

An Investigation of Pakistan Offshore IT Services Capabilities: Quality Initiative

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ABSTRACT

Pakistan is a developing country and the government want to diversify the economy. Offshore service resolve the financial background for the upcoming years and current prospects and experiments for organizations, individuals and countries. Various states are pushing in the universal facilities market to yield benefit of the developing opportunities. The achievement of a firm's offshoring initiative critically depends on the assortment of an accurate purpose, an incorrect choice might effect in a disappointment and inflict important budgets. The paper offerings a background to evaluate the attraction of a mark country, which categorizes several inhibiting, inspiring and simplifying aspects that can impact its attractiveness. The structure is used to investigate the upcoming desirability of Pakistan. The comparative attractiveness of other challengers for offshoring is too debated. Conflicting to further specialists' sentiments, I have accomplish that Pakistan is probable to improve its position soon and it is possible to develop as an universal center for the distribution of facilities..

KEYWORDS:Offshoring, Information Technology, Outsourcing, Telecommunication, Software Quality.

1. INTRODUCTION

Offshoring is the area of increasing importance for a number of companies and plays a major part in the IT strategy of large corporations [1]. The emerging countries are attracting businesses to offshore their software developments because of significant lower cost of highly skilled labor that can develop tangled custom applications and advanced Web-based solutions [1]. The researchers have previously discussed different aspects of the offshoring, its advantages and disadvantages for the host and source economies and large corporations. Another area of research has focused on the reasons and implications of the offshoring. The overall volume for offshoring reached to around \$3.7 and \$5.1 trillion by 2001 and 2003 respectively [2]. In case of software development it is the most noticeable with almost three-quarters of US companies involved in partial or full offshoring of their IT activities in 2004 [3] and the US offshore market is estimated to be around \$14.7 billion by 2009 with an annual rate of growth of 14.4% [4].

The research studies by NASSCOM, Gartner and Forester suggests that there is an estimated US \$ 1.045 trillion of current spending on the IT services, software and BPO out of which US \$280 billion is potentially offshorable but the actual revenue from offshoring is US \$ 40 billion. The global industry indicators are showing high growth rate of 7-8 percent for next five years with an estimated investment of US \$3.31 trillion by 2010, while the revenue of offshoring will reach to US \$94 billion. India is leading receiver of the offshore revenues followed by Canada, China, Eastern Europe, Philippines, Mexico and others. The major sources for the offshore software industry is Western Europe and USA with approximately 23 percent and 70 percent share of market respectively [5].

A.T. Kearney report suggests that the prime reasons for the offshoring are low ages for qualified workers and lower costs for business [6]. A.T. Kearney another report highlights, automation combined with business process as a service (BPaaS) has the potential to be an even more powerful of disruptive change, also identify the strongest underlying fundamentals to potentially deliver information technology (IT), business process outsourcing and voice services [7]. There are 1,500 registered software firms with US \$1.4 billion of exports [8]. The major attracting factors of Pakistan as an offshore destination for software development includes highly skilled man-power with 20,000 IT graduates produced each year, English as medium of education, friendly tax policies and easy starting of business [8]. Pakistan can capitalize on these factors for increasing its share of revenues from the offshoring. Pakistan is situated in Southern Asia between India on the east along with Iran and Afghanistan on the west, also bordering the Arabian Sea and China in the north as the total area amounts to 796,095 sq km. The estimated population of Pakistan is 199,085,847 (July 2015 est.).

Pakistan took its independence from Britain remained improvised and underdeveloped because of the low level of foreign investment, internal political disputes, and costly confrontation with India [9]. The civilian politics is marked with corruption, inefficiency, and confrontation between different institutions. The changing period of civilian and military rule is the major reason for instability [10]. The economic recovery is seen after the 2001 reforms that include privatization of banking sector, liberal foreign aid and renewed access to international markets. Pakistan has experienced 6-8% range of growth in 2004-07. This has increased the growth in the industrial and service sectors. The poverty has been decreased by 10% since 2001 and the government has increased development spending including a 52% real budget allocation. The telecommunication infrastructure has shown spectacular growth in the fixed line and mobile networks; the mobile subscribership reached to 153.8 million in 2015. The fiber optic systems are extended throughout the country [9].

2. MATERIALS AND METHODS

According to the Global Change Inc's CEO, Patrick Dixon, offshoring is ethical because it has increased the growth due to which prices has been reduced. Therefore, it is right for the customers. He further argues that it is also right for the companies because it has increased the shared holder value; the shareholders are mostly pensioners who in turn are ordinary people. Similarly, it is also right for the host countries because of the jobs produced, increase in income, transfer of technology, knowledge transfer (e.g. Training) and increase in overall growth. Thus offshoring is responsible for increasing the welfare of its participants [11]. There are many theories related to IT/software development outsourcing, explaining why it is taking place and different issues are involved.

