

The Job Mobility of IT Engineers: A Comparison between Kolkata and Bangalore

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Abstract: Bangalore or Bengaluru and Kolkata are two cities in India with IT & IteS industries provide substantial employment opportunities for skilled people in India. The industry is heavily dependent on outsourcing, mainly catering to the market of the developed west. While Bangalore is the prime IT industry destination in India, Kolkata lags far behind it. The paper seeks to highlight the differences of status of industries in two cities, and the factors governing such differences. Job generation, investment attraction and revenue generation in IT sector are the key areas where all the cities are following Bangalore at present. Kolkata is chosen for comparison, as Bangalore lies at the extreme opposite end of the spectrum. The paper is based on literature survey and analysis of secondary data for analysis of job mobility.

Keywords: Bangalore, Kolkata, IT, IteS, job mobility, industry.

1. INTRODUCTION

The IT engineers in India prefer to work in IT and IteS sectors, and most of which fall in the segment of outsourcing industries. The IT and ITeS sector provide services related to information technology (IT), research and development (R&D) services and also engineering designs, hardware plus business process outsourcing (BPO). Job mobility suggests the pattern of intra and inter-organisational transitions during a person's career (1).

Mobility is often linked with flexibility, adaptability, interactivity, reactivity and fugacity. The engineers and especially the young engineers are forced to get accustomed in living and moving in unstable work places. Mobility is different from the concept of 70's, and 80's decade that everyone will work in other countries (2). Understanding job mobility is paramount at the societal level as job mobility may encourage the diffusion of innovation, knowledge and technology across firms and, hence, stimulate the growth and development of intellectual capital in a society (3 and 4).

The objective of the paper is to compare the status of Kolkata and Bangalore in the context of IT job generation and mobility of IT engineers to Kolkata and Bangalore as two important job destination cities. The research has been conducted based on secondary data and literatures.

The Indian Information Technology and business process management (IT-BPM) sector is one of the largest employers in India, which directly employs about 3.5 million professionals, and has added over 2,30,000 employees. Digitization, internet of things, dextrous entrepreneurial environment, improving business environment are the driving forces of IT sector in India. The industry is evolving over the year and prioritized on boosting efficiency, enabling transformation plus agility and also partnering for digital initiatives. Aggregate industry revenues for the fiscal year FY2015 are estimated at US\$ 146 billion. In product engineering solutions, the fastest growing export revenue segment stands at 13.2%. Industry building competencies through acquisitions, collaboration and partnerships- industry M&A in excess of USD 5.3 Billion in FY2015. Digital solutions around social, mobile, analytics and cloud (SMAC) – upgrading legacy systems to be SMAC enabled, greater demand for enterprise resource planning (ERP) software, customer relationship management (CRM), mobility and user experience technologies is driving growth in IT services at present. Infrastructure outsourcing and software testing segment has also outpaced the industry growth rate. The (BPM) sector is being driven by greater automation, expanding omni-channel presence, application of analytics across entire value chain, etc. (5).

