Journal of Advances and Scholarly Researches in Allied Education
Vol. 16, Issue No. 6.1, May-2019 (Special Issue), ISSN 2230-7540

Effective Recruitment and Selection System for the It Software Industry in India

Rebaccal A.[1]* Dr. Priyanka Shrivastav[2] Dr. Gauraw Lakshmi[3]

[1] Assistant Professor, Dhanalakshmi Srinivasan College of Arts and Science for Women, Perambalur, Tamil Nadu, India

[2] Assistant Professor, Mangalmay Institute of Management and Technology, Greater Noida, India

[3] Faculty, L. N. Mishra Institute of Economic Development and Social Change, India

priyankas3012@gmail.com

gauraw.dhankus@gmail.com

ABSTRACT

Recruitment and selection lie at the heart of how businesses procure human resource required to maintain a sustainable competitive advantage over its competitors. Staffing personnel and especially managerial personnel in the organizations may well represent one of the most important human resource management functions. Information technology essentially refers to the digital processing, storage and communication of information of all kinds. The IT sector is likely to give employment to 9 million people in India by 2008 and also generate $ 87 billion in annual revenues and $ 225 billion in market in India by 2008. The present article focuses on how efficiently the IT sector follows the Recruitment & selection processes and to trace out the differences of the same between the Indian & MNC companies if any.

Keywords – *Software Industry, Recruitment*

INTRODUCTION

In business and management, the contribution of the information technology (IT) industry has been recognised worldwide and India is no exception. A paper on the Indian software industry and its changing service potential has shown that performance contrasts sharply with other industrial sectors when measured against growth in revenue, employment and exports (Suma. S. Athreye, 2005). This performance has completely changed the country's job scenario. It is in this sense that the rise of a developing country like India has drawn worldwide attention as a pioneer in supplying software services. A study by Nagesh Kumar notes that the Indian software industry has achieved the unique status of an economic engine for India, an emerging superpower of the Twenty First Century, while recording remarkable growth rates in the last few years (Nagesh

Kumar, 2001). It was a success storey that left everyone happily surprised by its contribution to India's GNP (Gross National Product), the realization of foreign exchange, steadily growing involvement in the world market, providing jobs to highly talented engineering graduates and other enterprising young people.

The Industry Report also reports that the Indian software industry is expected to reach a turnover of $40 billion by 2010. (John Ribeiro, 2007). NASSCOM's updated export projections predict a turnover in 2010-11 of $56-57 billion, slightly less than the $60-62 billion expected previously (NASSCOM, 4 Feb 10). While this is just one side of the coin, some sleeping nations such as China have simultaneously awoken, who also seem to be taking rapid steps in trying to replicate the Indian model and there lies the need to look into the future. The ever-present danger of large-looming brain drain is now a past. Due to the rewarding job prospects now available in the Indian IT industry in general and the software industry in particular, there are clearly visible signs of brain drain reversal. The huge pool of competent human capital in IT has stepped away from the age of body shopping (Nagesh Kumar, 2001, p. 5). Today, leading companies such as TCS, Infosys, HCL Technologies, WIPRO, etc. provide consulting, but software development remains the key share of export earnings. While the effect may not be immediately felt, in order to retain the edge of our human resources in the coming years, incisive thinking and thorough planning for an effective human resource jobs system with an efficient recruitment and selection system is of great importance to our over-populated country. A few years ago, Sumeet Chatterjee, writing for the Indian IT Sector's Indo Asian News Service, reported that India's IT Industry base surpassed 1 million marks in the fiscal year ending on 31 Mar 2005. The indirect employment rate was also estimated to be around 2.5 million, according to his estimate. With this as the context, analysis of the quantum of human capital is substantial. It affects not only social expectations and economic needs, but also the image of the country, seeking to achieve its place in the new emerging world order in the comity of nations.

OBJECTIVE

1. To determine key employee skill gauges, like academic record, socio-economic conditions, overall work experience and experience in a specific field.

2. To determine key company performance metrics, like growth in sales, net profit margin, revenue/profit growth and average net profit per employee.

