

# IT NEXT

FOR THE NEXT GENERATION OF CIOs



## GENDER DISPARITY: BEGINNING OF THE END?

Why 2018 will be a tipping point  
for women in enterprise IT?

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# Talk, Women, Talk



Last two years data reveals that in 2016, of all the women who completed the NEXT100 application process, 78% made it to the winners' list while only 43% of men achieved this feat

**Shyamanuja Das**

**D**o organizations need to intervene to ensure gender parity at the workplace? The question, even after two decades of the issue being raised, is still being debated. What's worse, I hear the same arguments that I used to hear 10 years back. And some of them are from young women themselves.

'Why should women be given special consideration?', 'Does it mean we are less capable?', 'If men and women are equal, why create this artificial gender divide?'

Yes, these arguments have not gone away. Even at the risk of sounding repetitive and redundant, I will like to state for the umpteenth time that even though men and women are largely equal, the two genders have their differences and current workplaces have been built around the needs of men. So, non-discrimination is not enough. Proactive, positive intervention is needed.

I need to focus on just one of those differences to clarify what I mean.

According to a study, results of which were published in the *Academy of Management Journal* in the US last year, women receive less credit for speaking up in the workplace than their male counterparts. This just corroborates results of similar studies in the past which have found that women do not promote themselves in the workplace. A 2013 study by a researcher from University of Massachusetts, had found that women talk down their achievements and undervalue themselves when working in a successful group alongside men. Yet another study conducted at Montana State University and published the same year had found that American women are reluctant to talk about their own accomplishments because society disapproves of women who are perceived to be bragging about themselves. However, it said American men who brag about their accomplishments are perceived as confident and capable.

India should not be any different, at least not in a positive way.

Here is some evidence from India. And it is from something that you are most familiar with—NEXT100. Last two years data reveals that in 2016, of all the women who completed the NEXT100 application process, 78% made it to the winners' list while only 43% of men achieved this feat. In 2017, the story was slightly better for men. While 54% of women made it to the final cut, only 33% men did.

But what the world sees is not this data but how many winners are there in the list of 100. At 7 and 6 respectively, that looks unimpressive. The studies and data make it clear that it is not their competence but their willingness to apply for the awards that could be the reason.

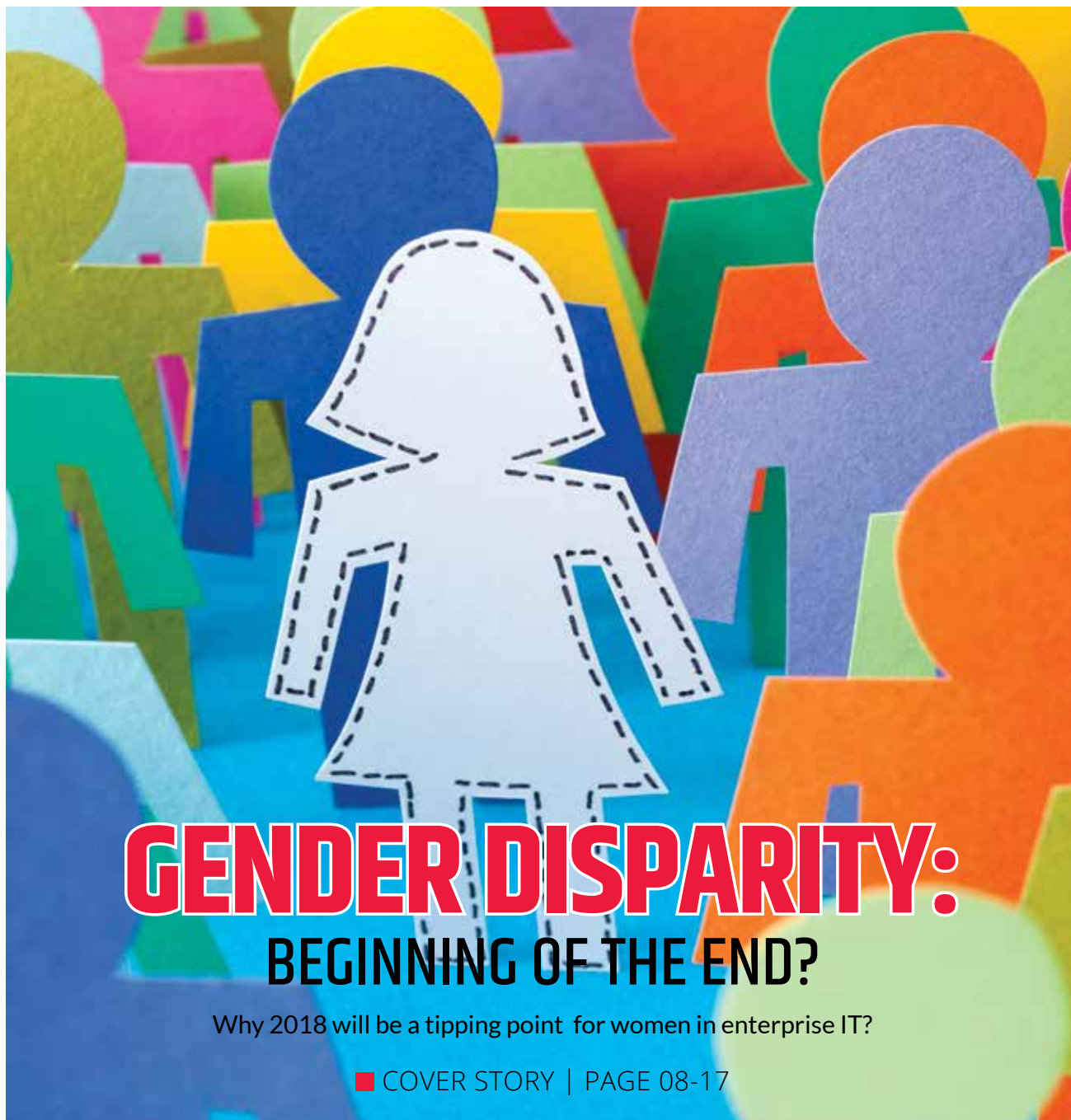
And it is for the same reason that their evolution to leadership roles might be getting impacted.

So, maybe, our appraisal process needs intervention. Maybe, even the feedback process. The Montana State University study that I have quoted above found that women have no hesitation in talking about other women's achievements. Maybe, there is a clue. Maybe, women leaders are entrusted with encouraging them to talk. Maybe, it's something else.

But *laissez-faire* is clearly not the right approach.



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# Why New Age BI Systems Are Better Than Traditional MIS?

As big data and analytics become a priority, CFOs need to be shown how new BI systems can create value for the businesses

By Anshul Rai

**T**he role of today's CFO extends way beyond the mandate of traditional financial management into more strategic areas of business.

The new responsibilities make it crucial for CFOs to have meaningful data at their fingertips to support and develop strategic business initiatives.

However, the problem is with getting the right data, in the right format and at the right time. Traditional MIS systems, especially those used for revenue and expense reporting, are saddled with inaccuracy, inconsistency

and unmanageable complexity.

The way the data is collected, stored, compiled and presented to CFOs makes it unfit for analysis and decision-making.

For department heads and finance teams, data management is an arduous and time-consuming process. Why is this the case?

## **1. The data extracted from the traditional MIS systems is aggregate data.**

In any organization, department or product heads are given budgets at

the start of every month or quarter, and their performance is gauged against this budget. To view their individual performance against budgets, department heads resort to the canned reports from the General Ledger (GL) generated by the finance teams. They view the report data, look for variances and take corrective measures to eliminate cost overruns and maximize budget efficiency.

Seems pretty straightforward till this point, doesn't it? Well, it's not, especially when there are deviations in data. Aggregate data is not

enough to understand the root cause of budget deviations.

The GL reports show aggregate data for spends vs. budget. This data output has none of the rich transaction details that are necessary for investigating the root causes that trigger a budget deviation or an unexpected increase in a particular expense category.

In this case, the departmental managers go back to the finance teams for the underlying details behind the GL data — the individual transactions that caused them to exceed their budget. This triggers a spurt of activity within the finance department, causing workload to shoot up immediately during the month or quarter end.

The finance departments run additional reports to find out the required information for managers. The process doesn't stop there. The departmental heads often have questions on the new reports generated. Once they receive the answers, they have follow-up questions and the cycle continues. It sometimes takes weeks for the issue to get resolved satisfactorily from both ends.

## **2. The data is stored in multiple systems managed by different teams.**

The GL summary report contains transaction data that is extracted from different systems like HRM & Payroll, Accounts Payable and Inventory Management – each of them managed by different teams.

People other than finance also get tasked with requests for data extracts. This makes the entire process even more complex and time-consuming. No wonder it takes weeks on end to solve one issue.

## **3. The data does not facilitate easy comparison of different departments or cost centers.**

The reports generated by the finance department for comparison are income statements and balance sheets. They show profits against losses and performance vs. budget for an individual manager, department or

product and are definitely useful.

But imagine a director who has 15 managers reporting to him – he must view 15 individual reports. And to compare the performance of all managers together, he and his team have to do a fair amount of spreadsheet work. Teams have to manually copy, paste and transpose rows into columns to compile the data together. Ideally, the GL should be able to generate these reports without putting the directors through this manual and error-prone process.

So what is the way out for CFOs and finance teams?

### **Alternative #1: Replace their legacy GL system.**

One way is to replace their current GL system with the latest ERP or accounting software. However, this might involve substantial cost and

Apart from addressing the key gaps of traditional MIS, BI systems help finance teams gain a lot more



resource commitment.

### **Alternative #2: Adopt a self-service, business intelligence system.**

A smarter way out is to adopt self-service, business intelligence (BI) systems that give CFOs the analytics they need while leaving their existing GL in place.

Let us look at how automated BI tools provide their users an edge over traditional MIS:

**Consistent, secure and error-free reports:** Rather than generate aggregate reports, BI solutions help finance teams generate role-specific reports. Such reports enable managers to easily view revenues and spends of their direct reportees or their area of responsibility. Finance teams can enable managers to view these reports via web-based dashboards, rather than sending the reports via email in the form of spreadsheets. Emailing reports can expose the company's financial data to unauthorized individuals.

Spreadsheets can be easily altered and the resulting conflicting data takes weeks to investigate and reconcile. BI systems help managers view the reports they need in the most secure environment.

BI systems also help finance teams automate the data-reporting process. Finance representatives can set rules and alerts within the system to notify managers of budget overruns and help them take action immediately.

**All data on one system:** BI systems easily integrate with other systems like accounts payables, inventory management and payroll. Such integrations help finance teams to map GL codes with transactional data, invoices, purchase orders, etc. What was initially stored in a maze of spreadsheets cannot be brought onto the same platform and viewed together with a click of a button.

**Easy comparison:** BI tools make comparisons across departments, across different data types and across different users easier to access as well as to visualize. In other words, no more headaches and switching between spread-



sheets, while reviewing employee or department performance.

Apart from addressing the key gaps of traditional MIS, BI systems help finance teams gain a lot more.

**Centralized visibility and accountability:** Since departmental managers can easily identify budget variances and the underlying reasons behind them, they can manage expenses in a better way. They can spend more time understanding what triggers budget overruns, rather than running behind finance teams asking for details behind the aggregate summaries. They also have centralised visibility over all data and can take decisions in a prompt and efficient manner.

**More efficient work allocation:** A significant amount of time and effort of finance teams goes into back-tracking bugs, errors and outliers in the data and reporting them back to the department that pointed them out. BI tools eliminate these low-value, cumbersome tasks, allowing finance to focus on core job responsibilities, such as identifying new revenue generating opportunities or mitigating risks.

**Powerful feedback tool:** BI systems can serve as a good coaching and feedback tools for management since they facilitate easy peer-to-peer comparisons.

With access to the comparison data, VPs and directors can evaluate performance of different managers, understand why certain managers are able to meet budgets and help the ones who don't create more realistic budgets and decrease their budget overruns.

