Reskilling the Knowledge Workers in It Sector – Need of the Hour

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ABSTRACT

Reskilling and online certification are the biggest earners in the Indian online education market, spent $93 million in 2016 and expected growth of $463 million in 2021.This is dominated by IT professionals with almost 5 lakhs paid users in 2016, mentioned by a report. The people who upgrade their skills tend to grow consistently. Jatin Migiani, (co-founder of Ethan) said that global multinationals reskills their employees, while Indian companies are tepid in recent times. Only Small and medium sized companies are keen in training their employees as they cannot hire people frequently. But IT sector hire people as per requirement so they show less interest in training the existing employees. Automation and AI puts jobs at risk, companies just looks in for profit from technology investment. With some basic tasks removed from human work force, employees should be trained and reskilled to focus on innovative value-driving activities. Reskilling IT workforce is the need of the hour.

INTRODUCTION

Employees in general depend on their employers to widen their skills, according to the updation, irrespective of their age. They need new skills as their role changes. New entrants might be technologically savvy but does not have any experience. Upgrading in coaching, mentoring and reskilling will lead to next level in filling the gaps.

CURRENT STATUS

Nasscom decided to announce and conduct its customer summit in US titled "Collaborating for digital tomorrow" it was all about industry slowdown, lay-offs, visa issues and protectionism. There aroused a question that is it sensible to launch customer-oriented campaign in American commerce. The answer they received was it is good to practice digitally. As a result Nasscom summit became the beginning for new customer journeys and was a great hit.

Factors affecting India's economic prospects are:

1. Government's inability to train its people,

2. Job loss due to automation
3. Closure of informal sector firms due to note ban.

These could accelerate slowdown. SBI research said that slowdown was real and technical and called for more open spending to capture the slide. The days after BJP President Amit Shah attributed the slowdown. There is price pressure. A lot more automation will evolve. From the point of digital side, the skills acquired acts as a premium. Investments have to be made to make sure that people are trained properly.

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Mid to senior level professionals opt for management courses and people with less than 10 years of experience go for domain specialisation to gain skill sets. Corporates customise their training for specific requirements while personal trainees would need to enhance their employability which leads to slight cost difference in the final cost borne.

82% of the Indian employees agree that they must be provided with lifelong learning but only 38% of training has been given to employees as it is an organisational priority as of 2016 report (Emeritus Institute of Management). There is always a demand for upskilling. IT sector has created a surge in certification enrolments due to layoffs. Budget for training also allocated by HR teams in most countries.

Transformations towards digital technologies such as cloud, artificial intelligence or automation are yet to balance the decline in traditional IT infrastructure business. Most will experience cost pressure in next 3-4 quarters due to increased global hiring.

EMERGING FIELD OF IT – OPPORTUNITIES AND CHALLENGES

TCS expects revenue of about $1 billion each from several emerging technology

segments in next 3-7years. TCS explores in segments such as cyber security, internet of things (IoT), analytics of IoT, and cloud application and infrastructure. These are now merged into 3 broad groups. Those groups are:

- Cognitive business operation
- Digital transmission practice
- Consulting and service integration, done to deliver services to clients globally.

Company expects 16 new segments and sub-segments. Also includes some existing ones which has already shifted digitally in order to increase growth and to concentrate resources in new areas. These areas have revenue targets of varying degrees and some have the ability to scale up to make billion to dollar business in 3-7 years.

TCS is adapting to the changes. "In digital, ability of multiservice lines creates outcomes for clients as it is essential. People who work without boundaries will succeed in big time."- Krishnan Ramanujam, president, business and technology services. Around 2 lakh TCS employees have been retrained on fresco platform to serve its global clients like Citibank, Siemens, Ferrari, Bombardier and Nissan. At present 17percent of its $17.5 billion revenue is from digital services. Customers of TCS have more ability to invest

in newer innovations thereby expands for automation.

Smaller tech firms offer hope amid IT gloom

Global goes local: Rubrik (cloud data management firm), Luxoft (software development firm) together hires 2000 people in India.

- More jobs will be created in emerging areas such as blockchain, fintech and artificial intelligence.
- There are 1100 global in house centres focuses on product development in the country, employing 800000 people.
- Luxoft holds a plan for a new product development facility in the country. More senior leaders, those three levels below CEO, global companies based on India GIC'S in the next 3 years. The scale and scope of work managed by GIC's is to increase.

Infosys, gave campus offer for graduates. Graduates were asked to pick paid course on front-end development on Udacity (online techno education provider) and get a degree/pass in it before training period. Once placed after training Infosys gives back student course fee on Udacity. Here it ensures to have trained engineers who are ready to be put on digital projects- segments. Business

with digital technologies is growing by 25% while legacy business shrinks by 2.5% given by Everest group (global technology consultancy).

Infosys and its peers (TCS, Wipro, HCL) have built applications for its customers which could be accessible with computers. This has declined as customers want them to be accessed through mobile phones. Better design and applications hosted on cloud for IT firms renders internet access and ensures that network is safe.

