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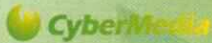
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THE BUSINESS OF INFOTECH

Rewriting the Rules

With its remarkable potential to eliminate the need for physical labor, automation is ushering in new hopes of revival for the IT services industry

INDUSTRY VIEW

—ROBERT H. BROWN
Cognizant

—ABDUL RAZACK
Infosys

—RAMESH GOPALAKRISHNAN
Mindtree

—K R SANJIV
Wipro

76 pages including cover

Special Subscription offer on page 42

Smita Vasudevan
smitav@cybermedia.co.in

Automation:
Rewriting the Rules for India's IT Services Industry

There is a revolution under way in the form of automation which promises to redefine the IT services landscape like never before. A threat or an opportunity, but indeed a new reality the Indian IT industry is gearing up for

The rules are being rewritten for the IT services industry. The service delivery models that worked unfailingly for years, now stand irrelevant with new technologies and new buyer expectations coming to the fore.

The Indian IT services industry has for long enjoyed the benefits of labor cost arbitrage and flourished and thrived on it. But the industry is facing dramatic changes now. The shifting focus on new technologies, rising labor costs, and the new customer mantra of asking 'more for less', is making it tough for service providers to maintain profitability with traditional service delivery models that were largely 'people' based.

While the industry's struggle to serve the dual mandate of improving service quality and maintaining costs continue, there is a strong revolution under way in the form of automation which industry experts, service providers, and enterprises believe can transform and redefine the IT services landscape with its potential to cut down the need for physical labor.

On the enterprise side, there is an ever increasing thrust on transformations led by disruptive technologies like mobility, cloud, and big data. To be ahead in the game, Indian IT vendors need to enable the change for their clients and at the same time desperately need to get their growth back on track. In this scenario, automation is becoming the change enabler. Software and process automation stands to change the way, the daily routine functions were ever thought of being performed. Automated technologies are eradicating the need for human intervention in different areas, especially high-volume, repetitive tasks including IT support, remote infrastructure, and business processes.

"As the offshore arbitrage has been used to the hilt by most service providers, the table stakes have changed and the next level of arbitrage is through automation of labor intensive functions," says Anupam Govil, Partner, Avasant.

> " Service providers will need to shift revenue models that are input-centric, to models where output and outcome-based benefits are paramount

—Robert H. Brown
Assistant Vice President, Business Process Services, Cognizant

> We have deployed our automation platform and initial results are very promising. We see between 30% to 50% productivity improvement "

—Abdul Razack
SVP - Global Head - Infosys Platforms, Big Data and Analytics
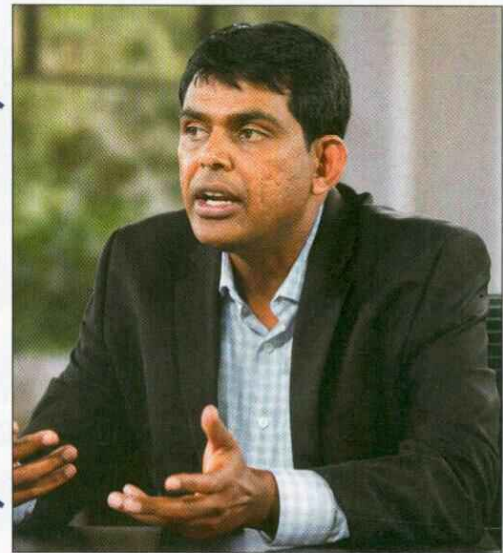
There are many factors driving the push for automation. IT companies are moving towards non-linearity as they need to scale up without the burden of additional hiring. There is also the need to control labor costs as margins are shrinking. And to safeguard their businesses against growing attrition, new sourcing models backed by innovative technologies like automation are the best bet. It promises of a scenario where they no longer need to rely on the services of a huge army of software professionals to get routine things done.

In fact, industry experts even sound confident that the benefits of automation would extend far beyond cost savings that was ever achieved through labor arbitrage.

"Automation is not only about costs, it is also about providing more reliable quality, and providing faster turnaround to clients. Traditionally, clients have complained about lower productivity on offshore delivery. Automation provides a way to address these issues," says Chirajeet Sengupta, Vice President, Everest Group.

