

---

# Risk Assessment on BPO (IT) New Venture Opportunity in India

**S. Ajinth and T.J.Kamalanabhan**

*Professor, Indian Institute of Technology, Chennai, India*

## **Introduction**

The survey of literature on the growth of computer industry reveals the fact that, it has led and paved way for the technological revolution in 1980's and continued till today and positively will continue forever. Although individual firms have had varying levels of success, the industry as a whole may be seen as the powerhouse that has provided the fuel for the global economies in the recent decades.

Almost all organizations today rely on computer and information technology to conduct business and operate more efficiently and effectively. Often, however, these institutions do not have the resources to effectively implement new technologies or satisfy their changing needs. When this happens, they turn to the external service providers who could help them with achieving the efficiency and effectiveness. These services might limit to a data processing level and more often extend to a very competitive level of engagement, such as setting up a secure website or establishing a marketplace online. Alternatively, they may choose to "outsource" one or more activities, such as the management of their entire data center or help-desk support, to a computer and data processing services firm.

## **Snapshot on computer and data processing services industry**

The computer and data processing services industry has grown dramatically over the past decade and is expected to grow about 86 percent by the year 2010, making this the fastest growing industry in the U.S and other global economy. Given the rate at which the computer and data processing services industry

is expected to grow and the increasing complexity of technology available, the entrepreneurial opportunities will be excellent for most entrepreneurs.

An increasing reliance on information technology, combined with falling prices of computers and related hardware, means that individuals and organizations will continue to turn to computer and data processing service firms to maximize the return on their investments in equipment and to fulfill their growing computing needs. Such needs include the expansion of electronic commerce, a growing reliance on the Internet, faster and more efficient internal and external communication, and the development of new technologies and applications. With increasing global competition and rising costs, organizations must be able to obtain and manage the latest information in order to make business decisions.

The services include data preparation and processing services, as well as information retrieval services. Establishments may provide payroll processing, credit reporting, data entry services, and optical scanning services, as well as the leasing of computer time. Usually, information is collected from the client's databases, processed, and passed to other online subscribers, to contracted users, or back to the client. With the Internet and electronic business creating tremendous volumes of data, there is growing need to be able to store, manage, and extract data effectively.

The other encouraging factor for the industry is that, unionization is rare in the computer and data processing services industry; fewer than 2 percent of all workers are union members or are covered by union contracts, compared with 14.9 percent of workers throughout private industry.

---

## **Prospects of computer services industry in India**

India has been a prominent player in providing the Information Technology services and support to the global economies in terms of resources and technologies. Several ventures in the information technology sector either headed or partnered by Indian entrepreneurs have created remarkable success in the past. There has been an increasing focus on the information technology industry by the central and state government that has resulted in enormous innovations in this sector.

The interest for an Indian firm's participation on providing the support and services are derived from the following facts.

- Traditionally, India has a huge pool of trained information technology experts.
- The literatures have stated and ratified that, the quality of resources from India, were found to be comparatively superior to the resources available at other developed/developing countries.
- There is an upward tendency for Indian professionals to work abroad and gain career excellence.
- India has been liberal towards the brain drain from its resource pool, due to the lack of employments available in the particular sector.
- The cost benefits in outsourcing business processes to India.

### **Driving factors for proliferation of IT**

For many companies, it has become imperative to revive their focus on cost cutting and operational efficiencies and effectiveness. The driving factors for this renewed trend are due to the following facts.

- Emergence of the Global Economy
- Transformation of Industrial Economies
- Transformation of the Business Enterprise
- The Emergence of Digital Firm

Increasingly companies are digitally enabling their

operations. This phenomenon is supported by the fact that information technology could provide organizations with the following benefits.

- Core business processes could be accomplished via digital networks.
- Digital management of key corporate assets.
- Rapid sensing and responding to environmental changes.
- Increased Productivity
- Management and control in a global marketplace
- Global work groups and delivery systems
- Digitally-enabled relationships with customers, suppliers, and employees.
- Communicate and collaborate
- Separating work from location
- Reorganizing work-flows
- Increasing flexibility
- Redefining organizational boundaries
- Effective facilitation of the supply chain management (literature surveys state that Inefficiencies can waste as much as 25% of company's operating costs).
- Sustainability of competitive advantage
- Information technology could change hierarchy of decision making
- Lower cost of information acquisition
- Broadens the distribution of information
- Build switching costs (Expense incurred by a customer or company in terms of time and expenditure of resources when changing from one supplier or system to another)
- Information technology architecture provides a universal and easy-to-use set of technologies and technology standards that can be adopted by all organizations.
- Increases quality of products and services

---

## Opportunity

There is continued demand for outsourcing the data processing and customer service operations. More often the demand for outsourced services is extend to several areas of data entry processing. The listed below are some of the common areas that are identified being outsourced.

