An Insight into New Dimensions for Indian IT Outsourcing Industry

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Abstract: *Background: Over three decades, Indian ITindustry has become a $150billion industry built on outsourced works of rich-country companies with over 3 million employees.Banks and insurance companies, the biggest customers, have not been financially sound in past years.India seems to be losing out to countries like the Philippines and Malaysia which have staff trained in non-voice analytics and accounting work. With rise in the spirit of economic nationalism, more work being transitioned to onshore delivery centers, than off-shore. Objective: To predict the upcoming trend in the Indian IT outsourcing industry in the context of changing business structure and process due to advanced technologies. Methodology: Secondary data study focussed on* **Department of Industrial Policy and Promotion (DIPP)** *statistics,* **ASSCOM** *reports,* **CRISIL** *Research papers with systematic review of literatures and empirical articles. Findings: Call Centres are being replaced by Contact Centres because a Virtual agent can handle more volume work associated with various clients at the same time.Robotic process automation(RPA) ensures increased productivity at reduced costs through a quality process execution, using software robots to replace humans for repetitive tasks. Cloud technology enables outsourcing companies to tackle big data needs for increased agility & efficiency of business processes. But outsourcing has exponentially increased the cost of handling contracting projects. Too many brands face cost overruns due to poor cost projections and fail to maintain a lean infrastructure for their vendors. They are now shifting from outsourcing multiple vendors to single dedicated partner. There is centralization of IT systems for standardization, increase in productivity, cost reduction, higher quality and better efficiency.*

Keywords: Contact Centres, RPA, Virtual agent, VMOs, SROs, Containerization

1. Introduction

India has emerged as a hot destination for outsourcing works in recent years. The success is mainly due to the fact that there is a ready availability of large numbers of human resources since a majority of its population is young and under 30. But Indian outsourcing industry now have an uncertain future, due to external forces beyond its control. Rapidly shifting technology needs, Brexit, changes in immigration and visa norms and the protectionist US are badly affecting the industry — with the growth projection from industry body NASSCOM slumping to 8%-10% for 2016-17 from 12% for 2014-15. Hiring too has slowed, with fewer people required in a sector embracing automation and robotics to revitalise itself. Outsourcing is one of the biggest sources of employment in India. As now it's time for Indian outsourcing sector to get along the upcoming trend.

2. Upcoming trend in Indian IT outsourcing industry

2.1 Cognitive technologies

Also known as artificial intelligence that augments human expertise and performance by using machine learning, natural language processing with computerized vision to automate tasks. Cognitive technologies focus on computerising the very easy and low-value tasks and on supporting more complex expert-rich work. Robotic process automation (RPA)automate highly structured administrative tasks. It has been applied to repetitive, structured work that can be expressed in logical rules and workflows. RPA is relatively easy to configure and implement in a particular application, it typically produces benefits rapidly.

1) Contact centres

The trends going to alter the contact centres are likeOmni-channel that respond to customers with a single, unified customer view, regardless of the channel of interaction. Contact from each channel like email, chat, voice,etc.are carry over to subsequent channels to provide a rounded view of the customer.From providing services to upsell products in addition to assisting customers in resolving issues and with a self-service portal, customers can search for their problem online and follow instructions to fix it. The portal can include a click to call button where they are transferred to an agent and they don't have to repeat all their information in order to get assistance.Social media servicesin addition to one-to-one, community-based interactions are taking place on discussion threads, wikis, blogs, podcasts, etc.Most contact centre software companies have begun offering cloud based services under a pay-as-you-go scheme. Cloud-based services offer 24/7 support and provide real flexibility and adaptability, particularly in their ability to be integrated with third-party.

2) Security service provider

In an institution many external users and partners require access to the business network in the course of normal operations. Institutions could have between 200 and 300 high-risk, third-party relationships at a time.Data Security solutions provided by Security service provider enables enterprises to secure the information being sent to the outsourced environment while establishing and controlling security access to the information using [1]*Tokenization and Dynamic Masking*. With the solution's format-preserving tokenization capabilities, managers can restrict access to sensitive assets, yet at the same time, format the protected data in a way that enables many users to do their jobs. They are transparent to applications and databases, so no modifications to the IT infrastructure are required and it supports all leading databases as well as unstructured data

stores on Linux, Unix and Windows platforms.Only the largest of companies can afford an in-house security team with the tools and expertise to defend their database. That's why a growing number of smaller companies are outsourcing the job to security services providers. Some providers offer cloud services that monitor your systems by running your traffic through their data centers before it comes to you. Some install equipment on your network that sends data to them for analysis and investigation and others combine in-house and cloud technologies.