As new technologies continue to redefine the rules of IT service industry, automation is seen by service companies as the way to differentiate their offerings and gain competitive advantage. IT companies that have sound automation capabilities will be better positioned to reprice and realign their service offerings in line with the changing expectations, while the ones sticking to the traditional FTE models

> **Level 1 jobs that require a knowledge worker to perform simple repetitive functions stand to be automated at this point of time. We expect automation to enhance the productivity levels of certain higher level knowledge-based jobs**
>
> —K R Sanjiv
> Chief Technology Officer, Wipro

> **Mindtree believes that a strong combination of robotic process automation, machine learning, and predictive analytics would revolutionize the business in delivering significant value proposition to our clients**
>
> —Ramesh Gopalakrishnan
> Global Head - Delivery & Operations, Mindtree
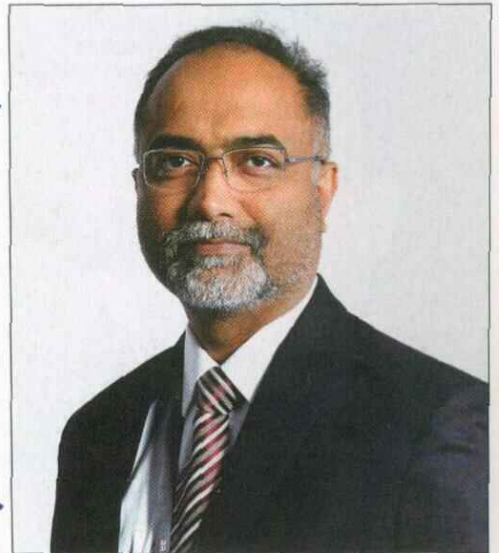
will tend to lose out in the increasing price wars.

"Service providers which rely exclusively on labor arbitrage, will find their competitive value proposition greatly diminished in the absence of a meaningful automation strategy. And those which are facing growth challenges due to other issues like sub-scale, poor sales force, etc, will face even stronger pressures due to automation," opines Sengupta.

There is no tiptoeing around the fact that automation has the potential to bring revolutionary changes in the IT industry. According to the Institute for Robotic Process automation, "Any company that uses labor on a large scale for general knowledge process work, where people

are performing high-volume, highly transactional process functions, will boost their capabilities and save money and time with robotic process automation software."

GEARING UP

Indian IT majors are increasingly looking at margin improvements and expanding their market share through innovative platforms either by way of partnering or through building capabilities inhouse. Govil reveals, "Indian IT companies are investing on developing automation tools and platforms offering cost benefits to demanding customers. Providers like Infosys and Cognizant have entered into a revenue sharing agreement with IPSoft while HCL Tech-

> In the future, employees will be expected to bring cross-functional expertise to the table. Simply being a good programmer, or a system administrator will not be good enough

—Chirajeet Sengupta
Vice President, Everest Group

> According to an industry analysis, the top three Indian IT services companies, TCS, Infosys, and Wipro have collectively lost 100,000 people between them while having a net added headcount of 40,000-50,000 in 2014-15

—Anupam Govil
Partner, Avasant

nologies and Tata Consultancy Services (TCS) have developed their automation tools inhouse." While some players are providing it as an addition to their core offerings while others have embedded it within their core services.

Infosys has been betting big in this space and has also taken the acquisition route to plug in the holes in its capabilities. Its Panaya acquisition signals the company's growing interest around automated technologies. "We see automation as an opportunity to drive costs down and provide higher value for customers. More and more repeatable tasks will be automated. We have deployed our automation platform and initial results are very promising. We see between 30-50% productivity improvement,"

says, Abdul Razack SVP, Global Head, Infosys Platforms, Big Data and Analytics.

Close rival Wipro too has developed its Artificial Intelligence (AI) platform, Wipro HOLMES. "In 2015, we launched Wipro HOLMES and brought together existing automation platforms, niche partner solutions to bring cognitive robotic interventions in infrastructure, applications, testing and BPS services," reveals, Anurag Srivastava, Senior Vice President and Business Head, Business Outcome Services, Wipro.

Other leading players like Cognizant also have their strategies laid out. "Automation allows us the opportunity to structure, price, and measure our offerings as out-

INDIAN IT MAJORS BETTING BIG ON AUTOMATION (KEY DEVELOPMENTS IN 2015)

TCS announced its Artificial Intelligence (AI) based automation platform, which it plans to sell as a standalone product and along with its service offerings

Infosys acquired US-based automation technology company Panaya for around $200 mn, its second biggest acquisition after Lodestone

Wipro entered the automation space with its in-house AI platform, HOLMES, which can be used to automate industry specific business processes

IMPACTING BUSINESSES & HEADCOUNTS

Up to about 85% of the cost of commoditized IT services can be reduced with Automation

According to Frank Casale, Founder & CEO, The Institute for Robotic Process Automation, around 40% of IT/BPO service providers will be out of business or acquired by larger enterprises if they fail to embrace the change

In 2014-15, IT majors, TCS, Infosys, and Wipro collectively lost 100,000 people between them

Automation is estimated to result in around 15 to 20% reduction in hiring at junior levels in the coming years

Source: Based on opinions of Industry experts and published sources

come, transactional or gain-share agreements. We have a number of examples of clients on fixed fee and per transaction pricing, where we have taken the benefits of automation and shared the benefits of the new model, a win-win for both of us." Robert H Brown, Assistant Vice President, Business Process Services, Cognizant.