- Data Entry
- Forms Processing
- Information Processing
- Data cleansing
- Key boarding
- Key punching/Text entry
- Electronic document management
- Database management
- Data warehousing
- Data work flow

The outsourced data processing and customer service operations service line is absolutely fragmented and the potentials on the opportunity are unclear. The evidence on efforts to consolidate the potentials of this market niche and exploit the opportunity is not available. However there are evidences on the presence of few players specialized in data entry processing area. There are very few cases located in the US, where new innovations are in effect. Although the unemployment in US is on the rise, there has been reluctance in taking up the jobs in the data entry operator jobs. Moreover the data entry operator salaries in US are in the range of \$9.02 - \$11 per hour. In many cases it was found that the firms that are exploring the outsource option are faced with stiff competition from their rivals. Their rival are blessed with the lower level of operating costs. Ultimately their rivals could provide the same services at a reduced price and have the flexibility to leverage the economies of scale. Hence many corporate firms are in the search of service providers who could help them in the streamlining the business process and providing the cost benefits.

There has been a constant increase in demand from corporate firms from US and developed countries for providing related services. Indian companies were successful in providing the mileage that the captioned companies seek. However there was only minimal interest shown in the data entry/processing projects. The lower margins associated with such projects and higher costs for connectivity

being sited are the main inhibitors.

Major Indian software giants like Infosys, HCL, Ascenture, E&Y etc, did not consider the data entry service line as it was not a competitive niche for them. Due to the proliferation of the internet connectivity and the broad bandwidth across the country, it is now possible to derive a competitive niche for companies who would want to venture into this service line space.

## Objective

### The objective of this study is to

- Analyze and disseminate the various factors of the opportunity. The scope of the opportunity survey would be limited to the outsourced data processing services.
- Perform an initial scan on the potentials and derive the level of attractiveness for the venture.
- Identify the dependant elements and factors that could have an impact on the venture.
- Identify the overall potential for the success of the venture and derive conclusion on fitness (Organization , Resources and Team)of the venture.
- To identify the risk intensity for the venture.

**Quick Screen Analysis:**

**I. Market and Margin related issues**

<b>Criterion</b>	<b>Potential Review</b>	<b>Venture Attractiveness</b>
Need /Want/ Problem	Identified	Is medium as the niche is not very evident.
Customers	Is scattered around different industry lines.	Is medium, the exact market segmentation data unavailable
Payback to users	There are immediate tangible and intangible benefits to the users within a period of one year	Is high due to the predictable and substantial benefits to the user in short duration.
Value added or created	IRR = 40%+ in 5 years ( estimated)	Is medium since the indicators for predicting the IRR not available.
Market size	Is estimated around \$10M-50M	Is medium, as there are as many as 300 companies established in this sector in US . ( source US government site). However the penetration in India is very less as it is just emerging. Hence the opportunity still looks attractive.
Market Growth rate	Is estimated 10-20% + for a period of 10 years. Assuming most of the companies who haven't computerized their operations would go for computerization within 10 years at a pace of 10-20% per year ( IDC data ).	Is Medium to High. The indicator is based on the fact that the computerization is in swing for most of the developed countries and there are still corporations who haven't stated their migration.
Gross Margin	20-40%	Is high
<b>Overall Potential</b>		
Market	The market potential is medium, since the indicators are not very evident. However the venture is still attractive since the competition is scattered and the niche drive is not evident in the present market space.	
Margins	The margins potential is High. The venture could provide economies of scale and scope as there is an impact on margin with increase in volume and concentric diversification services along the supply chain.	
<b>II. Competitive advantages</b>		
<b>Criterion</b>	<b>Potential review</b>	<b>Venture Attractiveness</b>
Fixed and variable cost	Inception costs are moderate however marginal variable costs apply	Is medium, since there is a potential for interim fixed cost requirements as the certain fixed costs are in proportion with the volume ( growth).