As big data and analytics become a priority, CFOs have to be prepared to take strides forward and bag the best business intelligence systems for their companies ■

*The author is the CEO and Co-founder of Happay, a business management company that caters to various business spends; the article was first published in cfo-india.in, our sister website*

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# **GENDER DISPARITY:** **BEGINNING OF THE END?**

Why 2018 will be a tipping point for women in enterprise IT?

By Shubhra Rishi



This month is International Women's Day. And on this niche platform, we can only go so far as to explore why there are still so few women in enterprise IT. Through our brief research last year with Headhonzos.com, we spent time analysing the women pipeline in enterprise IT. The result was somewhat expected. At 35%, most women were likely to be hired in the field of HR while only 12% were likely to get a job in enterprise IT.

In enterprise IT, the percentage of women leaders globally—from CIOs to chief technology officers to vice presidents of technology—remained at 9% in 2017, the same as 2016, according to analysis by executive intelligence tool, Boardroom Insiders. In large organizations, that number was 10%, which was identical to the global average rate of women in IT overall. In India, however, only 7% women were hired for CIO positions in 2017 as compared to 19% at entry level and 14% in middle IT positions, according to a Headhonzos.com exclusive research for CIO&Leader.

At the World Economic Forum (WEF) Annual Meeting in Davos, Switzerland this year, gender equality precipitated into almost every topic. Chinese major Alibaba Group's executive chairman told a prominent audience comprising world leaders and CEOs that women accounted for 47% of the company's 50,000-plus employees. One third of Alibaba Group founders are women, one third of partners are women and one third of its management executives are women. Canada also has set an example in diversity where the country's prime minister, Justin Trudeau himself is championing diversity by setting up a gender equal cabinet comprising 50% men and 50% female. Canada currently ranks 11 in WEF's Global Gender Gap Report 2017. In many ways, the #Metoo movement has also pushed the topic of gender equality back into the limelight and sparked conversations in multiple directions.

In an enterprise setting, companies are slowly starting to take a more structured approach to hiring, to overcome implicit bias and to assimilate gender equality as a norm into the organization's core culture. This will require work.

Here's why 2018 will bring us closer to the tipping point for gender equality in enterprise IT.



**W**hy are there so few women in tech? We have addressed this question many times before. And we have found commonly cited answers, attributed to the pipeline problem in tech, unconscious bias, and the lack of good mentors. Last year, while addressing this question, we spoke to three IT leaders and asked them how they dealt with each issue. We found that they were able to overcome them in one way or another. In each of the cases, however, their commitment to serve and return to their tech careers served as an important contributor to their ascent to leadership roles. However, these are rare examples when women in enterprise IT have been able to overcome hurdles in their personal and professional lives.

There are other factors such as isolation, hostile male-dominated work environments, ineffective executive feedback, and a lack of effective sponsors that are pushing women to leave SET jobs. Almost 32% of women in the United States and 30% of women in China intend to leave their SET jobs within a year. This intention to leave within a year is slightly less common for SET women in Brazil at 22% and India at 20%. In fact, our research with Headhonzos.com presents proof that the number of women engi-

neers in the Indian workplace increased by a whopping 326%. A survey by NASSCOM and the PricewaterhouseCoopers (PwC) in 2016 also claimed that 51% of all entry level positions in the IT-BPM sector were filled by women.

Then there are stereotypes which have proved to be untrue so far. In recent history, a former engineer employed at Google who wrote a 3,300-word manifesto claiming that women's biology makes them less able than men to work in technology jobs. Google's CEO, Sundar Pichai, responded by saying that memo promotes "harmful gender stereotypes" in the workplace. Being among the top 20 Fortune 500 companies, Google is currently battling a wage discrimination investigation by the US Department of Labor, which has found that Google routinely pays women less than men in comparable roles.

However, statistics by Accenture in 2018 appear to be comforting. According to the survey, women's pay could increase by 51% or up to an additional USD 30000 per woman each year. Globally, that equates to a lift in women's earnings of USD2.9 trillion. Women are also four times more likely to reach senior manager and director levels in 2018. Globally, for every 100 male managers, there could be up to 84 female managers, compared with the current ratio of 100 to 34.

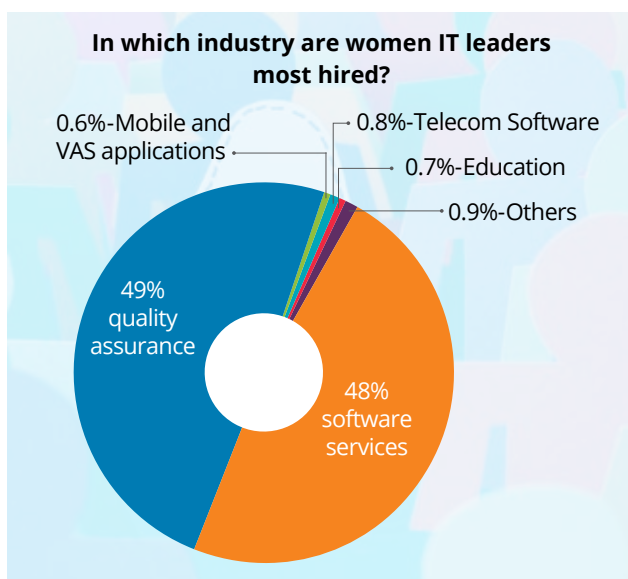
The company cites the example of Nissan Motor Corporation that has achieved its goal of having 10% of its management positions in Japan held by women in 2017. This, Accenture says, is about seven times more than the automotive manufacturing industry average of 1.3%.

It is also common knowledge that women in enterprise IT do not opening talk about the existing bias in the industry unless their company has a mandate for gender diversity. This is not a perception. Many years ago I was interviewing an Indian woman IT leader for a story on cloud. I used the opportune moment to throw the 'glass ceiling' question at her. To my utter amazement, her reply wasn't quite what I had expected. She said that she had never faced gender bias – unconscious or conscious – in her two decades of technology experience. She didn't advocate gender equality norms but hired in a meritocratic manner.

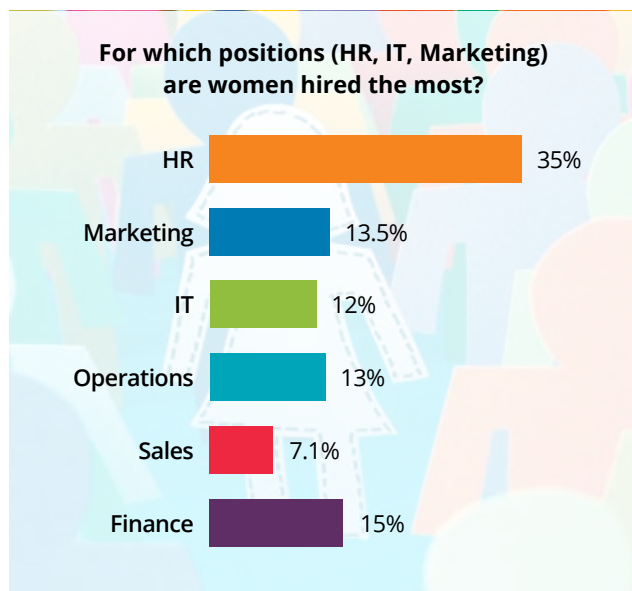
In the years that followed, I started posing the same question to male and female CIOs who responded rather evocatively. A male CIO of a large retail conglomerate told me then. He said that men are uniquely positioned to advocate gender equality in the workplace. "Keeping an open mind and showing willingness to understanding the gender inequalities facing women is the first step," he said.

At the very least, one would expect women to be advocates of gender equality in the workplace. But that's where one can be wrong. In the course of time, I have interviewed several women leaders in enterprise IT – and almost all of them said that they didn't position themselves as "a woman in technology".

However, women in enterprise IT have been more







open to discussing gender parity that percolates within the enterprise when an organization's senior leadership is more aware and more sensitized about the benefits of gender equality in the enterprise.

For instance, At Genpact, Vidya Srinivasan, Senior VP - IT & Infrastructure, has a mandate to hire at least 20% women in Genpact's internal IT workforce. The BPO major's CEO, NV "Tiger" Tyagarajan wrote in a blog that their recruitment teams have aggressive goals of ensuring balanced representation of women in the talent funnel. For instance, the company's leadership development programs in 2016 targeted at least 40% representation from women. They have promoted twice the number of women versus men as a percentage of their populations last year...This, he says, is purely driven by merit. They also have robust family-friendly policies like flexi-timings, work from home, day care facility, security measures and stork parking to make life easier for women which helps them focus on what's important.

However, one of the main challenges that Srinivasan faces on a regular basis is to encourage women to participate in the fields of technology and encourage them to apply for higher-level managerial roles.



## Landmark Judgments Favoring Gender Equality In India

### 2015

The Companies Act 2013 created an urgency of appointing women directors on corporate boards. In fact, the need to comply with the regulation has become a primary driver of gender diversity and it is stronger than the belief that it adds value (18%) or creates the brand image of a progressive organisation (20%). Not surprisingly, the proportion of women directors has increased significantly (180%) after the mandate was introduced. Previously, women occupied less than 5% of the board roles in India.

Source: KPMG Survey

All listed firms are required to have at least one woman director on their boards from 1 April 2015, according to a Securities and Exchange Board of India (Sebi) directive. This was aimed at increasing gender diversity, which is often seen to have a positive impact on the decision making processes of corporate boards.

### 2017

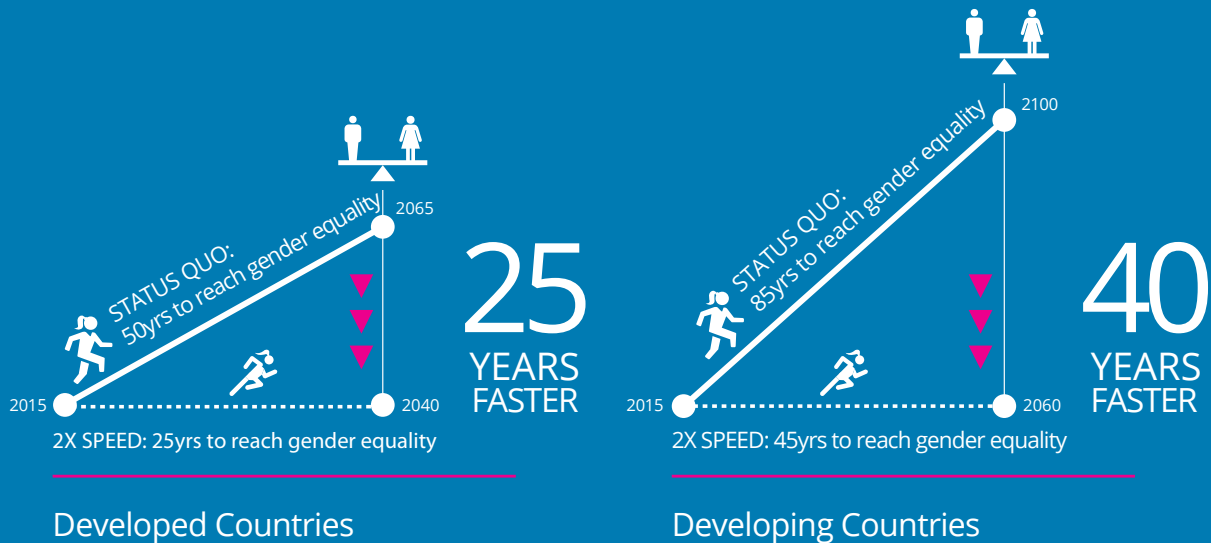
The Parliament in March 2017 passed a bill that will benefit about 1.8 million women in India. The Maternity Benefit (Amendment) Bill, 2016 was passed by the Lok Sabha, months after the Rajya Sabha approved the measure that takes India to the third position in terms of the number of weeks for maternity leave after Canada and Norway where it is 50 weeks and 44 weeks, respectively.