Background

The ever-increasing emphasis on a lean workforce, together with the population's economic ambitions, is of great importance to the management of human and financial capital. In such a social, technical and economic climate, government policymakers need to synchronise their strategic thinking, provide the IT software industry with a vision and shape it for the future. This aspect has particular significance, as a main factor has always been the need to increase the availability of jobs to help meet rising global demands (Ronald Fernandes, Ashish Aurora and Jai Asundi , 2001, p. 2). In this regard, the vision of the government for the IT industry in general and the software industry in particular has been reasonably well expressed in order to address the challenges of the future. The Annual Report 2004-05 on Technical Education notes that leading bodies such as the University Grants Commission (UGC) and the All India Council for Technical

Education (AICTE) have taken measures to enforce the strategies set out in the Policy Framework (Annual Report 2004-05, Technical Education, All India Council of Technical Education, p. 186). However, the author of another research, Nirvikar Singh, is different. He sees the provision of infrastructure and the use of government resources as inefficient (Nirvikar Singh, 2002, pp. 10-11). An agreement defining the objective of NASSCOM to serve as a catalyst for growth in the form of the National Association of Software and Services Companies (NASSCOM) and the UGC Memorandum of Understanding (MOU) is an important indicator of government concerns (Memorandum of Understanding between University Grants Commission and National Association of Software and Service Companies, 2005, p. 1). While this may be an essential move in the right direction, further deliberation is required for many other aspects. Strategic thinking on the issue, which addresses not only the educated mass of Indian youth, but also the national economy and the image of the nation in the world, needs to be more articulated.

Frame Work of IT Industry

The important factor or the driving force for the Indian IT services and ITES industry has been the changing global business landscape, which has exerted performance pressures on multinational enterprises. Our nation has emerged as an important venue for the services sector including financial accounting, call centers, and business process outsourcing. Technology and Bio informatics, which are on Government‘s priority list for development, offer scope for FDI.

IT Industry: Its Growth & Development

In 2005, the software industry crossed the $ 27 billion dollar mark. In 2003-04, its exports accounted for 20 percent of Indian export revenues. It will account for 7% of India's GDP by 2008 and contribute 30% of total Indian export revenue. By 2008, the IT sector is projected to hire 9 million people in India and will also produce $87 billion in annual sales and $225 billion in India's economy by 2008. In the IT sector, Table II.1 shows jobs. In addition to the nearly 1.3 million employees directly employed in the industry, it is estimated that Indian IT-ITES helped create an additional 3 million job opportunities through indirect and inclusive employment. Indirect employment includes supplier spending, including telecommunications, power, construction, facility management, IT, transportation, catering and other services. Jobs inclusiveness is driven by employee spending expenditure on food, clothes, utilities, entertainment, health and other services. The Gartner estimate of the growth of the global HRO market to $80 billion by 2008 is quoted by Vipul Prakash of Elixir. The break-up of the HRO pie along with the various offers is as described below.

HRO functions	Percentage contribution
Payroll	40%
Recruitment	35%
Compensation & benefits	5%
Performance Management	5%
Training	15%

Table: 1 Employment in IT Sector

Sector	2004	2005	2006	2007
IT services	215000	297000	398000	562000
ITES-BPO	216000	316000	415000	545000
Engineering services & R&D and Software products	81000	93000	115000	144000
Domestic market including user organizations	318000	352000	365000	378000
Total*	830000	1058000	1293000	1630000

RECRUITMENT IS DISTINCT FROM EMPLOYMENT AND ELECTION

Once the required number and kind of human resources are determined, the management has to find the places where required human resources are or will be available and also find the means of attracting them towards the organisation before selecting suitable candidates for jobs. In general, this whole process is known as recruiting. For jobs, some individuals use the word 'recruitment'. Not one and the same are these two. Just one of the steps in the entire job process is recruitment. The term recruitment for selection is used by some others. Nor are these two words one and the same. Technically speaking, the recruitment function precedes the selection function and includes only finding, developing prospective employee sources and attracting them to apply for jobs in an organization, while the selection process is the process of finding the most appropriate candidate from the attracted candidates for the job.

FACTORS AFFECTING RECRUITMENT

- Internal factors
- External factors

INTERNAL FACTORS:

The internal factors include the compensation package of the company, including wages, fringe benefits and rewards, quality of work life, organisational culture, career planning and growth opportunities, company size, product/services of the company, regional distribution of the activities of the company, viz., local, national or global, growth rate of the company, trade union position and recruitment costs.

The other recruitment activity is consequently influenced by internal factors such as:

1. Terms of operation; and
2. Promotional chances;
3. Wage rate, form and magnitude of benefits;
4. Other rules and procedures about personnel;
5. Organization image;
6. Management's capacity and willingness to stimulate the candidates.

EXTERNAL FACTORS:

The external factors include supply of and demand for human resources, employment opportunities and/or unemployment rate, labor market conditions, political, legal requirement and government policies, social factors, information systems etc. The other activity of recruitment is consequently affected by external factors such as:

1. Personnel policies and practices of various organizations regarding working conditions, salary, benefits, promotional opportunities, employee relations etc.,
2. Career opportunities in other organizations;
3. Government regulations

ESSENTIALS OF SELECTION PROCEDURE

The selection process can be successful if the following requirements are satisfied:

1. Someone should have the authority to select. This authority comes from the employment requisition, as developed by an analysis of the work-load and work-force.
2. There must be some standard of personnel with which a prospective employee may be compared, i.e. a comprehensive job description and job specification should be available beforehand.
3. There must be a sufficient number of applicants from whom the required number of employees may be selected.

