

'The Entire IT Workforce Can't be Reskilled—and Shouldn't be'

As global companies shift to digital platforms there's a sort of panic among IT services companies on multiple fronts – maintaining margins, growing the business, re-skilling manpower and keeping themselves relevant. **Malcolm Frank**, chief strategy officer (CSO) at Cognizant, the \$13.49 billion (2016) US headquartered tech services provider, has seen it all over the last three decades. But in the last few years the change has been disruptive. He hasn't had time to play his favourite game of golf, as he's busy dissecting the change and ensuring Cognizant is the go-to company for global customers. In an exclusive interview with **Shelley Singh**, Frank, who co-authored, 'What to Do When Machines Do Everything,' discusses the changing environment and strategy to cope with it. Edited excerpts:

On the changed outsourcing paradigm, what with every company looking more like a technology company, from banks to smartphone makers

This issue of a panic perplexes me. I am more optimistic than ever that the opportunity is actually larger. As the world becomes more technical and our clients are digitizing, then there should be more services.

But there are two problems – one is, there's a bit of an innovator's dilemma for us and for the industry. The pie is getting bigger, the market opportunity is growing but the unit costs are coming down. That's the challenge. Retaining your margins and creating an environment inside the company where you can cannibalize what you do.

If a team solved a problem with 10 units two years ago, can it do with seven units now? Product companies have done this forever. And now there's a certain Moore's Law coming to the services business. Some firms understand how to manage that but other firms are really struggling.

The second problem is that it was easy 10 years ago when there was a greenfield market and the client said 'my mess for less'. But now if you have to solve digital solutions you have to understand client businesses. When IT becomes the business, we have to lead with business and not with technology.

On how much of Cognizant's business comes from newer areas like blockchain, AR, VR, ML, AI, IoT, big data...

More than a quarter of the business comes from digital technologies and it's growing faster than the traditional business. We have already stated that till 2019 we will maintain 22% margin. After that, there's a question of how fast will digital truly become mainstream.

There is a huge supply demand imbalance in the labour market, which gives you pricing power against these skillsets. How long are we able to maintain this pricing power from the

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labour standpoint (is the question). The third issue is whether we can build software platforms around certain problems. And can that bring scale? There are question marks around those things.

On what Cognizant will be like 10 years from now

We want to be central to the digital economy. We could play an important role in helping to provide digital at scale in the industries that we focus on. We hope to have a sort of 'Intel Inside' paradigm, like 'Cognizant Inside' where we are the go-to partners to build and operate digital businesses.

On the challenge around skills as IT shifts from being non-core to core now

If we have a reskilling challenge, it is multiplied 5x inside our clients. There are clients saying, "I can't get my hands on these skills. Give us people who are experts in IoT, mobility, data scientists or AI." They actually turn to us – "can you be my lean-to partner, can you be the one that brings in those skills?"

On reskilling employees for digital platforms

We plan to have 100,000 reskilled by end of 2017. Most of the Indian IT services industry for the past 20 years was built on client server, internet stack, the whole WinTel stack – browser, PC, Unix boxes, Oracle databases, Cisco routers and mainframes. That is a huge proportion of the revenue and skillset of the current industry.

Now we are making a scale pivot to digital,

which is a whole set of technologies that sit on top of the interface. But legacy will not go away. When an insurance company goes digital they will not throw away what they already have.

To go digital you need strategy skills, that is helping the client envision change. Second is design thinking; whether it is creating a virtual customer experience or smart products, you have to reconceptualise the design. When a customer walks into a retail bank or when she accesses the bank on phone, these are two different experiences.

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Next is scale around specific technology and solutions. For example IoT is exploding. Worldwide we are instrumenting 150,000 things per minute (embedding things with sensors – like an IoT sensor embedded in the carburettor of a car or in security devices). By 2025 we will have 80 billion machines around the world that are instrumented, online and talking. Then there are areas around cyber-security, data, AI, cloud architecture and how those operate. Those are specific areas where people need to start reskilling.

On whether the entire IT workforce be reskilled

There are two answers – one is can't and the other is shouldn't. Because the legacy systems are going to be there. There are businesses

like Netflix and Twitter that were digital businesses built from the ground up but most businesses are not like that. Twitter, Netflix, YouTube are the exceptions and not the rule. The rule is going to be a large bank, which has the entire mainframe environment, the entire client server solutions and those are not going to go away. A certain percentage of that can move to the cloud, but very critical systems like the flying operations system of Lufthansa or United Airlines -- you don't want to touch that.

There are still more cobalt transactions per day than there are Google searches! Legacy is there and all those sensors and digital solutions need to tie back to the legacy environment. It puts more strain on the legacy.

If you look at the next 10 years, the whole industry won't be 100% digital. You will have lot of people who understand these heritage technologies of today and you will

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need them as well. Employees can self-select – whether they want to go all digital or want to do traditional technology.