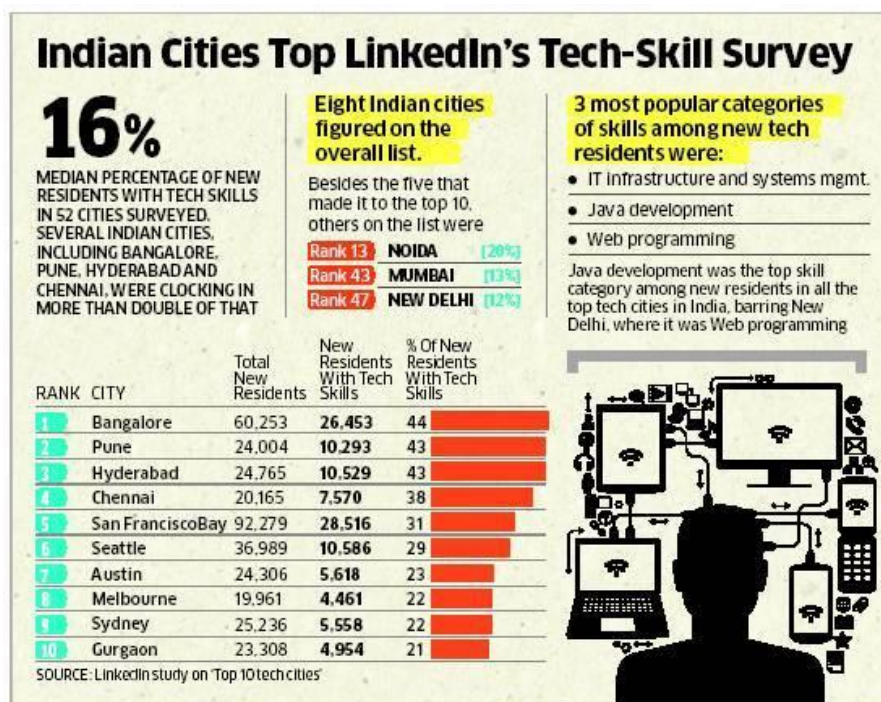
2. COMPARING IT INDUSTRY IN TWO CITIES

The two cities are in completely different stages of development of IT industry. Bangalore is termed as the Silicon Valley of USA. At the backdrop of globalised knowledge economy and consequent floating labour market, the labour mobility has become inevitable. Thus there is also increasing demand for skilled labour. The concept of “mobility” is linked to the idea of “opportunity” (6).

The perception of great social mobility is linked with the idea of mobility. The three characteristics of the entrepreneurial regime like low concentration of innovation, big pool of innovators and high entry rates lead to conditions for increased mobility of workers, both voluntary and involuntary. Low concentration of innovative activities suggests that many firms are in possession of the pieces of novel knowledge. Such condition creates an ambience in which the incentives for knowledge exchange among firms remains very high, since several firms own potentially high innovative knowledge that will be useful only if connected. High entry rates suggests new jobs being created and new opportunities for attrition from incumbents to newcomers (7). The present status enjoyed by Bangalore in IT business should be viewed in the context of early start by this south Indian city. Kolkata being a late-developing economy face few major disadvantages. The case of Kolkata resembles late development scenario in the Indian context.

The following table 1 shows the importance of different Indian cities in information technology service industry. Kolkata is conspicuous by its absence in the list.

Table: 1 Indian cities performance in IT and ItsS sector



Source: (8)

Bangalore has gained recognition as a leading center of high tech industry in addition to high quality services. Bangalore is linked to the world economy for meeting the needs of firms in the United States and Europe and superior educational and research institutions (9 and 10). The transfer of capital knowledge and the political will to attract the assets vital to transform metropolitan economies and infrastructure are considered critical to the growth of high tech city like Bangalore. Returning first-generation Indian immigrants have contributed significantly towards development of software industry in Bangalore. Even those immigrants, who could not physically relocate, served as bridges, thus facilitating effective transfer of technology, capital and expertise to India (11 and 12). In the case of Kolkata, lack of vision by the policy makers during 60's and 70's decades, accompanied by the absence of work culture have resulted in a huge loss of investment during that time. The industry has lost attractiveness from industrialists' perspectives due to problems like land acquisition and absence of multiplier effects. Still Kolkata has some distinct advantages like cheap wages, power supply and skilled labour force etc.

According to outsourc2india.com¹, Bangalore continues to be a software hub, with its skilled resources. The pleasant climate of Bangalore has been its forte. The Indian outsourcing revolution began here and it continues to be rated as a popular Indian city for investing, living as well as earning opportunities. However, inadequate infrastructure, political bickering, booming population, inadequate urban planning and expensive real estate prices are few factors, due to which other Indian cities are gradually posing challenge to Bangalore. Outsourcing services like software, chip design, IT consulting, customer support, tax processing or bio-informatics are managed by the Silicon Valley of India. Bangalore employs the maximum number of IT professionals. Many famous leading companies in Bangalore are Infosys, Wipro, IBM, Intel, Tisco, SAS, SAP, Dell, Motorola, TI, Oracle, HP, Yahoo, E & Y, AOL and Accenture etc.