a. Theory of core competencies

This assumptions explain that activities that can be exercised at the organizations or else outside the organizations through a supplier. Those activities are performed outside the organization which is not core of the organizations; for these activities the best supplier is selected in the world. But sometime the few non-core activities are performed within the organization that is part of the competitive advantage [12-13]. These core activities are critical or fundamental to the organization. The theory used over here is because this research because this is a true explanation to the reason behind outsourcing of the software development of an organization in the developed countries where it is more expensive to have a separate software development department in the organization as well as the selection of a low cost market around the world for software development. Those employees which are working in the non-core activities will be affected as they may think excluded from the organization e.g. the employees working on web based legal services that of Information Technology at a firm of law . In case of public sector it is much more difficult to decide the core activities [14]. The IT can be seen as core competence by an organization and establish organization have a better know how of the IT potential [12]. In case of successful outsourcing the capability of defining IT requirements and monitoring the output of these organizations, is a sort of competence and transparency is done by third parties. The success lies in the outsourcing of non-core competencies is on the rise. [15-16].

b. Neoclassical economic theory

This theory states that the IT outsourcing is performed by organizations for gaining the cost advantage from the economies of scale and scope of the supplier [17]. It is more concerned with the outsourcing decisions than the transaction cost economies. Williamson (1981) argues that the organizations involved in business are production function whose focus is on increasing profits. An organization offers its products and services only at the cost or cost production advantage, therefore the organizations must rationalize their outsourcing strategy by production cost savings while satisfying Neoclassical economic theory. Thus, it means that outsourcing can only be an option when products and services can be produced at lower prices by suppliers than internal production. So, in the case of IT the outsourcing is performed only when the internal IT department costs more as compared to the outsourcing supplier. But in case of IT other factors are also considered e.g. economic, technological and strategic factors [12]. All these factors make this theory suitable for the current study because the research focus is on Pakistan which is a developing country; it provides the low production cost with reasonable quality of the software product. The outsourcing decisions for larger firms and smaller firms are based on different factors e.g. the sustainable growth of the economies can be achieved through large firms when production is in-house, because it can be achieved through the replications of the methodologies that are used by vendors internally [12]. [18] argue that the reason for the large firms to outsource is the output of the vendor that is thoroughly on the benefits on the economic side derived from development of a vital set of core competencies.

c. Relational exchange theory

It states that the proficiency of contract governance depends upon the relational norms between the parties involved in the transaction e.g. the level of engagement in the joint planning and information sharing are the

major elements for concluding the costs related with the periodical renegotiation of contracts [12]. [19] suggests that well-known behavioural norms can substantially reduce the costs. [20] has established solidarity, flexibility, information exchange and are the main factors for establishing the norms.

d. Stakeholder theory

It states that the organization's have moral responsibilities for all of its stakeholders with no priorities over one another [12]. These responsibilities include avoiding harm to others, respecting agreements, respecting the space to be provided to individuals and refrain from lying. [21] suggest that stakeholders have aligned interests, and those organizations that states low financial performance is because of less satisfied stakeholders [22]. The IT outsourcing stakeholders includes customer senior IT managers, customer IT users, and supplier senior managers, customer IT staff, supplier account managers, supplier IT staff all the subcontractors and customer senior business managers [23].

3. RESULTS AND DISCUSSIONS

There are large numbers of people leaving the country that can affect the industry due to which the reasons for leaving of the skilled employees is regarded highly important. There can be different reasons of job leaving among skilled employees that includes: salary issues, experience abroad professional growth/further education, work conditions and others. The figure 1 and table 1 shows that the overwhelming majority of the employees are leaving the job for salary issue with 68.8%. There are 6.2% employees of respondents who consider the experience abroad. The professional growth/further education and work condition are 12.5%. The figure 1 is showing an important fact that when these employees return after the completion of their education then they can add to the industry in much better way.

| Reasons for skilled employees leaving | | | | | |
|--|---|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Salary issue | 11 | 68.8 | 68.8 | 68.8 |
| | Experience abroad | 1 | 6.2 | 6.2 | 75.0 |
| | Professional growth/ further education | 2 | 12.5 | 12.5 | 87.5 |
| | Work conditions | 2 | 12.5 | 12.5 | 100.0 |
| | Total | 16 | 100.0 | 100.0 | |

Table 1



Figure 1. Reasons for skilled employees leaving

The figure 2 and table 2 shows those methods which can be employed in order to tackle the brain drain. The recent increase in the salaries shows that staff retention is not that difficult. The respondents can also be having different staff retention methods that include: financial incentives, changes in legislation, further education at company expenses, something which cannot be tackled and others.