Degree of control Price and cost Channels of Supply & distribution	Moderate control  Low rather none.	Is Low. The price would be depended on the market trends ( currently \$9.2 per hour ( as per US govt records). The advantage is that, depending on the cost of resources at the location of venture, the price could be aligned appropriately.
Barriers to Entry	Proprietary advantage : None Lead time advantage on product, technology people, resource , location: Advantages on the resources exists.	Is Low. There are ultimately no barriers to entry. If at all there is a barrier that would apply to the proposed venture as well . This could be in terms of the legal and domestic regulations, RBI norms etc.
Contractual advantage	Could prove to be at the advantage of the venture.	Is high. As there are no obligations set at present. The is a possibility for setting up concrete contractual norms towards ventures advantage. The most preferred way is to get the client to invest in the venture and function as a partner providing the required service.
Contacts and Network	Is strong	Is high.
<b>Overall Potential</b>		
Costs	Is Medium. The initial costs are attractive but there are fixed cost requirements attached to increasing capacity. The equipments are highly depreciable. The variable costs could be minimized if economies of scale are achieved.	
Channel	Not Applicable	
Barriers to entry	Is Low.	
Timing	Is Medium - High. The span of opportunity window will be the only concern.	
<b>III. Value Creation and Realization Issues</b>		
<b>Criterion</b>	<b>Potential review</b>	<b>Venture Attractiveness</b>
Profit after Tax	10-15%	Is High
Time to Break Even	<2 Years	Is High
Time to positive cash flow	<2 years	Is High
ROI potential	40-60 %	Is High
Value	Moderate strategic value	Is Low
Capitalization requirements	Low, can be funded individually	Is Low
Exit mechanism	Acquisition, sale or partnership	Is medium

<b>Overall Potential</b>			
Timing	Is Medium to High		
Profit/ Free cash Flow	Is High		
Equity/Liquidity	Is Medium.		
<b>IV. Overall Potential</b>			
Criterion	Go	No Go	Go If
Margins and market			A niche sector is derived. Market size data available and is around \$10 M and more. Market growth potential is 10- 20% annually. Initial contract worth of \$0.2 M possible ( to be re-estimated based on resource requirements and cash flow projections)
Competitive advantage	Capital Investments on infrastructure could be minimized. Optimized resource loading should be produced.		
"O" "R" "T" Fitness	Perfect		Should have a committed team for at least and year from inception. Opportunity life cycle analysis should be held at least on quarterly basis.
Risk reward balance			Opportunity cost is only concern.
Timing	The market potential is not fully exploited at the present situation. Timing is perfect.		
Exit mechanism			Partnership or initial investments received from the clients.
Other compelling issues	The regulations on IT services sector regarding the location, facility, insurance, Tax etc Data security aspects. Lead time requirements for the first product/sale to realize. Impact of IT regulations on Sales tax, FOREX clearance , deposits etc. Cost on Sales		

## Conclusion

While the overall risk on the venture is high, the opportunity hold fruitful as well. The success of the venture however will depend on the balancing of the risk and return potential. As per the literature available, there are few approaches that are perceived at such situation. 1) Avoid it completely 2) Wait to invest until substantial evidence of success of first mover received. 3) Bear the risk if the return prospects are large. 4) Share the risks with others. 5) Spread risk over time etc.

As a matter of fact, recognizing and managing risk are critical functions of entrepreneurship. With respect to the case being assessed, the focus should be on minimizing the impact of risk factors. The following could lead to benefit the venture by minimizing the risk:

- Lease the equipment and facilities that are highly depreciable and are less liquid over time, rather than investing on purchasing them.
- Initial long term contact should be achieved before the startup.
- A partnership or a joint venture approach would be more desirable.
- A phased approach on investment.
- A periodic assessment of risk propositions, mentioned on the instrument is essential.
- The appropriateness in the venture team composition.
- The feasibility on the horizontal and vertical growth opportunities should be assessed.
- A detailed exit plan would be essential.
- The knowledge management approach for the venture.

Hence it is imperative that, the venture should be prepared to significantly revise the scale , scope and timing of the activities in light of new evidences. This can range from accelerating or decelerating ramp-up of capacity, inclusion or exclusion service lines, services etc.

## Appendix 1.

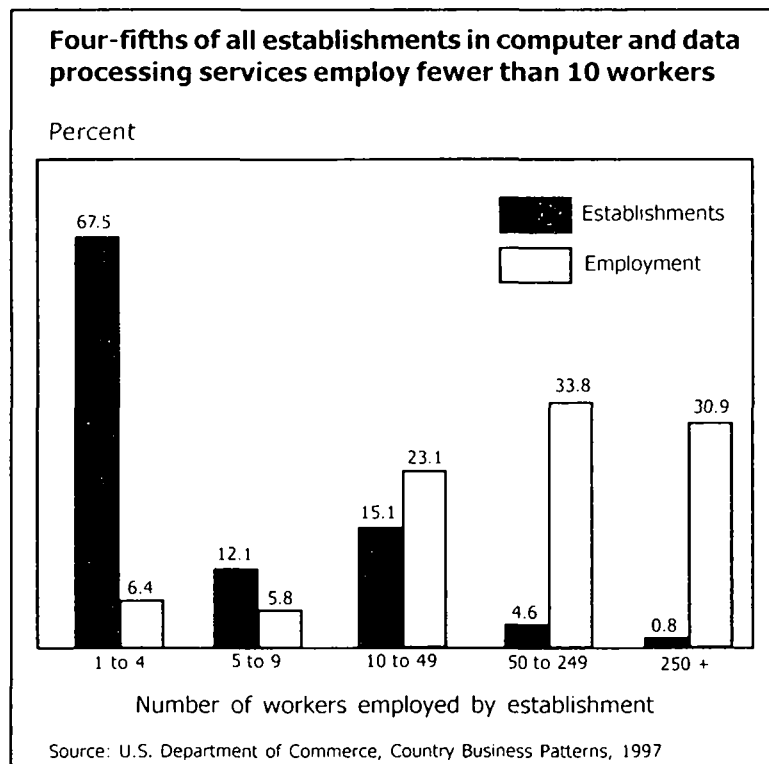
Employment of wage and salary workers in computer and data processing services by occupation, 2000 and projected change, 2000-10