Kolkata has IT industry, at the Salt Lake Electronics Complex due to connectivity, good power supply, governmental support, skilled labour, investor support, cheap wage rate, peaceful environment, low attrition etc. Kolkata is well connected by land, air and sea route to many cities. Kolkata offers social infrastructure for attracting senior to middle level management talent to Kolkata. Kolkata's added advantage is low attrition rate as part of its culture. Attrition is lower in Kolkata than other cities. Incubation services in Kolkata has fast connectivity, disaster recovery services, web hosting service etc. which provide appropriate platform for professionals in Kolkata. Kolkata offers the IT players very low operations cost in India. The low attrition levels in Kolkata also reduce the costs of training incurred by employers. Besides, West Bengal usually offers on-time service accompanied by recurring incentives to IT companies. These incentives have strengthened the value proposition of the city as a low-cost IT destination (13). However, Kolkata remains the least priority among engineers as suggested by the recent survey by Aspiring Minds (2011). Table 2 indicates the importance of Bangalore as compared to Kolkata.

Table: 2 Five cities in India and geographical differences in their popularity among job aspirants

Top 5 Cities for each region, counting the top 3 preferences.				
All India	North	East	West	South
Bangalore 72%	Delhi 79%	Bangalore 75%	Pune 81%	
Delhi 32%	Bangalore 54%	Delhi 53%	Mumbai 61%	Hyderabad 47%
Hyderabad 30%	Pune 33%	Pune 35%	Bangalore 47%	Chennai 43%
Pune 30%	Chandigarh 24%	Kolkata 32%	Delhi 18%	Mysore 23%
Chennai 23%	Mumbai 23%	Hyderabad 18%	Hyderabad 17%	Pune 12%

Source : (14)

Currency movements and improved operational efficiencies ensure that India's status as globally most cost effective sourcing destination has only become stronger in FY 2014-15. Even Tier I city like Bangalore is ten times cheaper than source countries and cheaper to a great extent than other low-cost destination countries. Hence, additional cost benefits are passed on to customers through subtle internal efforts such as, moderate wage inflation, adoption of automation and nonlinear models for controlling salary expenses, introduction newer career bands, and also flattening organisational pyramid etc. (5).

Recent studies (13) have established that almost all the important US and European IT firms have set up software development and R&D centers in India, especially in Bangalore. All major IT players have chosen India to develop their innovative, high quality, and valuable IT products from India's development centres. Many Indian companies intelligently exploit the positive network and reputation of the "brain drain" in addition to the Indian Diaspora in Silicon Valley for grabbing businesses from the reputed organizations. They negotiate with the top-notch companies for their IT solutions plus support services. These companies develop high quality solutions from Indian soil at low cost. Compared to

¹ India's Hot & Happening Outsourcing Destinations, <https://www.outsource2india.com/india/india-outsourcing-destinations.asp>, obtained on 12 April, 2016.

Acknowledgement: The present research is a product of a Minor Research Project wholly funded by the University Grants Commission.

Bangalore, Kolkata has been avoided by many top ranked Indian companies. Some apparent reasons might be the lack of leadership quality, low pool of talented and creative workers, low pool of mentors; medium pool of highly capable English-speaking manpower; mediocre work culture; late planning and policy implementation by the government; governmental apathy in modernization of technical and higher education; poor growth in manufacturing industries; red-tapeism and so on.

3. ATTRITION, MOBILITY AND CAREER GROWTH

Some of the reasons for employee attrition are – lack of work/life balance, organizational situations, work pressure or lack of it, better job opportunity, personal desire for job-change, poor management, ambition to enter senior levels of management, bad work environment, personal ambitions in specific field, inadequate rewards, personal circumstances, lack of satisfaction with present employer or vice versa. Mobility is associated with mental flexibility and innovation. Mobility is a method to think someone's behaviour in given contexts; and it allows adjustments to these contexts, facilitates cooperation, synergy, and cross-fertilization (15). Different types of mobility may be traced. External-upward mobility means job changes but with different employers. External-lateral mobility means accepting a job at same hierarchy, and with a different employer; which may be voluntary or involuntary.