The figure 2 shows that most of the respondents consider the financial incentives as the major staff retention policy with the 56.2%. Further education at company's expenses is considered with 25.0% while 12.5% changes in legislation. The respondents 6.2% think that it cannot be tackled or any other reasons are responsible for the staff retention.

| Staff retention methods | | | | | |
|--------------------------------|---|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Financial incentives | 9 | 56.2 | 56.2 | 56.2 |
| | Change in legislation | 2 | 12.5 | 12.5 | 68.8 |
| | Further education at companies expenses | 4 | 25.0 | 25.0 | 93.8 |
| | Cannot be talked | 1 | 6.2 | 6.2 | 100.0 |
| | Total | 16 | 100.0 | 100.0 | |

Table 2

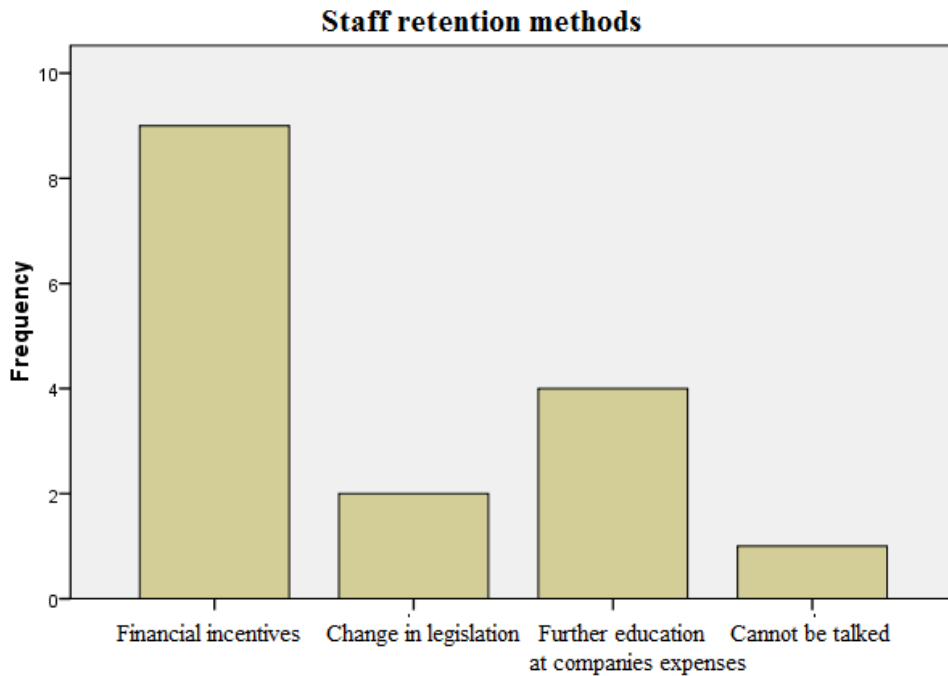


Figure 2. Staff Retention Methods

4. CONCLUSIONS

This study examined the current state of the Pakistan's Offshoring software industry and its potential as a global offshore outsourcing market. The major conclusion from the study is that the industry is transforming itself from a young to mature industry. The industry has all the necessary characteristics required for competing successfully but still there is a long way to go.

The study has also revealed the fact that association support in Pakistan is high because all most all of the firms are the members of the PSEB. The PSEB provides an important facility to all software firms to be registered

with it incredibly easy from where it can be accessed by the potential clients much more easily. The PSEB provides an increasingly important facility of membership but now it needs to think beyond by developing the resources.

5. RECOMMENDATIONS

There are some recommendations given to the government of Pakistan, PSEB and software development industry for the establishment of the Pakistan as leading Offshoring market. These are as follows:

a. Recommendations for government of Pakistan

- The government of Pakistan is helping the development of the software industry but still more is needed to be done. These are some of the recommendations to the government of Pakistan:
- The government should subsidize the software industry.
- The government should establish clear technology policy.
- Government should make a pro-software industry policy by establishing IT parks and scholarships.
- The legal and regulatory environment should be improved.
- Tax incentives should be given to the offshore outsourcing companies.
- More assistance should be provided in the international promotion and lobbying.
- The IT education should be made more competitive by providing more resources to the IT education programmes.
- The government should extend the software industry outside its main traditional centres (Karachi, Lahore and Islamabad).

b. Recommendations for Pakistan Software Export Board (PSEB)

The Pakistan Software Export Board (PSEB) is trying to establish Pakistan as a leading offshore outsourcing market. Some of the recommendations to it are:

- Expand the existing promotion programs in North America and UK to reach more Western clients.
- Establish relations with non-traditional markets e.g. Middle East, Russia, China, North America, Australia, France and India etc.
- Develop relations with expatriate Pakistanis having software business.
- Motivate multinational software companies to start business in Pakistan especially in UK, Canada, USA and Middle East.
- Promote activities for acquiring the international certificates among software firms.
- Close cooperation with the foreign commercial community.
- Begin physical presence in the global strategic markets.
- Foreign clients should be helped in business in Pakistan.
- Establish fine relations with neighbouring India and China.

c. Recommendations for Offshore software industry of Pakistan

The offshore software industry should also help itself for increasing its profits and should not fully rely on the government and the PSEB. These are some of the recommendations for them:

- The industry should unite together for the development of strong business association that could lobby government for a favourable offshore work environment.
- Industry should differentiate itself on the basis of low prices and then also move towards quality. The achievement of ISO/SEI certificates can also be a differentiating factor.
- It should work closely with universities and R&D (Research and Development) institutions. Sponsorship programs, training opportunities for students and academic contacts will make the industry more innovative and competitive.
- There is a need to make joint ventures and strategic partnerships with western firms and firms in leading offshore markets is the quickest way of gaining much needed business expertise, experience and recognition. Becoming a specialized subcontractor to global outsourcing firm is a good option sometime.

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