"Even if organizations train for unconscious bias, create an inclusive leadership platform, set up mentor programs, but it finally boils down to the individual who has to ask herself – how much do I want this job? Because then, you will have to make it work," said Srinivasan.

In many ways, Genpact's philosophy is the same as its former parent, General Electric. Last year, the company announced that they are setting a goal to create a workforce of 20,000 technical women by 2020 and recruit 50% women and 50% men into all of their entry level technical leadership programs. Another organization worth mentioning here is multinational computer software company, Adobe, who undertook a review of its job structure and analysed its compensation practices,

## Closing the Gender Gap at Work

Digital Fluency Is The Accelerant



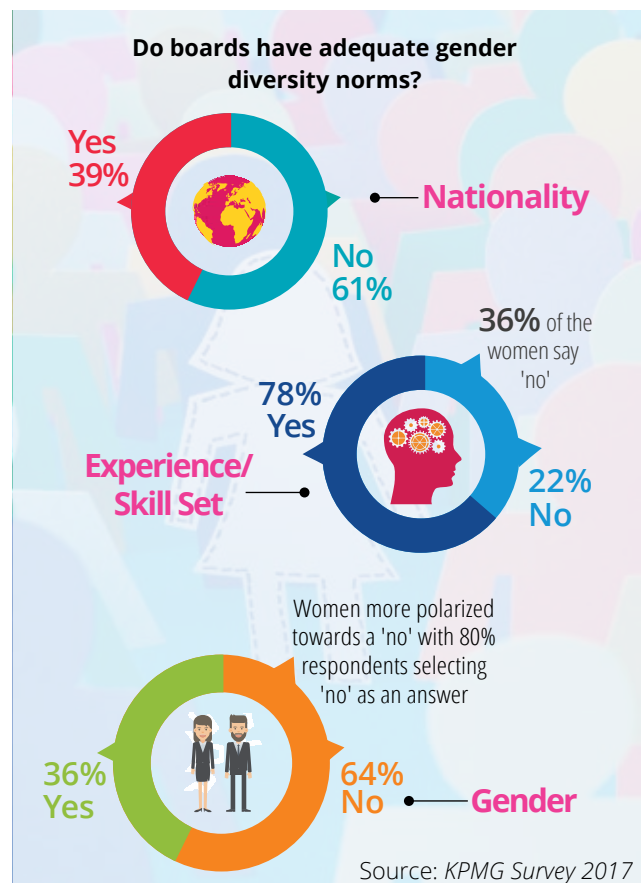
Source: Accenture-IWD-2016-Research-Getting-To-Equal

and announced in January 2018 that it has achieved pay parity in the US and in India, its second largest employee base. Fortune's 100 Best Workplaces for Women list also revealed something interesting. Their research found that women employees' perception of work-life balance actually had a minimal effect on their decision to plan long-term careers at their businesses. Instead, women prefer work-places that promote employee advancement through job responsibilities and imparting new skills.

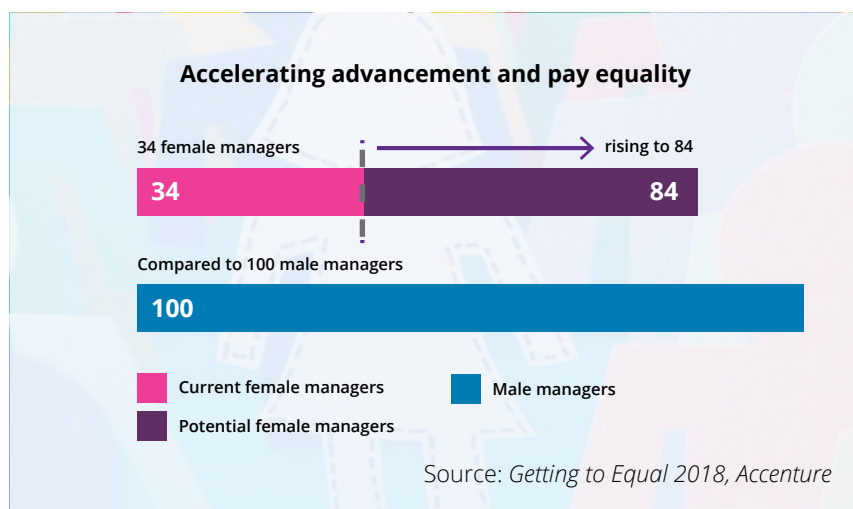
### Gender diversity is a business imperative

What does that mean?

According to a KPMG Survey conducted in India, there is a strong business case for having women on boards. Their research has indicated that companies with gender balanced boards outperform companies with male-dominated boards on various financial parameters. For instance, a recent study of 2,400 companies, globally, for a period of six years indicated that companies with one or more women boards tend to have better return on equity, lower debt-to-equity ratio, higher price-to-book value ratio and better average growth. This is because inclusive and diverse boards are not only effective but they are also better able to understand their customers and stakeholders and benefit from fresh perspectives, new ideas and broad experience. A significant majority (68%) of the respondents agree that women create a positive environment within the boardroom improving its culture



Source: KPMG Survey 2017



and dynamics. Additionally, nearly half agreed that they are better in providing feedback and inputs in a manner that is constructive. However, on other traits that women bring to the table, there is considerable divergence in the views of men and women respondents. While nearly half of the male respondents agree that women bring in a comparatively balanced view of risks, there is little agreement between them on other traits that women bring to the table. On the contrary, a significant majority of female respondents unequivocally agreed that women: (a) create a positive environment, (b) have a more balanced view of risks and (c) are better at conflict management.

According to a study by McKinsey Global Institute in 2015, advancing women's equality could add USD12 trillion to global economic growth in a decade, raising it by 11%, compared with the business-as-usual scenario. The Indian economy would be the biggest gainer of gender equality as its GDP could be 16% higher in 2025, the study claimed.

Geetha Kannan, managing director, Anita Borg Institute (ABI), India, says, the corporate world has started looking at gender diversity with a different lens today and we are very hopeful that this will eventually move the needle.

ABI has worked to improve the representation and advancement of women in computing for two decades. It was founded by a computer scientist Dr. Anita Borg in 1987 who wanted to start a digital community for women in computing. Over the years, that community has grown and changed to become the leading organization for women in technology and in spreading the message of keeping women in the technical workforce matters.

It's been more than 40 years since the mass arrival of women in the corporate workforce and 20 years since

organizations created their first formal diversity plans.

Yet women make up only 35% of the average company's workforce at the professional level and above and only 20% of its executives. Even worse, the average organization still isn't on track to achieve gender equality a full decade from now, according to Mercer's 2015 global research.

"Women are underused in the workforces of emerging economies. This is due to both "push" factors (lack of career advancement or support on the job) and "pull" factors (pressure to care for children or elders, among others).

Although the glass ceiling is cracking in some regions, there is still great work to be done," said the report.

The business case for having women in decision-making positions is also quite obvious but somehow a lot of the companies just do not see that. "The value of diversity of knowledge is commonly understood and that is why different opinions are sought in organisational decision-making. Only that women are usually not invited to the table. A narrow spectrum of thinking and easy consensus often makes the business outcomes sub-optimal, if not altogether disastrous," added the report.

Most of the companies continue to see women primarily as consumers and not as resources for leadership and innovation. Typically, companies buy market research

about what women want instead of actually asking women to decide what to make, how to monetize that and what to make next.

### Making it mandatory

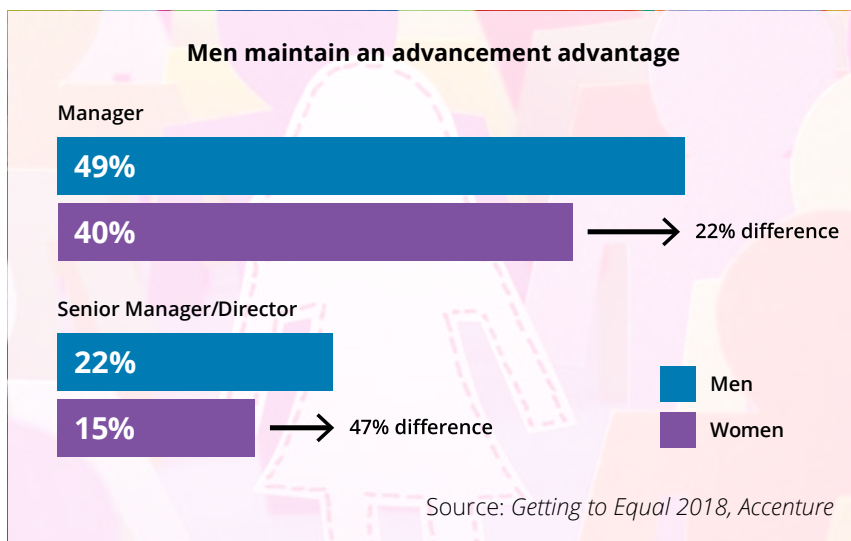
Today world leaders are committed towards making gender equality a norm. Canada's prime minister, Justin Trudeau, was in news

for creating a gender equal cabinet in 2015. This year, the Government of Canada has announced that it will introduce proactive pay equity for workers in federally regulated sectors. According to reports, it is estimated that through this legislation alone, the gender wage gap can be moved from 88.1 cents to 90.7 cents in the federal private sector alone.

Iceland is another example of a government that's taking stringent measures to curb gender inequality – prohibiting pay gap between men and women.

If countries and governments can alter their laws, so can enterprises. However, the push has to come from the top.

**19%**  
**of Indian women**  
**were hired at entry**  
**level in 2017**



### Skill gap is widening

Women make up half the world's population and only a little more than a quarter join the workforce, and less than 10% are in leadership positions. According to Accenture's new report titled 'Getting to Equal', the digital fluency scores provide an overall measure of the impact of digital on working men and working women today by country and by generation.

Although women are beginning to achieve gender equality and close the gender gap in IT by developing digital fluency, they remain under represented in the workforce in most developed countries. The report found that India's low levels of digital fluency are hindering the progress of women. Increasing women's access to the Internet as a first step to improving fluency should help open-up new work opportunities.

The report found that India's low levels of digital fluency are hindering the progress of women. "Organizations are most effective when gender composition aligns with the audience the organization is serving. Right now, this is not the case. IT organizations that have an imbalanced workforce are less able to anticipate and proactively address customer needs," noted Accenture in the report.

Accenture has 150,000 women, which is nearly 40% of its global workforce. Over the past several years the company has devoted itself to creating new milestones on the path to gender equality which includes growing its percentage of women managing directors to 25% globally by 2020.

Kannan said that increasing the number of women in leadership teams could allow CIOs to improve gender equality and access the skills they need to be successful.

### Why we must start now

Employers have a critical role to play in creating gender parity. Many research bodies over the years have indicated that higher female representation in the workplace

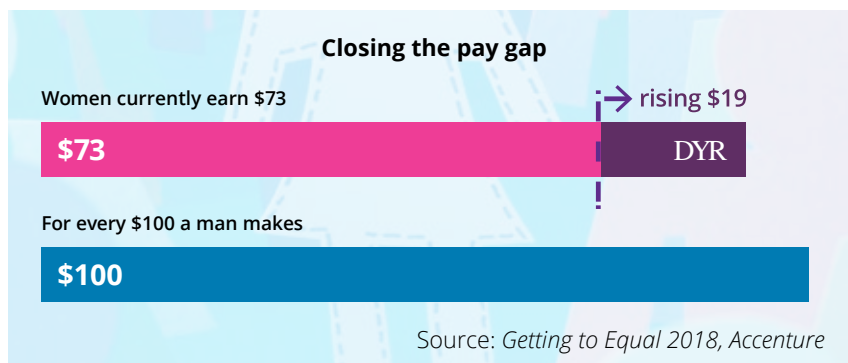
and various company performance measures, including better financial performance; higher return on sales, equity and invested capital; higher operating results; better stock growth and more. One of the companies in the IT/ITes to do it first in 2015 was Intel CEO Brian Krzanich who pledged USD 300 million to increase the company's grow workforce diversity with the goal of reaching equal representation among its 50,000 U.S. employees.