Reverse brain drain has substantial contribution in the progress of IT sector in Bangalore. (16) found the US-educated and trained engineers transferring modern technical know-how and market information to assist in jump-start local entrepreneurship. This has allowed the home economy to participate in the IT revolution. The experience and professional networks are effectively used by the cross-regional entrepreneurs helping them to identify viable fresh market opportunities, mobilize capital, build skilled management teams, and set up partnerships with other specialist producers. The exchange of communication and information within ethnic and professional networks boosts up learning regarding latest sources of skill, technologies, capital as well as potential collaborators. Such type of decentralised modus operandi acts as an added advantage that very few multinationals can claim. Bangalore has a distinct advantage in this regard. The following table reveals the industrial differences between two cities.

Table: 2 IT Landscape in Bengaluru

Focus	Major firms
Chip design, software,	Infosys, Wipro, Intel, IBM,
Boi-informatics,	SAP, SAS, Dell, Tisco, TI,
Call centres,	Motorola, HP, Oracle, Yaho,
IT consulting,	AOL, E & Y, Accenture
Tax processing	AOL, E & Y, Accenture

Table: 3 IT Landscape in Kolkata

Focus	Major firms
Consulting, software	PwC, IBM, ITC Infotech, TCS

Source : (17)

After two decades of IT brain drain, Kolkata is in nascent stage of nurturing talent of local IT professionals. Many local IT professionals, who left West Bengal, are coming back to Kolkata for better jobs or to hone their entrepreneurship skills. Many professionals, after rich international experience or other lucrative places, are presently engaged in Kolkata in many flagship IT projects. (13: page 14-15) found that in the IT service industry the knowledge workers regularly refresh their knowledge through training and learning. As the cutting edge knowledge is imparted to the professionals through training, more value addition takes place. To move up the value-chain, IT service companies invest their resources in training and development for their people.

The following table 3 and 4 show the average payscale differences in these cities. Besides work opportunities, better salaries act as a powerful pull factor of skilled migration to Bangalore. The frequency of survey respondents are also much smaller than Bangalore. Hence, job mobility of the IT engineers from Kolkata to Bangalore is very high as per the common rules of mobility and migration.

Table: 3 Average IT jobs median salary in Bangalore

Senior Software Engineer	Rs. 735,806
Software Engineer	Rs. 450,248
Software Developer	Rs. 410,213
Project Manager, IT	Rs. 1,364,477
SAP Consultant	Rs. 603,489
Senior Technical Assistant	Rs. 1,072,475
Lead Software Engineer	Rs. 1,070,435

Source: (18) on the basis of individuals reporting 89,962

Table: 4 Average IT jobs median salary in Kolkata

Business Analyst, IT	Rs. 468,000
Project Manager, IT	Rs. 1,100,000
SAP Consultant	Rs. 540,000
Senior Software Engineer	Rs. 571,000
Software Developer	Rs. 210,000
Area Sales Manager	Rs. 687,845
Senior Software Engineer	Rs. 404,984

Source: (18) on the basis of individuals reporting only 187

4. CONCLUDING REMARKS

The IT and Ites industry in Bangalore has some added advantages as revealed by the discussion. The industry in Kolkata being located in industrially barren land, will find it difficult to sustain due to negative external factors. Investment climate is completely different in two cities, mainly due to infrastructural and historical factors. However, Bangalore being an international city having global connection with the skilled diaspora enjoys some technological leap forward. Reverse brain drain mainly occurs in Bangalore due to its already developed stage of industry and immense potential of entrepreneurship. Thus, in the coming decades, Kolkata as a centre of IT offers huge potential for acting as a peripheral IT service center from where the IT engineers and other technical human resource regularly move to Bangalore and vice versa for attrition and further training purposes. Governmental policies endorsing the IT industrial initiatives will continue to play crucial role in this regard.

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