Trained freshers hit the ground running

IT sector changing its hiring pattern and taking trained graduates for entry jobs, many companies sees an increasing demand in digital technology-enabled services. IT-BPM (business process management) sector, hired 1.7 lakh people last year. Thousands of jobs been created annually, bulk hiring made from campuses.

Since companies focus on trained freshers no further training is required at the workplace. IT sector companies (TCS, Infosys, Wipro, HCL, Tech Mahindra) thinks about equipping their freshers with initial training. BPM looks for ready-talent, business operations are faster than before.

Training employees with old and new technology will take much time thereby IT companies look to deliver its services by artificial intelligence, data analytics and machine learning.

Large IT firms wants people to be trained on their own before they step forward, says Rajesh Gupta, Indian partner at IT consultancy firm ISG. Trend is getting quick. Some collaborates with product companies to expertise in AI, machine learning or automation, apart from co-creating courses.

PROBLEM OF UNEMPLOYMENT

Essential to develop top quality digital talent. This talent should consist of learning ability, a key of virtue and investments have to be made in all geographies and by partners to build and deploy new thought leaders, user experience specialists, data scientists and digital storytellers is a part of collaboration to succeed in new digital area. Reskilling Employees: Indian firms invest in AI tools, eg: Infosys with Mia platform, Wipro with Homes, TCS and Tech Mahindra has TACTIX. This helps clients automate projects and improve efficiency by doing more on complex projects, reduces mass hiring. Focused in skilled professionals.

IT firms stare at jobless growth as top employers focus on automation, which

improves productivity and deliver services. TCS and Infosys exports $117 billion, seen its employee headcount decline for 3 months in the first quarter of FY18. For IT exporters the 3 month period is the strongest. Decline in employee head count:-TCS: 1,415 to 385,809; Infosys: 1,811 to 198,553.For a sector generating high pay decline in employee count is a weak scene. Indian software exporters face challenges through slowdown in business such as from traditional services-contributes four out of five dollars earned; automation-eliminates need for low-end worker; shifts in client spending-towards digital and cloud, requires consultation from people and work jointly with clients to build solutions.

Employee performance metrics has been tightened and let go of its engineers as they are the ones who are in toughest phase over a decade. Rise in automation over entry-level, mid-level people who has not upgraded their skills or roles tends to lose their jobs. Mid-level people, in spite at risk they have the opportunity to upgrade themselves with upcoming technologies .If they upgrade themselves will they have job assurance? asks Sanchit Vir Gogia, founder and chief executive, Greyhound Research.

URGENT NEED FOR RESKILLING IT WORKFORCE

India and society as a whole has ramifications: Jobs are impacted through digitalisation. Requirement of employees in job has declined due to skill obsolescence, technology changes; developments in AI, robotic process, automation and machine learning destroy incumbent roles rapidly. As industry grows more jobs will be added and accessible for those who equip themselves in emerging technologies. Training majors such as GTT, NIIT took the initiative in helping more than 2 million employees digitally ready. Here AI and deep learning helps employees dent with job prospects. Skills Alpha and VideoKen help in skilling people.

Digital transformation has to demonstrate business value, few mobile apps are customer oriented interfaces designed well compared to past legacy systems. Customers spend much time in touch point, channel. Employees should behave like digital native through adequate sensitisation and skilling; should be able to engage when required from expected digital companies.

Indian firms are expert in creating and maintaining back-end applications. Repeatable work being automated. Indian firms learning to build front end and stitch with back end. India's top five technology firms are reskilling engineers for past 2 years. As old work being automated workforce has to be retrained. Thus

companies need new skills. Employees need to acquire new soft skills. These companies have invested in design thinking and agile development methodology (by peter-bendor-samuel; founder and chief executive officer of Everest Group, a global outsourcing advisory).

New motivation has to be spread to upskill and reskill themselves for 55 new job roles which NASSCOM has identified and published. Deploying reskilling platforms by skills alpha, investment by 5F World, skill gap identification, skilling mechanisms powered by small bots and adaptive learning mechanisms enables reskilling happen quickly in all organisations.

IT industry with inspired confidence in Indian generation brought world leadership status. India's prowess is still intact and more new firms and existing large incumbents need to apply their technology innovations to problems that the country is facing and build global competitiveness in India and globally needed areas of opportunity. Country needs new technology research, development and solution building for future. For this there should be collaborations between government, corporations, universities and social enterprises to build India of our dream.

Needed Skill sets for the modern IT workforce

What skills do they need to carry with them to develop their roles? First: Develop their Analytical Skills. Done to understand the problems, configures technology; grasp benefits and implications of various options; to come out of a solution; listening and understanding required in taking effective decisions. Includes ability to research, challenge of a problem then designs solutions for what business requires. Secondly: Develop skills around Data and Numeracy. This is done to gain high knowledge in data which in turn increases demand. It focuses more in technical sectors such as financial services and pharmaceuticals. With data analytics it is important in business sector such as marketing where companies get to understand their customers. It is also important in other sectors such as retail, manufacturing and utilities.