Companies are finally putting the money where the mouth is. Not only has Intel used this money in training and recruiting female and other groups of under-represented computer scientists.

Since the diversity pledge, the company's business has seen a 65%

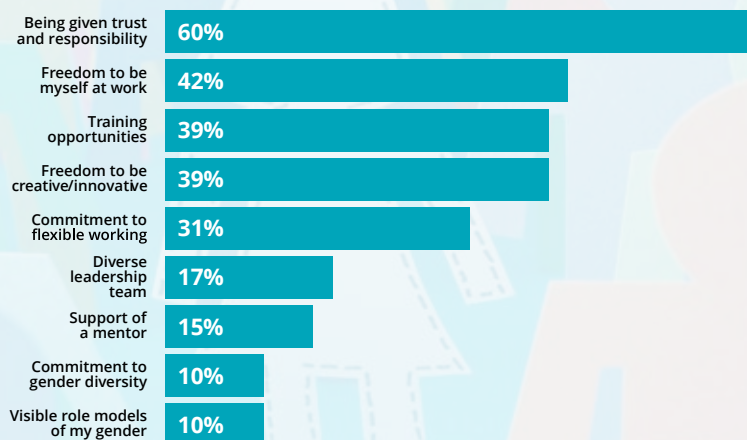
improvement in the representation of female and minority talent. However, the icing on the cake was when it announced that it had eliminated gender pay gaps between employees in 2015. This sent a clear message to the rest of the industry that equal pay among male and female workers is possible. Intel proved that prioritizing gender parity in tech is possible, without sacrificing revenue or results.

The other bigwig in the tech circles is GE. GE promises to bridge this gap by hiring 5,000 more women in STEM roles in the next two years. The initiative is expected to increase the representation of women in its engineering, IT, and product management roles. Clearly, there is a lot of work yet to be done. GE's announcement came within the past year so while there are no results to show just yet, the very public announcement is definitely a step forward and it enables a level of accountability on a major scale. The industry is inundated with examples comprising companies with the lack of female leadership. Adobe India, on the other hand, has achieved gender parity in India, and therefore, stands alongside Intel and GE, in becoming case studies for other organizations to follow. A majority of tech companies including mammoths such as Facebook, Google, and Microsoft have more work to do when it comes to equal representation of women on their tech teams. While





### The factors that men and women say help them advance at work



Source: *Getting to Equal 2018, Accenture*

both Facebook and Microsoft have eliminated the gender pay gap among their male and female workers. Google, still hasn't reached full gender parity in tech.

In a joint paper released by IMF Chief Christine Lagarde and Norway's Prime Minister Erna Solberg at the World Economic Forum (WEF) annual meeting in Davos this year, raising women's participation in the labour force to the same level as men can boost India's GDP by 27%. Unfortunately, India has seen a decline in its overall Global Gender Gap Index ranking, largely attributable to a widening of its gender gaps in Political Empowerment as well as in healthy life expectancy and basic literacy.

Take Iceland for instance, which has closed more than 87% of its overall gender gap. On 1st Jan, the Nordic country became the first in the world to 'paying men more than women' illegal. The legislation on gender pay in Iceland states that companies and government agencies employing at least 25 people will have to obtain government certification of their equal-pay policies. Companies and agencies that fail to prove pay parity will face fines.

#### Diversity in the boardroom

The Securities and Exchange Board of India's (SEBI) consultative paper articulated the need for diversity in the boardroom quite well. The report said, Diversity, in all its

aspects, serves an important purpose for board effectiveness. It can widen perspectives while making decisions, avoid similarity of attitude and help companies better understand and connect with their stakeholders.

Board members, through this survey, were asked if adequate diversity existed at the board level on three different parameters: skillsets, nationality and gender.

While over 60% of the survey respondents indicate that much needs to be done to enhance diversity in terms of gender and nationality, 78% believe that there is sufficient diversity in terms of skillsets. However, there appears to be a difference between the perceived and required levels of diversity in the boardrooms. For instance, an analysis of the primary area of expertise of

survey respondents (see the respondents' profile section) reveals that a majority (71%) of the directors are from finance, accounting, audit and general management backgrounds. Very few indicated that their primary area of expertise as information technology, marketing, international expertise or supply chain management. This was despite the fact that our sample for the survey was fairly diverse comprising directors representing companies of different sizes and from varying industries. Further, from our conversations with prominent independent directors, we gather that diversity goals should be aligned with the long term business strategy of the organisation.

#### Equality versus Meritocracy

A study conducted by researchers in the U.S found that respondents who were assigned to play the role of a manager in the company that emphasized meritocracy, rewarded male employees a bonus that was USD 46 higher, on average, than equally performing females (mean bonus of USD 418.8 vs. USD 372.4).

Therefore, it is impossible to say that there is one solution that will ensure gender parity in the workplace. The solution is a collection of bold, yet realistic measures that governments and countries will require to put in place to achieve pay parity. After all, the first step is providing equal pay for equal work, regardless of gender. What better than the enterprise IT community to lead this change in 2018? ■

**7.4%  
of Indian  
women  
were hired  
at senior IT  
positions in  
2017**

# Looking For SHEROES In Enterprise IT



Time to turn the tide...

By Shubhra Rishi

**T**he dialogue on gender equality is perhaps as old as women have been in workplaces. Even the broad issues surrounding the disparity have aged. A lot of organizations are working in this sector, aiming to get women to their rightful place in technology. SHEROES was started by Sairee Chahal who since 2013 has been working towards creating and enhancing flexible work options for women from all walks of life. A community platform, SHEROES is operated by a team of counsellors and coaches who speak to women and offer them support, advice and resources. We spoke to Chahal on the occasion of International Women's Day.

**Q How does an organization being meritocratic help the cause of gender equality in technology?**

It depends on what we define as meritocratic. The best candidates for a job are not necessarily the most available or willing. Some of the best candidates for technology jobs are on career breaks; they are taking care of children, senior members of their family, and are de facto caregivers in their families. The kinds of conversations and queries in our communities bear testimony

to this. If workplaces create more space and models for remote work, flexible work, I believe we shall see actual meritocracy at work.

Secondly, are we only considering candidates with degrees from a specific set of schools, and work experience from a certain set of companies, or are we expanding the pool? It's a known fact that women are denied from being sent to the best schools, because they are located outside their state, or far from home.

Let's also not forget that in many cases, breaks on resumes are due to an unsafe work environment; women tend to leave jobs rather than lean on the system for resolution, since our POSH compliance still has a long way to go. According to the Kapor Center's Tech Leavers 2017 Report, unfairness or mistreatment within the work environment was the most frequently cited reason for leaving, irrelevant of the gender or other factors like it.

**Q Where and in what roles are women in the tech talent pipeline?**

Women are embracing all kinds of tech roles - product managers, coders, data scientists, engineers, and entrepreneurs.



**"Women are embracing all kinds of tech roles - product managers, coders, data scientists, engineers, and entrepreneurs"**

- Sairee Chahal, Founder, SHEROES

## Organizations And Communities Around The World That Support Women And Girls In Tech

### Anita Borg Institute for Women in Computing and Technology

Anita Borg Institute (ABI) seeks to help women in computing reach their career goals by providing them with opportunities to learn, network with other women and gain inspiration. Every year, the Grace Hopper Conference is also held in Bangalore, India.

### Women 2.0

Women 2.0 is a global network and social platform for aspiring and current female founders of technology ventures.

### National Centre for Women & Information Technology (NCWIT)

NCWIT is a national non-profit organisation that works to increase the participation of women and girls in computing.

### Women Who Code

With a membership of over more than 50,000 women worldwide, this global non-profit provides several leadership and learning opportunities to their community of tech professionals. In India, WWC has active chapters in Delhi, Pune, Bangalore and Ahmedabad.

### Women in Technology International (WITI)

Initially started as a networking e-mail system, WITI has grown to a global organization that supports women in technology and business. In India WITI has an active chapter.

### Girls in Tech

Girls in Tech is a global non-profit with more than 50 chapters worldwide focusing on education and empowerment of girls. In India, Girls in Tech is headquartered in Hyderabad.

### Google Developers Groups

A GDG is a sort of gathering where interested people come together for activities like tech talk, hackathons etc. GDGs are active in several cities of India like Bangalore, Ahmedabad, Gandhinagar, Pune, and Coimbatore.

### Q How are organizations dealing with unconscious bias?

Organizations would need to redefine their metrics at multiple levels - entry, when it is time for promotions, and being considered for leadership roles. For instance, if a woman is pregnant, the general tendency is to overlook her for a promotion. This is unfair, as pregnancy is a life stage, and cannot be used to define one's career and performance. It de-motivates women, and they end up moving to another organisation.

Through our diversity consulting vertical we are working with multiple organizations to look at diversity hiring in a more authentic, holistic way, and I am seeing a shift in the way organizations are approaching it - it's not about being socially responsible. It's about creating an inclusive environment at work, and an even playing field for candidates to compete at the entry level. I see organizations working towards initiating a culture of inclusiveness and respect for all. But it has to be a sustained effort. And there's a need for commitment at the highest echelons.

### Q What policies can organizations put into place to address gender equality?

Flexible and remote frameworks need to be designed, workplaces need to be made accessible to all, returning women programmes must be designed and strengthened, and leadership pathways for women must be designed so we have more women in leadership at all levels.

Also, develop a no-tolerance approach towards harassment in workplaces. Through our enterprise product SHE by SHEROES to support organizations in cultivating safer workplaces, we have clearly understood the need to address the cultural factors influencing the sexual harassment narrative via outcome-based trainings.

Having one-site day care centres and paternity leave is beneficial for men and women, in general. Overall, we need to move towards an empathy-based work culture.

Additionally, I would like to share that I believe there's a genuine need to celebrate professional women more. With this in mind, this women's day we hosted SHEROESHOURS, a nationwide initiative in almost 40 offices across the country, including a slew of tech companies like Sapient and HPE. We got over 40 women achievers to host interactive workshops for women employees, and this curated activity drew more women professional into the conversation around gender parity at work.

### Q Can you give examples of organizations in India that are good examples of possessing gender equal policies?

There are so many. IBM India and ThoughtWorks - these organizations have built up an inter-sectional, gender-equal work culture - they have women in leadership positions, they have women with disabilities, and transgender women, and employees who identify as queer. Accenture also has a strong returning women's programme. In our own office, we have a baby room, so that moms can work without stress. Simple things built on a culture of empathy go a long way ■



# EXTRA Curricular



Anis Pankhania  
in one of his  
modelling poses

## Posing Away!

NEXT100 Winner 2017, **Anis Pankhania**, General Manager – Technology (Products and Apps – Customer Experience), Vodafone India shares his passion for modelling and photography

*"I think one of the secrets to modelling is the less you care and the more you're yourself, the more successful you are"*

– **Daria Werbowy**

I started venturing into modelling during my college days. I got inspired by some of the models who were already there in my college. It all started in Mumbai only. In the 80s and 90s, people were not really into modelling as they are nowadays. People were not very eager and open to the idea. But I used to go to college annual shows, meet models out there and work with them.



One of my cousin brothers used to stay near Juhu beach. He was a rich guy and quite often got opportunities to meet Amitabh Bachchan, Dilip Kumar, Manoj Kumar, Suresh Oberoi and other film personalities. He used to inspire me a lot. I got a life-time opportunity to meet with some of the noted film personalities like Suresh Oberoi amongst others. That's how I felt the urge to do





## Anis Pankhania

### Snapshot

Anis Pankhania is GM – Technology (Products and Apps – Customer Experience) at Vodafone India. He is a winner of NEXT100 Award in 2017. He has done his Masters in Management Studies,

Diploma in Computer Applications and Bachelors in Commerce. He has previously worked in companies, such as Aircel, IBM and Airtel. Besides modelling, he is also passionate about photography.