3) Vendor management offices (VMOs)

As the list of companies' suppliers grows longer and becomes more diverse, this is where vendor management offices (VMOs) come in to provide the solution. VMOs identify the importance of the function to the organization, the nature of the activities the vendor will perform, and the inherent riskiness of the activity. It delves into a vendor's ability to meet the requirements for the proposed service andvendor's financial position to deliver on its promise considering vendor's contingency plans and insurance coverage. VMOs take note of operational issues, staffing, expertise, and the vendor's internal control. The vendors are subjected to regulatory review privacy and information security, supervision and dispute resolution. VMOs establish the performance standard and service quality expected under the agreement.The VMO also works with sales, marketing, development, business units, finance, and procurement to identify potential vendors, and investigate possible solutionsto initiates bid process.VMO keeps centralize vendor information and track & monitor vendor contractual commitments to ensure commitments are met, issues addressed, and renewals tackled.It systematically score vendors across multiple categories of performance, while allowing stakeholders to rate vendors in the categories that apply to them.It alsoconduct period-over-period performance reviews of like vendors to identify consolidation opportunities.

4) Socially Responsible Outsourcing (SRO)

As to fulfil corporate social responsibility (CSR) requirements,large firms would not need to provide additional support that in-house employees as SRO focuses on utilizing workers from poor and vulnerable communities to perform functions with lower and moderate skill requirements such as scanning documents, data entry work, data verification and cleaning, video tagging, and other micro-work. SRO has the potential for attrition rates to be 15—40 per cent lower than industry norms, resulting in tangible savings through lower training and hiring costs with the inherent benefits of ongoing workforce knowledge. It is an effective market-based solution to poverty alleviation and shows the potential to create millions of jobs for the young and those living in poverty. SRO also has the potential to benefit traditional BPO service providers, who are actively seeking alternate lower-cost destinations (i.e. smaller cities and/or rural towns) and pools of new and more affordable qualified workers.

5) Containerization (container-based virtualization)

When moved from one computing environment to another, a Container provides an identical software environment. Containers hold entire runtime environment for a software; including the application, libraries, binaries and configuration files. This way the software can perform reliably on different OS & configurations and it becomes lighter & faster compared to the [2]*virtual machines* (VM). Because containers share the same OS kernel as the host, containers can be more efficient than VMs, which require separate OS instances. Containerization gained prominence with the open source [3]*Docker*, which developed a method to give containers better portability – allowing them to be moved among any system that shares the host OS type without requiring code changes. With Docker containers, there are no guest OS environment variables or library dependencies to manage.This makes for a much more agile environment and facilitates new approaches, such as micro-services and continuous integration and delivery. One of the key benefits of containerized software development is that to build software applications without the problems involved in multiple deployments across disparate systems. Containers also allow developers to more easily perform administrative and configuration tasks such as load balancing and resource scaling, thereby removing the dependence on IT OS for configuration changes to optimize deployments.

3. Conclusion

The Indian IT Outsourcing industry has to realize that once the industry matures, profit margins & return on investment stagnate and reach a plateau. We will observe the maturation in cloud computing, robotic process automation (RPA) and cognitive capabilities while entities like the call center and business models based solely on labour arbitrage will extinct. Fortune will favour those service providers who can innovate and create new products, services, and business models to capture marketplace advantages like improving software quality and enhancing user experience to achieve a competitive advantage they could not achieve with only onshore resources.India is the topmost offshoring destination for IT companies across the world. Having proven its capabilities in delivering both on-shore and off-shore services to global clients; emerging technologies like Social, Mobility, Analytics and Cloud offer new Challenges and opportunities for top IT firms in India.

