vendors can develop best practices and use them globally                                                                                                                                           | • Factor Analysis  
Factor Loading= 0.647 to 0.756, Factor relevant  
• Regression analysis  
Coefficient=.178 , Positive contribution by variable for enhancing competitive position  
H0: Strategic partnership with multiple vendors is the preferred working model for creating innovations is verified and passed | Strategic Partnership is the preferred working model between clients and vendors.                                                                                                                                                   |
| Flexibility and Management Control | Managers expressed need for flexibility in managing projects due to changes in the business dynamics.  
• Resource ramping up or down  
• Access to niche set of skills  
• Using 24/7 cycle                                                                                                                                                                                                      | • Factor Analysis  
Factor Loading= 0.638 to 0.720, Factor relevant  
• Regression analysis  
Coefficient=.060 , Positive contribution by variable for enhancing competitive position                                                                                                                                  | Flexibility and Management Control is one of the key drivers for clients for sourcing products and services from vendors.                                                                                                             |
| Innovations | Most respondents expressed  
• Lack of creativity or generation of IP  
• Innovations need to be championed from senior management  
• Need for rewards and recognition for innovations  
| Factor Analysis  
Factor Loading= 0.669 to 0.786, Factor relevant  
Regression analysis  
Coefficient=.561, Positive contribution by variable for enhancing competitive position  
| Innovation is one of the major contributors for the clients to enhance competitive position. |

| Enhance Competitive Position | Most senior managers expected that the vendors must create differentiation to maintain competitive advantage for clients  
• Resources need to be utilized more effectively  
• Outsourcing decision should not be driven by cost reduction  
| Factor Analysis  
Factor Loading= 0.646 to 0.758, Factor relevant  
| Factor used as dependent variable in Regression Analysis  
| Enhance competitive position is used as the dependent variable in regression analysis. |

| Collaboration and Cooperation | Clients prefer multisourcing over outsourcing to a single vendor  
• The client and the vendor have to work in sync to achieve the business objective  
• Trust and transparency is extremely important in multisourcing  
| Factor Loading= 0.725 to 0.837, Factor relevant  
Regression analysis  
Coefficient=.176, Positive contribution by variable for enhancing competitive position  
| H0- Strong and healthy Collaboration between client and vendor creates innovations is true  
Qualitative and quantitative analysis indicate that this is an important factor in explaining relation with dependent variable of enhancing competitive position of clients. |
| Contract Formulation | The contracts should have a clear mention for  
• SLA  
• Creating innovation  
• Proper funding  
• Ownership of Innovations  
• Rewards and Recognition  
Middle level managers must be a part of the team at the time of contract formulation | • Factor Analysis  
Factor Loading= 0.656 to 0.690, Factor relevant  
• Regression analysis  
Coefficient=.157, Positive contribution by variable for enhancing competitive position  
H0: Contracts must focus only on innovations is passed  
Qualitative and Quantitative analysis indicate that Contracts must define evaluation procedures, tools and techniques for evaluating vendor deliverables and avoiding IP related conflicts |
|---|---|
| Resistance for Change | • Outsourcing leads to sense of insecurity amongst client employees  
• Client and vendor management should have mechanism for conflict resolution | • Factor Analysis  
Factor Loading= 0.637 to 0.753, Factor relevant  
• Regression analysis  
Coefficient=.168, Positive contribution by variable for enhancing competitive position  
• Resistance is higher in the initial stages of implementation but reduces as the project reaches completion. |
| Thinking out of Box | • Management should encourage operational level employees to think out of box and innovate  
• Internal teams can work with vendors to innovate | • Factor Analysis  
Factor Loading= 0.671 to 0.806, Factor relevant  
• Regression analysis  
Coefficient=.044, Positive contribution by variable for enhancing competitive position  
Qualitative and Quantitative analysis prove that thinking out of box is essential for creating Innovations |
| Cooperation and Competition | • Client and vendor should build conducive environment for innovation  
• Escalation mechanism should be known to all the teams  
• Trust among team members is important for information sharing | • Factor Analysis  
Factor Loading= 0.731 to 0.790, Factor relevant  
• Regression analysis  
Coefficient=.236, Positive contribution by variable for enhancing competitive position  
Collaboration and competition depends upon trust among client and vendor. |
### Empowerment

- Operational staff is not much empowered for accountability
- Vendor teams or staff members being empowered can lead to slow decision making and poor collaboration

<table>
<thead>
<tr>
<th>Factor Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Loading = 0.650 to 0.818, Factor relevant</td>
</tr>
<tr>
<td>Regression analysis Coefficient = 0.136, Positive contribution by variable for enhancing competitive</td>
</tr>
</tbody>
</table>

**H0**: employees at operational level need to be empowered to think out of box for creating innovations

### Impact of Culture and Communication

Service providers are from different parts of the world hence there could be issues arising out of work cultures, time zone etc.

<table>
<thead>
<tr>
<th>Factor Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Loading = 0.836, Factor relevant</td>
</tr>
<tr>
<td>Regression analysis Coefficient = 0.013, Positive contribution by variable for enhancing competitive position</td>
</tr>
</tbody>
</table>

### 4.10 Summary

The qualitative analysis is presented in the form of six case studies. In all the case studies the respondents have expressed almost similar concerns regarding nature of relationship, contract formulation, enhancing competitive position of clients, and innovations. Opinions expressed by senior and middle management level managers do differ in certain areas. The areas which are discussed in details are consistent with further data analysis as analysis has shown similar factors as important from the point of enhancing competitive position of the client as a result of outsourcing. As it has been discussed in the previous chapters that there are different factors that are concern to managers at different levels in the organization, perspective of these managers is presented for each factor.

The quantitative analysis contains initially data reliability tests followed by non-response bias test. The results of these tests are found to be satisfactory. Discriminant validity is verified to ensure that there is no multi-collinearity among factors and factor analysis could be performed. Exploratory factor analysis and confirmatory factor analysis is presented which identifies critical factors among the set of factors in analysis. This is followed by multiple regression analysis which also shows the consistency among factors having larger impact on enhancing competitive position. Finally, hypotheses are tested based on the regression output.