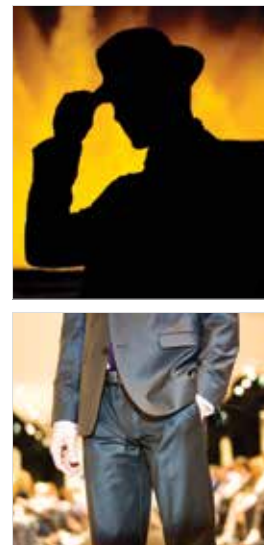
something in the field of modelling as I always believed it is the first door to acting.

I interacted with a few models in Bombay Central, Lower Parel, Ghatkopar and other places in South Mumbai. Whenever I went for a practice modelling session at annual functions, they used to guide me on how to walk, how to look up, how to perform in the main events, etc.

Among the male actors, I was influenced by Amitabh Bachchan, Salman Khan and Aamir Khan. Among the female models, Sonali Bendre and Aishwarya Rai were my sources of inspiration. Especially, I liked Aamir Khan's



*Anis Pankhania in one of his earlier modelling assignments*



acting in 'Qayamat Se Qayamat Tak' and Salman Khan's 'Maine Pyar Kiya' movies. As a model, you have to constantly maintain your physique and follow a certain fitness plan. I was extremely impressed by the manner in which both Salman and Aamir build their physique and have been regularly doing workouts even in their 50s. This is reflected in their hit movies.

The future of modelling in general is very bright. Earlier, there were very few models. However, these days, the maturity levels are high, exposure is more and a large numbers of institutions are available. At the same time, the market is very competitive. Nowadays, almost everyone wants to take up modelling as a career and enter the film industry. People want name and fame more these days. For example, while pursuing a modelling career, if you become Miss India or Miss World, within 24 hours, the entire country or the world gets to know you. Further, you get to meet the Prime Minister and top national and international personalities as well as get opportunities to travel around the world. You become a global name and thus, it opens a completely new door for you.

Personally, I would still like to be passionate about modelling, maintain my health and fitness by doing Yoga, walking and other physical activities ■

*As told to Dipanjan Mitra, Content Executive-Enterprise Technology, ITNEXT*



# The Perks of Leading InfoSec in Isolation

It will ensure that there would be a lot more coordination between shadow IT owners and physical security set-up owners

**By Milind Mungale**

choose to agree that the Information Security (InfoSec) function should be independent of enterprise IT.

It is a myth that InfoSec is limited to IT and information stored in IT infrastructure. No doubt, IT has a very big (and major) role to play when it comes to information handling and therefore, it has a lion's share in the Infosec aspects. However, information and its security is not limited to IT alone. Secondly, when we talk of



enterprise IT, the inclusion or exclusion of shadow IT would depend on the said organization. Regardless of any organization treating shadow IT as part of enterprise IT or not, the application of InfoSec definitely is necessary for Shadow IT.

In an organization, shadow IT mushrooms up only because enterprise IT does not have enough manpower or are heavily loaded with their enterprise priorities. Due to this, the operations / business functions directly engage and avail services of

third party IT service providers and finally supervise and run the show by themselves for the limited requirements. Having InfoSec independent of enterprise IT would help avoid the risk of misunderstanding such as, being part of enterprise IT, Shadow IT is excused from the discipline of InfoSec – and this is only a “good to have” thing for shadow IT.

Next in line is physical security. Almost all the physical security measures have IT interfaces and lot of this information is stored, processed,

and used within certain IT systems. It is also observed that, like Shadow IT, these kind of set-ups are generally owned and managed by an administrative department who evaluates, installs and owns the building management systems.

If InfoSec is independent of enterprise IT, there would be lot more coordination between shadow IT owners and physical security set-up owners as this function is not considered mixed up in enterprise IT. Last but not the least, the InfoSec function should be particular to the security needs of the information while remaining sensitive about delivery deadlines. They should not get bullied to overlook or compromise certain controls that are necessary or say critical from an InfoSec perspective. That can be facilitated only if InfoSec is independent of enterprise IT.

Apart from this, many more systems can be quoted which always or most of the time do not fall in enterprise IT domain. These systems include SCADA systems, R&D DMS, Design Department Systems etc, because they have skills to use platforms and systems which are different from enterprise IT and are better at maintaining the same. However, they too have to be kept in the umbrella of company-wide InfoSec initiatives. That would be more easily possible if InfoSec is independent of enterprise IT. While all this is being discussed, let us not forget that enterprise IT, being a major information handling setup, will definitely respect and follow InfoSec principles.

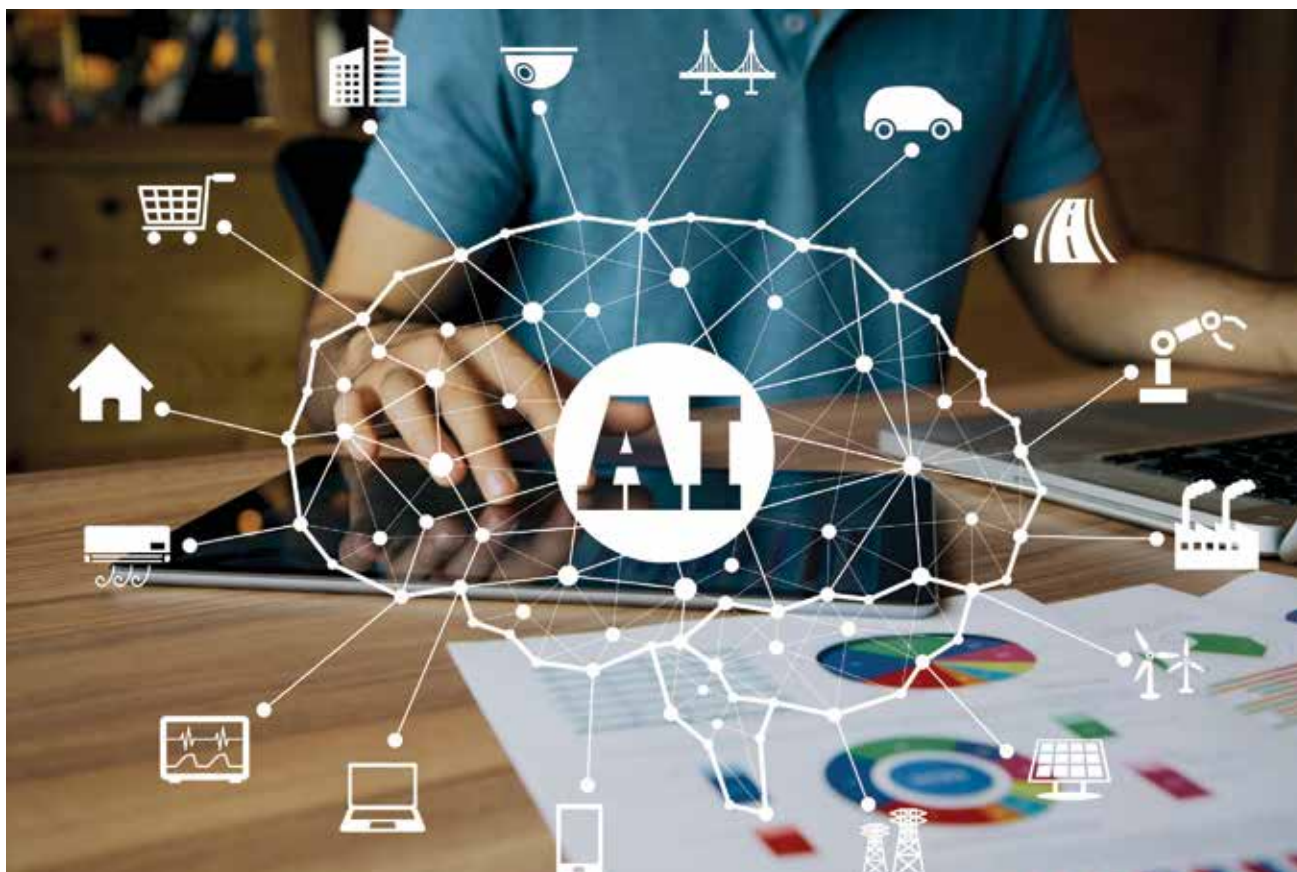
Another equally important reason for InfoSec to be independent of enterprise IT is to keep non-IT security (paper, people and other means of communication such as voice and video) within its purview as well as making it approachable without entangling pure technology aspects to InfoSec domain. ■



**The InfoSec function should be particular to the security needs of the information while remaining sensitive about delivery deadlines**

*The author is Executive Vice President & CISO at NSDL E-governance Infrastructure Limited*





# Using AI To Improve Customer Experience

The proportion of projects using IT to improve the customer experience will steadily rise

**25** % of customer service and support operations will integrate virtual customer assistant (VCA) or chatbot technology across engagement channels by 2020, up from less than 2% in 2017, according to Gartner.

Gene Alvarez, managing vice president at Gartner, said more than half of organizations have already invested in VCAs for customer service, as they realize the advantages of automated self-service, together with the ability to escalate to a human agent in complex situations.



"As more customers engage on digital channels, VCAs are being implemented for handling customer requests on websites, mobile apps, consumer messaging apps and social networks," Alvarez said. "This is underpinned by improvements in natural-language processing, machine learning and intent-matching capabilities."

Organizations report a reduction of up to 70% in call, chat and/or email inquiries after implementing a VCA, according to Gartner research. They also report increased customer satisfaction and a 33% saving per voice engagement.

"A great VCA offers more than just information," said Mr. Alvarez. "It should enrich the customer experience, help the customer throughout the interaction and process transactions on behalf of the customer."

A 2017 Gartner survey found that 84% of organizations expected to increase investments in customer experience (CX) technology in the year

ahead. Other Gartner predictions for CX leaders to know when developing a customer strategy include:

By 2019, 20% of brands will abandon their mobile apps.

Many brands are finding that mobile applications are not delivering the level of adoption and customer engagement they expected. Original return-on-investment (ROI) calculations are missing the mark due to the cost of support, maintenance, upgrades, customer care and marketing to drive downloads. Brands are now investing to build presence in consumer messaging apps, such as Facebook Messenger and WeChat, to reach customers where they spend a high percentage of their time.

By 2022, two-thirds of all customer experience projects will make use of IT, up from 50% in 2017.

As the number of digital channels expands, self-service or digital commerce interactions are increasing, as well as the move away from human face-to-face or voice-based interac-

tions. The proportion of projects using IT to improve the customer experience will steadily rise. Those not using technology tend to be projects related to recruiting, training, governing and managing customer-facing employees.

By 2020, 30% of all B2B companies will employ artificial intelligence (AI) to augment at least one of their primary sales processes.

AI in sales allows for more efficiency and effectiveness in business processes, often with up to 30% higher conversion rates when engaging prospects or leads, according to Gartner. It is becoming an attractive alternative for sales organizations with high volumes of lead processing, opportunities and forecasting processes because it provides fast and accurate support when performing the different sales stages.

By 2020, more than 40% of all data analytics projects will relate to an aspect of customer experience.

Data and analytics is already prominent across marketing, sales, digital commerce, customer service, social media management and field service departments. However, an understanding of the overall condition of the customer's attitude toward the enterprise is lacking for the majority. What matters is not the customer's attitude about a store, department, process or product, but the level of trust they have in the organization as a whole and their likely intent to remain loyal.

By 2020, augmented reality, virtual reality and mixed reality immersive solutions will be evaluated and adopted in 20% of large enterprises as part of their digital transformation strategy.