Current State of Recruitment and Selection in IT Software Industry

Organizations have to adapt quickly to people's requirements in today's rapidly evolving business climate. With technologies and processes undergoing rapid transformation, it is possible to reap rich dividends by investing in and improving human capital. Consequently, software companies took the high road to competitiveness in exports, investing in the development of organisational capabilities (Suma.S.Atherye, 2005, p. 9). Indeed, the quality and cost at which they are made available to consumers is the world's most competitive. Countries such as China, however, follow closely, having accomplished a great deal in a short period of 10 years. Its capabilities are

also likely to present a big challenge in the future (Nagesh Kumar,2001, p. 33). By educating low-wage IT staff, some countries are likely to pose a challenge, often helped by Indian training companies such as the National Institute of Technical Training (NIIT), Advanced Pavement Technology (APTECH), etc. It is a known reality that the Indian software sector's quality maturity has been realised globally. In order to minimise costs, in the context of setting up an educational institution such as the University of California Santa Cruz (UCSC) School of Management: Global Management for Information Based Economy, there is also a thought in America to provide a Management School offering such training (Nirvikar Singh, Ram Akella, and Kyle Eischen, 2005). Whatever the threat to its present position, however, India's IT Software Industry should be prepared to face such a challenge that could undermine the Indian IT Software Companies' growth and prospects. Therefore, it is necessary to have a well-defined recruitment strategy in place that can be easily applied in order to get the best fits for the vacant positions. It could turn out to be expensive errors for the company to pick the wrong candidate or reject the right candidate. One field where the intervention of external factors should be minimal is selection. Therefore, in framing selection policies, the HR departments of IT software companies should use their discretion and use different selection methods for the best performance.

The growth of the IT industry has been a boon to our country. Several problems facing the country, such as large numbers of unemployed educated youth, low quality education standards, poor quality of life and a fragile economy, have changed with a single stroke. A study has shown that in India, by providing tight security from imported technology that was followed by a series of trade and other liberalizations, national IT capabilities were built up in a planned way. As a result, prices dropped, technological lags decreased to zero, and some parts of the local industry became extremely creative (Mihaiela Grundey & Richard Heeks, 1998). In his report, Rafiq Dossani notes that India is one of the options for low-cost programmers due to several reasons, one of which is the widespread knowledge of English (Rafiq Dossani, 2005, p. 11). In the same report, the author also notes that the world has indeed awoken in terms of competitiveness, quality and cost, with India emerging as a major provider of IT services. The availability of human capital, especially the stock of engineers available in India, are some of the other important factors that have contributed to this success. The lack of manpower available for IT facilities has been faced by the rapid growth of the education system. The geographical position of the region, which has helped many nations discover the ability to work around the clock, has been a significant factor that has helped. It can also be noted that the Indian base has also helped bridge many gaps related to red tape and human networking in all parts of the world.

A dispassionate reassessment of the educational facilities to accommodate the IT boom amply shows that the new structure only meets the current demand and supply at best. The gradual development, coupled with the transfer to the IT industry of engineering students from different fields, has served as a vast reservoir of manpower to meet the demands (Ronald Fernandes, et.al, 2001, p 5). This has generally proven successful. The scenario, however, has since changed. Today, the IT industry involves professionals who, through the degrees/diplomas they possess, have achieved different levels of expertise and also the visibility and experience they have acquired. The current demand and availability is also another consideration in terms of employment available within the country and abroad. This condition is due to a trend of either taking IT from the beginning as a line of studies or changing course after obtaining a certain degree of educational qualification or meeting the requirement of demand and supply, even if not

an IT specialist. A reported NASSCOM report (Kiran Karnik, 2003, p.1) also notes that by launching a massive Rs 1500 crore Technical Education Quality Improvement Program with World Bank assistance, the government has also contributed. The Regional Engineering Colleges have also been revamped. In a report, the liberal policy of encouraging investment by Foreign Direct Investment (FDI) and Non Resident Indians (NRI) was a significant step for the industry.