References

[1] Aruna Kumar Panda, (2012) "Business process outsourcing: a strategic review on Indian perspective", Business Process Management Journal, Vol. 18 Issue: 6, pp.876 – 897

[2] Daisy Mathur Jain ,ReemaKhurana, (2015) "Impact of pricing and outsourcing models on Indian information technology service outsourcing", Benchmarking: An International Journal, Vol. 22 Issue: 4, pp.610 – 623

[3] Daisy Mathur Jain ,ReemaKhurana, (2016) "A framework to study vendors' contribution in a client vendor relationship in information technology service outsourcing in India", Benchmarking: An International Journal, Vol. 23 Issue: 2, pp.338 – 358

[4] DebasishaMishra, BiswajitMahanty, (2015) "Business knowledge requirements and onsite offshore work division in Indian software outsourcing projects", Strategic Outsourcing: An International Journal, Vol. 8 Issue: 1, pp.76 – 101

[5] Ernest Gundling , Christie Caldwell , Karen Cvitkovich , (2016)"Global Talent: Beyond Outsourcing" in Joyce S. Osland, Ming Li , Mark E. Mendenhall (ed.) "Advances in Global Leadership" (Advances in Global Leadership, Volume 9)Emerald Group Publishing Limited, pp.353 – 374

[6] Ingi Runar Edvardsson, Susanne Durst , (2014) "Outsourcing of knowledge processes: a literature review", Journal of Knowledge Management, Vol. 18 Issue: 4, pp.795 – 811

[7] Kirti Sharda, Leena Chatterjee, (2011) "Configurations of outsourcing firms and organizational performance: A study of outsourcing industry in India", Strategic Outsourcing: An International Journal, Vol. 4 Issue: 2, pp.152 – 178

[8] Lakshmanan Ramanathan, Sundaresan Krishnan , (2015) "An empirical investigation into the adoption of open source software in Information Technology outsourcing organizations", Journal of Systems and Information Technology, Vol. 17 Issue: 2, pp.167 – 192

[9] Pamela Meil ,Hal Salzman, (2017) "Technological entrepreneurship in India", Journal of Entrepreneurship in Emerging Economies, Vol. 9 Issue: 1, pp.65 - 84

[10] Rajshekhar (Raj) G. Javalgi, W. Benoy Joseph, EladGranot, Andrew C. Gross, (2013) "Strategies for sustaining the edge in offshore outsourcing of services: the case of India", Journal of Business & Industrial Marketing, Vol. 28 Issue: 6, pp.475 – 486

[11] S. Dzever, (2012) "Business process outsourcing industry in India: additional benefits of a CSR approach", Strategic Direction, Vol. 28 Issue: 11, pp.64 - 78

[12] Sandhya Shekhar, (2008) "Benchmarking knowledge gaps through role simulations for assessing outsourcing viability", Benchmarking: An International Journal, Vol. 15 Issue: 3, pp.225 – 241

[13] Shereazad Jimmy Gandhi, Alex Gorod, Brian Sauser, (2012) "Prioritization of outsourcing risks from a systemic perspective", Strategic Outsourcing: An International Journal, Vol. 5 Issue: 1, pp.39 – 71

[14] Shrinivas Patil, Winai Wongsurawat, (2015) "Information technology (IT) outsourcing by business process outsourcing/information technology enabled services (BPO/ITES) firms in India: A strategic gamble", Journal of Enterprise Information Management, Vol. 28 Issue: 1, pp.60 - 76

[15] Sumita Raghuram, (2009) "Outsourcing in India: The Past, Present, and Future", Journal of Asia Business Studies, Vol. 4 Issue: 1, pp.56 – 57

[16] CRISIL Research paper titled "Economy Quick Byte: Budget thrust needed on sectors that can immediately push job creation" Published on: Jan, 17

[17] Department of Industrial Policy and Promotion (DIPP) FDI statistics: October2016-December2016.

[18] NASSCOM report titled "AI, Beyond the Myth & the Hype" Published on: Nov, 2016

[19] NASSCOM report titled "The IT-BPM Sector in India: Strategic Review 2017"Published on: Feb, 2017

Notes:

[1]Tokenization, when applied to data security, is the process of substituting a sensitive data element with a non-sensitive equivalent, referred to as a token that has no extrinsic or exploitable meaning or value.

[2]Virtual machine (VM) is an operating system (OS) or application environment that is installed on software, which imitates dedicated hardware.

[3]Docker is an open platform for developers and system administrators to build, ship, and run distributed applications, whether on laptops, data centre VMs, or the cloud.