( Source: U S Department of Labour ) (Employment in thousands)

Occupation	Employment, 2000		
	Number	Percent	Percent change, 2000-10
All occupations	2,095	100.0	86.2
Management, business, and financial occupations	370	17.6	78.4
Computer and information systems managers	62	3.0	81.3
General and operations managers	54	2.6	71.3
Management analysts	30	1.4	113.8
Accountants and auditors	16	0.8	81.3
Professional and related occupations	1,118	53.3	105.7
Computer programmers	231	11.0	43.2
Computer and information scientists, research	9	0.4	73.8

Computer systems analysts	135	6.5	99.4
Computer software engineers, applications	194	9.3	144.8
Computer software engineers, systems software	124	5.9	144.8
Computer support specialists	137	6.5	144.8
Database administrators	25	1.2	103.6
Network and computer systems administrators	55	2.6	144.8
All other computer specialists	41	2.0	120.0
Computer hardware engineers	15	0.7	63.4
Sales and related occupations	113	5.4	54.5
Sales representatives, wholesale and manufacturing, technical and scientific products	29	1.4	24.9
Office and administrative support occupations	412	19.7	52.5
Information and record clerks	95	4.5	67.0
Customer service representatives	60	2.9	71.5
Computer operators	22	1.0	8.6
Data entry keyers	69	3.3	34.7
Installation, maintenance, and repair occupations	40	1.9	67.5
Computer, automated teller, and office machine repairers	24	1.1	61.3
Production occupations	18	0.9	62.5

## Appendix 2





---

### Appendix 3

Median hourly earnings of the largest occupations in computer and data processing services, 2000  
( Source: US Department of Labour)

Occupation	Computer and data processing services	All industries
Computer and information systems managers	\$42.50	\$37.90
Computer software engineers, systems software	33.72	33.43
Computer systems analysts	30.82	28.53
Computer programmers	29.33	27.69
Network systems and data communications analysts	28.44	26.20
Computer support specialists	18.20	17.53
Customer service representatives	11.97	11.83
Data entry keyers	9.84	10.24

### References

Elizebeth J Teal and Charles W Hofer (2001) "An Examination of the determinants of New venture performance through a matched pair sample of new ventures in the computer industry"

U.S. Department of Labor Bureau of Labor Statistics

Management Information Systems seventh edition, Laudon and Laudon.

James O.Fiet "Nascent and startup Entrepreneurs" Babson Entrepreneurship journal 2001 p (6-10).

David Olson "Entrepreneurial behavior in a market-entry game" Babson Entrepreneurship journal 2001 p (53-60).

Justin Craig and Noel Lindsay "Quantifying Gut feeling in the opportunity recongnition process" Babson Entrepreneurship journal 2001 p (124-133).

Dennis Hanlon "Vision and support in new venture start-ups" Babson Entrepreneurship journal 2001 p (263-270).

Stephen A Allen Corporate ventures and risk management : For best results, turn upside down Babson Entrepreneurship journal 2002 p(17-32)

Candia G Brush, Patrica G Greene and Myra M Hart "From initial idea to unique advantage: The entrepreneurial challenge of constructing a resource base" IEEE Engineering management review. First quarter 2002 p( 86-99)

Institute for Certification of Computing Professionals (ICCP), 2350 E. Devon Ave., Suite 115, Des Plaines, IL 60018. Internet: <http://www.iccp.org/>

Association for Computing Machinery (ACM), 1515 Broadway, New York, NY 10036. Internet: <http://www.acm.org/>

IEEE Computer Society, Headquarters Office, 1730 Massachusetts Ave. NW., Washington, DC 20036-1992. Internet: <http://www.computer.org/>

National Workforce Center for Emerging Technologies, 3000 Landerholm Circle SE., Bellevue, WA 98007. Internet: <http://www.nwcet.org/>