It is not just about skills. As technology emerges slowly adopt to it. Employees need to have growth mindset, gives them the flexibility to deal with continuous business process. Agile development and rapid deployment in technology will characterise modern digital business.

This validates data on number of people who have opted for online certification. Over

half million people chose online certification to reskill themselves in technology. People have spent for this around $93 million in 2016 (KPMG report). Spending are expected to grow $463 million in 2021 when industry focuses on digital technologies. As organisations increase they rely in certification which validates one's ability to learn and actualize new skills. In future, companies get people based on their skills rather than investing in retraining.

We live in a world of automation; skills define employment prospects of citizens, especially young people. UN world youth skills day (July 15th) attracts regard for the requirement for outfitting the youthful with skill and shows a path in fulfilling their career. India made skill development as national priority with National Skill Development Mission in 2015 rendered a programme having a budget of about $17000 crore. Indian Industry yet thinking to approach in building up employees with skills and focuses on programme outcomes and strengthens the connection among skilling and working. These efforts would be critical if India's skill development offering is to be scaled up and made sustainable.

Effective   Training

Training is not just a tick box exercise it must be rendered continuously based on collaboration and instant access on information. Not all employees need marathon training sessions.

Learning opportunities should be relevant and tailored in people's accordance which reflects in the behaviour of their life apart from work. Social Media such as YouTube renders learning tool which helps people to shape themselves. 39% of non-managers uses online and collaborative learning tools in their organisation for development.- surveyed by Oracle.

HR must adapt training and development to match employee expectations and give effective training. Latest technologies must help democratize training in companies. Use of collaboration and on-demand training modules means training not just for senior staff.

Tools like virtual reality, has huge potential in learning and improving one's performance. By placing these training approach and system HR can help employees develop their skills to perform the task. Organisations have to consolidate the benefits regarding upcoming technology and make sure that employees are in a position to generate business value in future.

Detailed study by PwC says that product, system, service will be redesigned and customised in order to fit the customer

needs. Firms will become participants in large industries. First movers tend to corner large parts (new opportunity share) and customers tend to dominate demand. Every process, person engages in manufacturing demand and supply chain thus it should be customer driven in order to succeed and stay relevant. Companies such as Siemens and GE offers comprehensive digital offering with cloud based systems to connect machines and IoT sensors. Partnering and co-creating ideas with customers, collecting and analysing data.Value chain and logistics process serves customer needs. Emerging digital economies will need new mindset, capabilities, skills. The California Manufacturing Technology Consulting group defines Smart Manufacturing as unit of data, technology, environmental perspectives and economic growth. Manufacturing enterprises have to understand the nuances of making this happen in real time. Digital cuts the edge for all factories.Here customer can participate or employees learn continuously with platforms enabled by AI and machine learning.This is essential for every manager and engineer in an organisation.Skills will be needed in operations planning and control, production and maintenance process, material planning and warehousing by the use of 3D printing and robotics .Virtual reality enables high

productivity to do takes like picking parts in warehouse. Augmented reality makes training of the shop floor engineer and fault diagnostics easier.

At workman level, capabilities deal with: extensive automation and robotic process. New digital capabilities will emerge every month and calls for quick assimilation and integration.

FUTURE FOCUS OF ITS SECTOR TO GENERATE JOBS

Clunky process, high latency information system and reluctant responsive are anachronisms in digital era. Relationship with technology services has to change, service level agreements to be replaced by business outcome measure and collaborative centres of excellence becoming true hallmark of partnership excellence.

At Masco summit leaders emphasised: Technology advancement and continuous change in lifestyle will happen. It is Collaborative creativity integrates ideas among participants in digital journey thus brings in success.

End collaboration summit: Masco team, key customers and speakers were invited to Nasdaq, idea of digital collaboration

welcomed by the bourse. Nasscom team closes with US stock market at high records, seemed to proclaim to the world that IT and Nasscom are open for business and customer support and collaboration will be driven.

In US more than 2000 jobs added wherein company would be hiring people aggressively. Advancing in automation technology will commoditize jobs thereon moving on to: next generation jobs, new areas of opportunity and build new skills, says Sikka.

Digital allows us to play in the new area

Wipro sees every dollar coming from digital services. Service delivery through digital technology changes business dynamics in a company.

Practically every industry being impacted due to rise in automation and data analytics, countless new roles will rise. Business has to rethink the way they are and turn new technologies to be successful. Employers seek digital-saavy workers to master in new technologies.

Thus to prosper modern employee would be needing new skill set.Recent Research by Capita Resourcing says 54% of leaders thinks that the HR's major focus for next 5 years should be on training and developing people for automation.

CONCLUSION

To conclude, humans will be replaced by technology due to repetitive or administrative tasks. It reshapes workforce and changes job descriptions in the process. Automation and AI puts jobs at risk, companies just looks in for profit from technology investment. With some basic tasks removed from human work force, employees should be trained and reskilled to focus on innovative value-driving activities. Reskilling IT workforce is the need of the hour.

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