Mindtree, another key player in the IT services space is confident that the technology will spur new dimensions of growth. "Our strategy is based on the extensive use of our proprietary monitoring and management platform, mWatch, which enables the company to monitor and automate a variety of tasks that typically involves significant manual monitoring and management, as well as leveraging our proprietary Atlas RAPID automation model along with a leading automation and autonomics solutions provider," says, Ramesh Gopalakrishnan, Global Head - Delivery & Operations, Mindtree.

NEED FOR NEXT-GEN PLATFORMS

New age business models will require IT companies to develop next-gen platforms based on innovative technologies like automation, M2M, and cognitive technologies. Intelligent and innovative solutions will be the next drivers for growth as traditional business models are on the verge of becoming obsolete. "Leveraging intelligent analytics coupled with automation will be the lynchpin of next-gen sourcing models," adds, Govil.

Sengupta points out that a winning automation platform must have some essential characteristics, such as extensive set of pre-packaged features that are easy to deploy and have a short lead time to positive RoI, and wide set of integration plug-ins with the customers' exist-

ing IT tools in order to protect existing investments.

The developments are still at a nascent stage and it is too early to be able to gauge the future impact on margins and overall productivity. Yet experts are of the view that it will result in significant cost savings in the long-term as IT companies will have to hire, train, and retain fewer people. Yet the expectations should be realistic. A Forrester's report, "Gauging the impact of Heuristic Automation on Service Delivery," by William Martorelli, Jean-Pierre Garbani, and Wolfgang Benkel, states, "The prospect of having 30% or more of IT operations automated in a relatively short period of time is indeed compelling, but what can you really expect? Anecdotal evidence suggests such results are indeed possible. But make sure you create the context in which automation can succeed."

THE PEOPLE IMPACT

The most highly argued point about embracing automation and the reason why many people across different industries still see it as a threat is its dramatic potential to displace physical labor. Digital labor is quickly displacing physical labor. Any kind of work that is rule-based or repetitive is going to be out.

It is increasingly evident fact that automation will change the way work was done till now, and there would be revolutionary changes in the IT industry that until now relied on 'people' for high-volume, repetitive tasks like IT support, and remote infrastructure. The impact would be higher on low level support jobs that can be automated for improved efficiencies. Industry experts point out that there will be reduced hiring at these levels and people presently doing such work will probably have to be trained

in managing automated technologies or moved to other business areas. Sengupta asserts, "Fewer people will be required at entry levels. We expect 15-20% reduction in hiring at junior levels over the next three years."

Peter Bendor Samuel, Chief Executive Officer, Everest Group has stated in the company's blog, 'The vexing aspect of service delivery automation', "Certainly automation won't remove all people from a process, but more and more will be removed over time as the tools expand and become more mature and as companies become more comfortable in using the tools."

It is quite ironical that automation has the power to free up people from doing tedious, repetitive tasks, and elevate them to higher value roles, and at the same time it threatens the existence of people engaged in such roles.

As Indian IT majors have been ramping up their efforts to embrace innovative technologies, signalling there move towards non-linearity, it is natural to expect that there will be some job slashes over the long term, if not in the short term.

But companies like TCS and Infosys have ruled out the possibilities of layoffs as of now and have emphasized on the view that the changes will drive higher productivity for employees and enable them to do higher value jobs, and freeing them up from the drudgery of routine tasks. Brown also seems to share a similar view that impact will

be more in terms of driving efficiencies and not much on the headcounts. "While positions that support basic, rudimentary tasks will likely be in less demand over time, Cognizant's view is that in aggregate, automation won't supplant knowledge labor as much as work in tandem to make smart humans smarter and businesses more agile," Brown says.

Industry experts point out that as companies look at doing more with less people, there will be disruptions. "Slower hiring coupled with high attrition rate is the becoming the new normal for the Indian IT Industry. According to an industry analysis, the top three Indian IT services companies, TCS, Infosys, and Wipro have collectively lost 100,000 people between them in FY15, while having a net added headcount of 40,000-50,000," points out Govil.

On the brighter side, with automation becoming a reality the sky is not falling for technology workers. It is assumable that the push for automation will be driving immense changes in the required IT skillsets as organizations will look for cross functional expertise, but there will be better opportunities for employees with the right skillsets in handling automation platforms, and the technology will itself enable them to move up the value chain.

After all, there will always be something that a robot can't handle and that will require the human touch, one that can't be replaced.