Organizations will have the ability to provide employees, customers and suppliers with a means to obtain real-time information, experience virtual environments and engage in social collaboration without a small, limited display and a limited point of view. Consumers already experience some form of immersive technology, such as Snapchat filters and 360-degree video and photos on Facebook. ■



By 2022, two-thirds of all customer experience projects will make use of IT, up from 50% in 2017



# India Ranks 20th Out Of 24 Countries In Global Cloud Study

India dropped by two positions this year

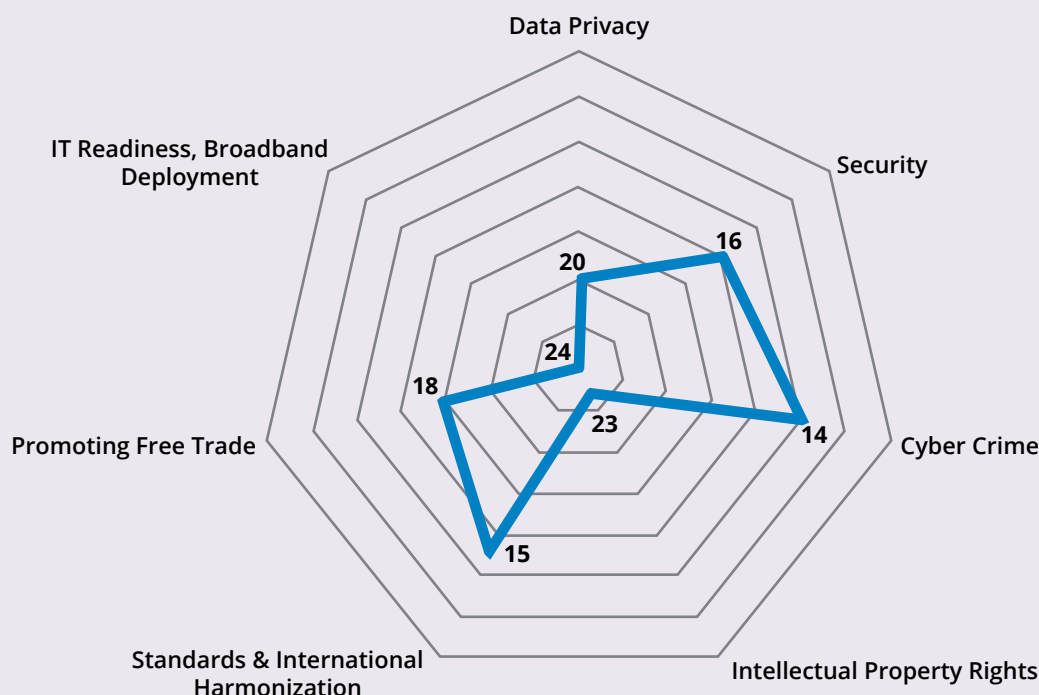
India ranks a lowly 20th out of 24 leading economies, in a recent global study of cloud preparedness. *The BSA 2018 Global Cloud Computing Scorecard* is published by Business Software Alliance, a leading advocacy for the global software industry. India's rank is a two position drop from its 2016 ranking.

While India ranks below 10 in each of the seven parameters considered by the study, its performance in two parameters—IT readiness & broadband Deployment and Intellectual Property Rights—is

particularly bad. In IT Readiness & Broadband Deployment, it ranks at the bottom of the table. Comparatively better are its rankings in Cybercrime (14th) and Standards & International Harmonization (15th).

"Laws and regulations in India have not entirely kept pace with developments in cloud computing, and some gaps exist in key areas of protection; notably, India has not yet implemented effective privacy legislation, although work is underway to address this issue," says the report explaining India's poor show.

## Global Cloud Scorecard: How India Ranks in Different Parameters?



Source: Business Software Alliance Global Cloud Computing Scorecard 2018

The report also points out that there is a gap in trade secrets protection in India.

“Guidance for examiners on how to evaluate patent applications for software-enabled inventions is lacking, although the revocation of guidelines that would have prevented most computer related inventions from being subject to patent protection if novel hardware was not present is a step in the right direction. Furthermore, India still has not ratified the WIPO Copyright Treaty,” the report notes.

The report, however says that India has a comprehensive national cybersecurity strategy in place and strong cybercrime legislation while pointing out that some laws and standards in

India are not technology neutral (e.g., electronic signatures), and these may be a barrier to interoperability.

This year’s BSA study reflects an updated methodology that puts additional emphasis on countries’ privacy and cybersecurity laws and broadband infrastructure.

Germany ranks at top with highest score on the Scorecard—due to its national cybersecurity policies and promotion of free trade—while Japan follows closely The United States ranks No 3.

The study shows that emerging economies still are lagging behind in cloud score. All the top 10 in the list are advanced economies. In terms of scores too, the advanced economies (the top 11 countries including

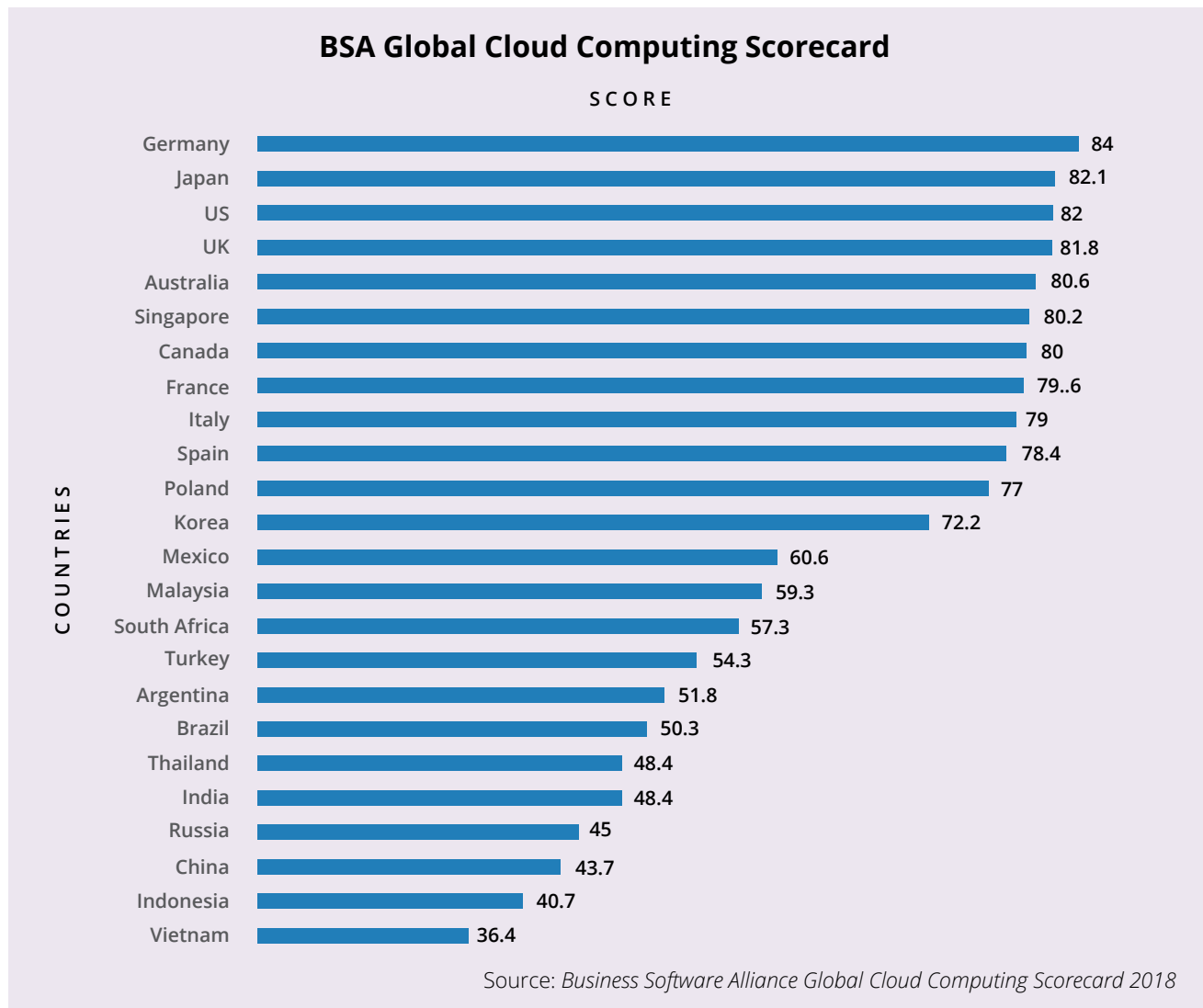
Korea) have a clear lead over the next set of countries, all emerging economies. There’s a 12-point drop in score between the 11th and 12th economy.

The BRICS nations all rank in the bottom half of the table. South Africa with a rank of 13th is Brazil with a ranking of 18th is the top BRIC nation in the list, followed by India at 20th. Russia and China follow India.

Some of the other key findings of the study include:

- **Advanced privacy and security policies set leading countries apart from lagging markets.** Countries continue to update and refine their data protection regimes, most often in a way that enables cross-border data flows. Several countries, however, still have not adopted adequate privacy laws.
- **Emerging markets continue to lag in the adoption of cloud-friendly policies, hindering their growth.** Examples

The report also points out that there is a gap in trade secrets protection in India



include regulations that impose significant barriers for cloud service providers, data localization requirements, and a lack of cybersecurity protections.

- **Deviations from widely adopted regimes and international agreements hold back key markets.** Internationally accepted standards, certifications, and testing help improve the security environment for cloud computing, but not every country recognizes such best practices as meeting local standards.
- **Those few countries that have embraced localization policies pay a heavy price.** Data localization requirements act as a barrier to cloud computing, causing

negative financial impacts for local markets.

- **Increased emphasis on IT readiness and broadband deployment leads to interesting results.** The ability of countries and companies to leverage cloud computing for growth requires access to a powerful network. While almost all countries continue to work to improve broadband access, the success of those efforts remains very inconsistent.  
By examining the legal and regulatory framework of 24 countries, the Scorecard aims to provide a platform for discussion between policymakers and cloud service providers. This dialogue can help

develop an internationally harmonized regime of laws and regulations that facilitate cloud computing.

"The Scorecard is a tool that can help countries constructively self-evaluate their policies and determine next steps to increase adoption of cloud computing," said Victoria Espinel, President and CEO of BSA. "Cloud computing allows anyone to access technology previously available only to large organizations, paving the way for increased connectivity and innovation. Countries that embrace the free flow of data, implement cutting-edge cybersecurity solutions, protect intellectual property, and establish IT infrastructure will continue to reap the benefits of cloud computing for businesses and citizens alike."■



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# The Lag In DX Implementations

As per a CA Technologies study, only 17% organizations have fully-formed digital transformation strategies

**T**he need for digital transformation has reached critical levels, as per *CA Technologies Asia Pacific & Japan Digital Transformation Impact and Readiness Study*. 80% of business and IT leaders surveyed agreed that their industries have been impacted by digital disruption. However, most organizations are lagging when it comes to staying relevant and competitive in this digital economy as only 17% surveyed have fully-formed digital transformation strategies.

## The discrepancy between business priorities and the pressure to change is particularly evident when it comes to customer experience

The study, conducted in late 2017, examined digital transformation strategies of 900 business and IT leaders across nine APJ markets: Australia, China, Hong Kong, India, Japan, Malaysia, Singapore, South Korea and Thailand.

According to the survey findings,

78% of respondents felt that their organizations have been impacted by digital disruption. Similarly, 78% of respondents felt that their jobs have been changed due to digital disruption. The majority also agreed that these changes will be augmented in the next three to five years.



### Mismatched Pressures and Priorities for Digital Transformation in APJ

In a new world that is defined by digital engagement, the competitive differentiation for organizations, and even governments, is increasingly determined by their ability to transform themselves digitally and build software into their business strategies.

The survey found that fast evolving economic conditions, meeting of changing customer expectations and using digital transformation as a new edge in winning against traditional competitors were listed as the biggest pressures for digital transformation in the region.

However, only 17% have fully-formed digital transformation strategies, and only 9% are looking at fully digitizing their entire organizations. While just a little over half (51%) of the organizations surveyed have launched digital transformation projects with clear corporate goals, such as increasing productivity and boosting revenue.

This finding mirrors the top three business priorities that organizations in APJ are focused on solving today, namely optimizing operational efficiency, improving workforce collaboration, and reducing operational costs.