Government approval of proposals like setting up venture capital funding and constructive actions on NASSCOM recommendations, are also quite important steps for the Tech Industry. India has also signed MOUs with 32 countries about bilateral cooperation in the IT sector (MOUs, 2004, pp. 1-2). This has contributed greatly and has supplied markets in many countries. A report (IT for all by 2008, pp. 1-2) highlights that government directions are a reaffirmation of the fact that policy makers are deeply aware of the need for the hour as well as the future of the tech industry as part of Operation Information. Such engagement at the level of government is extremely important. A prominent research, co-authored in 2003 by NASSCOM and the American accounting firm Klynveld Peat Marwick Peat (KPMG), suggested a cycle of continuous attraction, training, qualification, deployment, and then finally retraining employees to concentrate on graduates of Indian origin because they had a clear theoretical or philosophical history, but needed training. It further stated that students could obtain certification at a later age through a common examination that tests computer skills, analytical skills and language skills (Networking and Information Technology: Final Report, May 2009, p 159). An article on the subject, published some time ago, confirms that the Information Technology Association of America (ITAA) is also asking its government to support the growth of the IT industry in the United States (ITAA Press Release 2005, p1). Although these measures would improve the quality and also the quantity in terms of available engineers, several other problems will need to be addressed in order to effectively use human resources.

CONCLUSION

The results of the current study compare well with those of earlier studies. The current research and previous studies (IOMA, 2006) have shown that most businesses are concerned with attraction and retention. As the Society for Human Resource Management (SHRM) (1997) and Diane Lockwood, A.Ansari (1999) found, the present research recognises difficulties in retaining talent and attracting, finding and hiring the right talent. The important developments are the outsourcing of selection, competency-based selection and selection in tight labour markets. This is in line with research in other nations (Lievens Filip, Karen Van Dam, Neil Anderson, 2002). Earlier research (Hearty and Morley, 1998) discovered that decision-making is mainly at headquarters. For recruiting, the HR department and line management are responsible. The present research corroborates this. Hearty and Morley (1998) and Hewitt Best Employers in India study (2004) found a large number of companies make use of them in terms of policy and strategy. Approximately 76 percent of respondents in the current study reported their organizations' use of policy and strategy. Philip (2006) found that the recruiting system in IT companies is characterized by well-identified and defined competencies, hiring There are similar results in the present research. In the current report, 53.24 percent of organizations favoring internal sources are almost evenly split by respondent organizations and the remaining 46.7 6 percent emphasizing external sources. The Hewitt Best Employers in India study (2004) highlighted 75 percent of IT organizations focus on developing employees from within the organization, while only 25 percent emphasize on hiring skilled employees from outside the

organization. According to the current report, there seems to be a disparity in the importance put by firms in India.

REFERENCES

1. Acharya, P. and Mahanty, B. (2008). Manpower shortage crisis in Indian information technology industry, International Journal of Technology Management, Volume 38, Number 3, pp. 235-247.

2. Afiouni, F. (2007). Human Resource Management and Knowledge Management: A Road Map Toward Improving Organizational Performance, Journal of American Academy of Business, Cambridge, 11(2), pp. 124.

3. Agarwal, R., & Ferratt, T. W., (1998). Recruiting, retaining and developing IT professionals: an empirically derived taxonomy of human resource practices, In Proceedings of 1998 ACM SIGCPR conference on Computer personnel research (SIGPR '98), pp. 292-302.

4. Barrett, Paul (2003), Beyond psychometrics measurement, non-quantitative structure, and applied numerics, University of Auckland, Journal of Managerial Psychology, Vol. 18, No 5, pp. 421-439.

5. Bjorkman, I., and Lu, Yuan. (1999). The Management of Human Resources in ChineseWestern Joint Ventures, Journal of World Business, 34, pp. 306-324.

6. Blue Egret Content Group, Psychological Testing in the Hiring Process, Recruitment Solutions, accessed 10 Nov 2005, 1200hrs.

7. Chapman, Derek. S., Zweig, David. I. (2005) Developing a Homological network for Interview Structure. Antecedents and Consequences of the Structured Selection Interview, Personal Psychology, Autumn 2005, Blackwell Publishing, Inc., pp. 673- 702.

8. Chan, Peng . S., Pollard, Dennis., Park, Seungwook (2006). IT Outsourcing: Strategic Implications, The Review of Business Information Systems- First Quarter, 2006, Volume 10, No.1, pp. 97-104.

9. Crandall, L.A., Dwyer, J.W., Duncan, R.P. (1990). Recruitment and retention of rural physicians: Issues for the 1990s‖, Journal of Rural Health 6, pp. 19.

10. Farrell, D., and Grant, A.J. (2005). China‘s looming talent shortage, The McKinsey Quarterly, Vol. 4, pp. 70-79.

11. Gibson, Shanan. Gwaltney (2001). Dissertation submitted to the Faculty of the Virginia Polytechnic Institute and State University: Call Me Old Fashioned- Is My Job analysis Accurate or Not?