According to the findings, priorities such as creating different business models and/or revenue streams; developing new products and services; improving customer experience; and attracting and retaining workforce are deemed to be less important. This demonstrates a clear misalignment between the business priorities that leaders are focused on achieving today and the top pressures that are driving their organizations' digital transformation journey.

The discrepancy between business priorities and the pressure to change is particularly evident when it comes to customer experience. Although changing customer expectations is highlighted as one of the main drivers for digital transformation, improving customer experience has been ranked sixth out of the seven priorities ■



# Indian Companies In The World's Most Ethical Companies List

As per Ethisphere Institute, there are 135 companies across 23 countries and 57 industries which are found to be most ethical

**A**ccording to a report by Ethisphere Institute, 135 companies across 23 countries and 57 industries feature in the 2018 World's Most Ethical Companies list.

The US has the maximum number of ethical companies while the UK has two. Among the Indian companies, Tata Steel and Wipro are the two companies that have made it to the list.

The research found that listed World's Most Ethical Companies outperformed the large cap sector over five years by 10.72% and over three years by 4.88%. Ethisphere refers to this as the *Ethics Premium*.

The companies were chosen based on the following parameters:

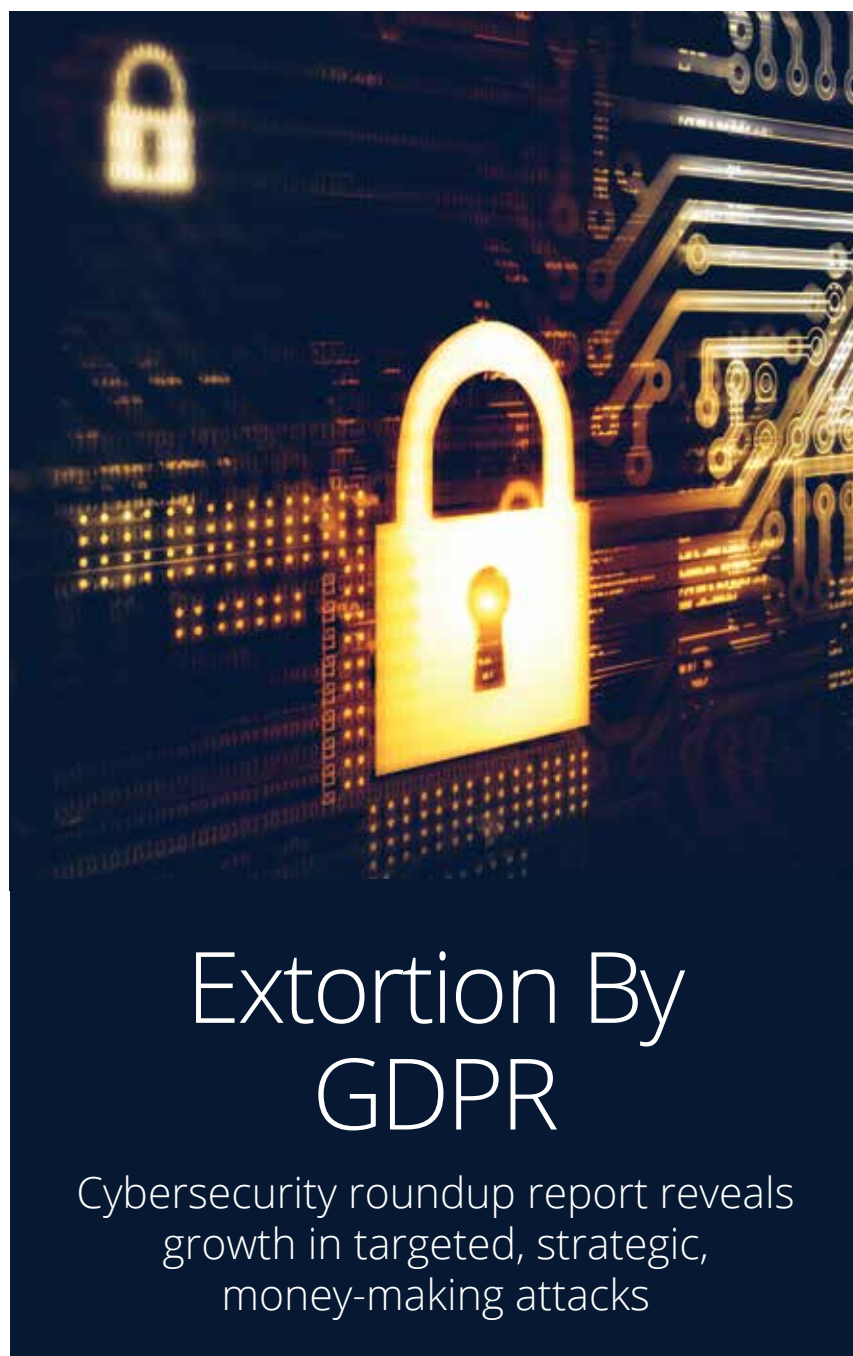
- Diversity and inclusion
- Investment and long-term commitment
- Constructive use of a company's voice
- Values-based leadership

Since 2007, Ethisphere has honored those companies who recognize their critical role to influence and drive positive change in the business community and societies around the world and work to maximize their impact wherever possible. In 2017, there has been a profound change in the discourse around the world, but

as part of that disruption, global companies have also emerged as society's leading voice to advance the human condition.

"Over the last 12 years, we have repeatedly seen that those companies who focus on transparency and authenticity are rewarded with the trust of their employees, their customers and their investors. While negative headlines might grab attention, the companies who support the rule of law and operate with decency and fair play around the globe will always succeed in the long term," said Timothy Erbllich, the company's CEO ■





# Extortion By GDPR

Cybersecurity roundup report reveals growth in targeted, strategic, money-making attacks

There has been an increase in ransomware, cryptocurrency mining and BEC attempts over the past 12 months as cybercriminals refined and targeted their attacks for greater financial return, as per Trend Micro's *Security Roundup for 2017*. The trend will continue in 2018, with extortion attempts likely to target organizations trying to

comply with new EU privacy laws.

The new report, *The Paradox of Cyberthreats*, validates Trend Micro's previous predictions for 2018, with cybercriminals increasingly abandoning exploit kits and spray-and-pray tactics in favor of more strategic attacks designed to improve their return on investment. Based on this trend, it's likely that some will try to extort money from

enterprises by first determining the GDPR penalty that could result from an attack, and then demanding a ransom of slightly less than that fine, which CEOs might opt to pay.

"We have seen an increase in those vulnerabilities being announced and lot of them getting compromised. Major outbreaks that caused global infections made headlines well into the year, proving that ransomware was still a burdensome threat for individuals and enterprises," said Nilesh Jain, Vice President – South East Asia and India, Trend Micro.

The report also reveals: a 32% increase in new ransomware families from 2016 to 2017; a doubling of BEC attempts between the first and second half of 2017; and soaring rates of cryptocurrency mining malware, peaking at 100,000 detections in October.

"The 2017 roundup report reveals a threat landscape as volatile as anything we've seen, with cybercriminals increasingly finding they're able to gain more — whether it's money or data or reputation damage — by strategically targeting companies' most valuable assets," said Jon Clay, director of global threat communications for Trend Micro.

"It confirms our view that there is no silver bullet when it comes to the sheer range of cyberthreats facing organizations. Businesses instead need a cross-generational security solution that uses a blend of proven security protections with the best new defenses to mitigate risk effectively," he added.

Vulnerable IoT devices are also a major security risk across several trending threats. Trend Micro detected more than 45.6 million cryptocurrency mining events during the year, representing a large percentage of all IoT events observed. Software vulnerabilities also continued to be targeted, with 1,009 new flaws discovered and disclosed in 2017 through Trend Micro's Zero Day Initiative and their 3,500+ independent whitehat researchers ■



# Deriving Maximum Benefit From AI-Powered Solutions

According to the latest report by PwC titled Artificial intelligence in India – hype or reality, machine learning is the most popular (63%) AI-powered solution in the IT/ITes industry

According to the latest report by PwC titled Artificial intelligence in India – hype or reality, machine learning is the most popular (63%) AI-powered solution in the IT/ITes industry, followed by decision-support systems, Virtual Private assistants (VPA), robotics, etc. This sector is at the forefront of AI research and commercial deployments, it is likely to cater to multiple client industries with a range of AI-powered solutions.



## AI solutions, combined with other enabling fields such as Industrial Internet of things (IIoT) devices and platforms, are expected to play a significant role in paving the way for smart manufacturing and Industry 4.0

The banking, financial services and insurance (BFSI) industry, however, considers robotics, along with machine learning and automated data analysts (44% of the participants for each), to have the highest impact on their business.

In the manufacturing sector, decision makers/influencers seem to lean towards a mix of machine learning solutions (50% of the participants), decision support systems, and automated communications and automated research and information aggregation solutions (40% of the participants each) in terms of how they perceive the above solutions to impact their business over the next few years. AI solutions, combined with other enabling fields

such as Industrial Internet of things (IIoT) devices and platforms, are expected to play a significant role in paving the way for smart manufacturing and Industry 4.0.

Overall, the survey results have indicated that business decision makers/influencers perceive machine learning solutions, virtual private assistants followed by decision support systems, automated research and information aggregation solutions and automated data analysts to be the most impactful for businesses in the near future, with approximately 36–51% of the participants vouching for each of their expected impact potential.

As AI is all set to bring about a revolution in the business landscape, busi-

nesses and consumers are bound to be divided on how quickly and eagerly they should adopt and integrate the new applications and workflows arising from it. During the initial phases in particular, businesses will need to identify the requisite data, direct training processes and refine outputs.

Vulnerable IoT devices are also a major security risk across several trending threats. Trend Micro detected more than 45.6 million cryptocurrency mining events during the year, representing a large percentage of all IoT events observed. Software vulnerabilities also continued to be targeted, with 1,009 new flaws discovered and disclosed in 2017 through Trend Micro's Zero Day Initiative and their 3,500+ independent whitehat researchers ■



# Corporate Ethics & Governance

**Helen Brand**, CEO, ACCA discusses the role of ethics and corporate governance

**By Sangita Thakur**,  
Managing Editor, CFO India



**Q Aren't corporate governance and business ethics two distinct parts of what makes corporate culture?**

**A** Well, I think they are two distinct parts though not the only parts of what makes corporate culture. There are many different aspects but these are the two absolutely critical ones.

Corporate governance is more about the system and how you govern a business. Business ethics is how you execute on that corporate governance and the behavior that is exhibited within the organization. I think both

have best practice elements. Both can be codified and you can hold people to account for good corporate governance and good business ethics.

At ACCA, the business ethics piece is played very heavily through all ethics and professional skills training, and how we hold our members to account through our regulatory and disciplinary processes for the rest of their career, for all the time they are professionals in terms of their ethical behavior. I do think that the public sometimes is not fully sighted on the ethical competence that lies at the heart of being a professional accountant and also the

redress that is available, should you feel that a professional accountant is not conducting himself according to those ethical principles and in the public interest.

**Q The emphasis on corporate governance is a recent phenomenon. Earlier, businesses were governed by internal ethical policies and practices. How have the two converged and what role does ethics play in designing the framework of corporate governance in the company?**



**A** One of the reasons why corporate governance has risen up the agenda in recent years is really driven by the need for public trust and confidence in business. And good corporate governance practices allow an organization to be transparent and to build that confidence with the public. So, we can see that elements, such as independence, due process, internal audit, dealing with external auditors-- all of those elements of corporate governance--people need to know now that they're in place. It needs to be reported and there needs to be a system of corporate governance. Hence, we've seen various corporate governance codes emerging around the world.

As I said earlier, ethics is about the execution of that. You can have the best system in the world but if the people in it aren't behaving properly, it's not going to work. So you need individuals who demonstrate by their behavior that they are upholding those principles, that they are using the corporate governance processes appropriately and in the interests of their stakeholders and the wider community.

**Q Should there be certain individuals in the company to manage ethics?**

**A** Well, I think everybody in an organization needs to understand the need to behave ethically. That's part of the sustainability of organizations. A business can fold overnight if its reputation is damaged, and reputation is mostly damaged by bad corporate governance practices and unethical behavior by individuals or groups of individuals. So, I think that there needs to be ethical training throughout a business but, of course, leadership will play a very important role in that because if leaders don't walk the talk, it is unlikely that the rest of the organization is going to follow.

**Q Is ethics a top-down approach which is passed on or set forth by the top management? Or is ethics**

**something which comes with the individuals who join the organization?**

**A** ACCA has done a lot of research about ethics and trust and behavior. One thing we've found consistently is that the tone from the top is absolutely critical. Even if you bring ethical individuals into the organization at different levels, if the tone at the top isn't right, it's unlikely to impact the entire organization in a positive way.

But the issue about the tone at the top is that it can't be just words. So, a lot of corporate leaders say the right words and then do the wrong thing. It is very much about putting those words into action. Even the smallest things can set the wrong tone for the people who work within the organization. Whether it's about using company resources for your family or for your own benefit, which are on the margins, if people see that happening, then it undermines everything you're going to say about the code of ethics and good corporate governance. Particularly the CEO and the chairman, as well as all the other members of the leadership team, have to be walking the talk or it completely undermines the ability of the entire business

to behave appropriately.

**Q In light of the recent scams rocking the corporate sector, do they point to an absence of ethics within companies?**

**A** Yes, I think it is ultimately individuals, personal behavior and bad ethical practices, coupled with poor corporate governance, the mechanisms that would objectively have assessed such behavior and held people to account. Let's stick with corporate governance rather than out-and-out crime here, but there is a choice. People have a choice. And it's that moment you have a choice where you can act in the greater good and you can think long-term, or it is quite often narrow personal greed and benefit that brings about those kinds of decisions.

So, first of all, we have to have people in positions of power and leadership, who understand the ethical dimension. It's interesting that some people who lead organizations have not been trained or they're not exposed to those concepts, which is incredible but true. So, you have to have that and then you have to have the mechanisms to hold people to account ■

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**“Corporate governance is more about the system and how you govern a business. Business ethics is how you execute on that corporate governance and the behavior exhibited within the organization”** – **Helen Brand**, CEO, ACCA

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# What India's IT Can Learn From America's Broken Corporate Processes?

However, whether it is India or the US, the onus of attrition isn't on the millennial alone

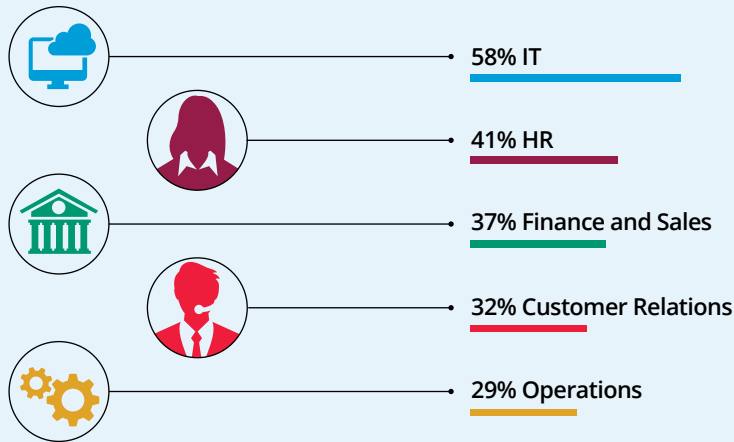
In the last few years since “making the workplace attractive for the millennial workforce” became an IT leader’s responsibility, several Indian IT leaders were asked on how they plan to make their workplace smarter and future-ready? Most of them are well-intentioned to deploy policies and tools that will help them retain this rather, restless workforce.

However, whether it is India or the US, the onus of attrition isn't on the millennial alone.

In a rather interesting survey of 1,000 US full-time employees across industries and departments by Intex titled Definitive Guide to America's Most Broken Processes, broken corporate processes are sending good employees out the door.

**“Broken processes play a significant role in my decision to look for other jobs”**

*(Departmental breakdown)*



According to the survey, of the employees surveyed who are actively looking for new jobs, the vast majority, about 86% say their company's broken processes are a factor behind their decision. Millennials are particularly likely to be influenced by broken processes to look for other work.

The majority of employees surveyed point to broken internal processes across IT, on-boarding and administrative functions. This is seen as a reason why non-IT employees engage in shadow IT.

So who do employees blame? Colleagues? Their supervisor? Or the CEO?

According to the survey, when it comes to broken IT processes like technology troubleshooting, 73% of respondents are quick to blame

IT staffers rather than corporate higher-ups, followed by 43% who blame the CIO versus the 30% who hold IT workers accountable. Only 13% of total respondents blame their company's CEO for IT shortcomings. For all of the broken processes, the survey uncovered a lack of prompt IT service, citing that a mere 16% say their IT department is extremely prompt in handling service requests, while more than one-fourth say their department is either not very prompt or not prompt at all.

According to the study, if these corporate broken processes remain deeply embedded in corporate culture, employees will feel limited in their roles and will actively look for other jobs. Eventually, they will leave.

**According to the study, if these corporate broken processes remain deeply embedded in corporate culture, employees will feel limited in their roles and will actively look for other jobs. Eventually, they will leave**

To tackle these problems, the study has identified four areas where companies can make significant strides towards stopping the cycle of attrition by proactively addressing broken processes.

More closely tie IT to line of business workers. Most employees in organization turn a critical eye to the IT department. This finding of the survey suggests that workers perceive IT as its own entity, separately accountable from the rest of the company in a way that HR and sales are not. The gap between IT and the lines of businesses needs to close. The study suggests that businesses must examine their internal workflows with an eye toward identifying and repairing the sources of disconnect between IT and the rest of the business with the help of new tools and technologies.

Identify processes that can be streamlined and automated. With many of the broken processes we highlighted, there are opportunities for streamlining and automation to play transformative roles.

Clearly define a process for advancement. 61% of employees with clearly defined advancement processes are very happy on the job. That stark contrast speaks for itself. To clearly define a process for advancement, companies must evaluate and evolve the administrative processes that are tied to career progress – namely, annual performance reviews, promotions and raise negotiations.

The study is an eye-opener, especially for IT leaders and IT departments are expected to embark on steering digital initiatives in their organizations. It is a wake-up call for IT leaders to get their basic IT processes in place. The right processes and policies need to trickle from top-down and provide employees a clear path for growth and continued success.

Are the well-intentioned IT leaders listening?

Moreover, it is also an organization's culture that plays a very important role in creating the right foundation for the millennial worker ■





# What Does Hyper-Consolidation Mean For Enterprise CIOs?

Why the Rule of Three framework may give some ideas on what to expect

Recently, market research firm Synergy Research Group published its 2017 market data for telepresence market. The specialized research firm said while the market is showing signs of revival, two companies—Cisco and Polycom—together account for 78% of the market share.

Just a few days prior to this announcement, Synergy had released the data for the cloud infrastructure

services market. There too, the top four—Amazon, Microsoft, IBM and Google—together hold 60% of the market share. But the big news is not that; it is that they are continuously gaining market share. In Q4 2017, data for which was released, they have taken away 3% market share from the rest. So, not only are these four dominating the market, they are further strengthening that dominance.

The research firm has also released



the Unified Communications as a Service (UCaaS) market data for Q4 recently. Though it did not explicitly indicate revenue market share available Q3 data suggests that three companies—RingCentral, Mitel and 8x8—accounted for close to 55% market share.

The story is similar in hyper-converged infrastructure (HCI) market. IDC's Q3 2017 data shows that two companies—Dell EMC and Nutanix—accounted for more than 51% market share.

These are just four segments for illustration purpose. One can go on illustrating the points further by citing more examples of markets where the top 2-4 players account for more than half the market share.

In short, we are seeing a sort of hyper-consolidation—far more concentrated than even what Prof. Jagdish Sheth and Rajendra Sisodia predicted for free, mature B2C market segments in their famous 2002 book, *The Rule of Three*.

There is little common to the type of companies who hold the dominant positions in these markets. Some of them are IT giants (Cisco, Microsoft), some are well-established niche players (Nutanix) and some are unknown names even to enterprise IT community.

Also, in terms of size, there is little commonality among these markets. Cloud infrastructure services is a USD 45 billion plus market while telepresence is less than USD 2 billion in size.

Yet, there is one thing that is common to all of these: these are all mature horizontal enterprise technologies—areas where CIOs are still the undisputed decision makers, in contrast to the vertical-specific solutions or emerging technologies like AI, IoT and Analytics, where other business and operational managers could be calling the shots.

### What does it mean?

Of course, lesser number of vendors invariably suggests that power shifts to the vendors from the buyers. Or the

vendor becomes more powerful. This has prompted many to raise the possibility of vendor lock-in.

Though the traditional vendor lock-in of the 90s and prior may not become a reality, it may make cost of switching a bit higher. While the technologies are open and hence no vendor can blackmail a user, today barriers are created by nurturing the ecosystem. So, even if switching may be theoretically possible, every step from finding an integrator to get skilled people to hire may be challenges.

And it is already happening. The cloud players are today projecting the size of their ecosystem more than the services metrics when selling their value proposition. However, it may also mean that from the skill standpoint, things may be less challenging.

However, it may be a worthwhile idea to look at the market through the framework of Sheth and Sisodia's Rule of Three model. What it says is that free markets often lead to a situation where equilibrium is attained eventually by two kinds of competitors: full-service generalists and specialists who could focus on a sub-market (either products or vertical/horizontal segments).

While full-service companies want to grab market share, specialists' financial performance deteriorates as they gain

The cloud players are today projecting the size of their ecosystem more than the services metrics when selling their value proposition. However, it may also mean that from the skill standpoint, things may be less challenging

market share and they play a margin game—thus driving innovation. While the leaders—the generalists—try to compete by offering price advantages, specialists try to innovate. The middle guys are in disadvantage positions. Often, the model is explained by illustrating the shopping mall analogy. While a few large general stores anchor the malls, high value niche players go there to tap top customers.

Of course, IT markets are still not the ideal candidate (thanks to multiple factors including the non-independence of markets segments from each other) for conforming to the rule of three. Yet, it is not a bad idea to explore the framework to understand.

For example, usually in a Rule-of-three market, the No 1 is the least innovative while No 3 often is most innovative.

Specialists are often forced to be super-niche players creating and commanding dominant position in those super-niches.

The mid-market companies, called ditch companies by Sheth and Sisodia, often are acquired by the leaders.

While no framework or rule can help you manage your challenges, it may be worthwhile to look at the market proactively through this framework to understand how they may evolve. ■



Two times  
the revelation



### Rupen Shah

Assistant General Manager - IT,  
Arohan Financial Services

#### TECHNOLOGIES THAT WILL HAVE MAX IMPACT IN 2018

AI, IoT, Big Data Analytics



#### MY FAVORITE HOLIDAY DESTINATION

North Sikkim

#### MY FAVORITE SINGERS

Kishore Kumar, Lata Mangeshkar,  
Asha Bhosle, Jagjit Singh

#### A PERSON WHO I LOOK UPTO ON SOCIAL MEDIA

Eugene Kaspersky on Twitter

#### A TECH CONFERENCE THAT I ATTENDED RECENTLY

Infocomm 2017 in Kolkata

#### MY PEER IN THE IT COMMUNITY



### Hemant Agrawal

CTO, Netweb Technologies

#### A TECH BOOK THAT I'M CURRENTLY READING

*Intel Xeon Phi Processor  
High Performance Programming*  
by James Jeffers, James Reinders  
and Avinash Sodani



#### A SONG THAT I KEEP HUMMING

Main Zindagi Ka Saath  
Nibhata Chala Gaya

#### MY FAVORITE MOVIE

Pakeezah

#### MY IDEAL TECH COMPANY

Infosys



#### MY IDEAL ETHNIC WEAR

Kurta Pyjama

#### A TECH DEVICE THAT I MOSTLY USE

A Smartphone



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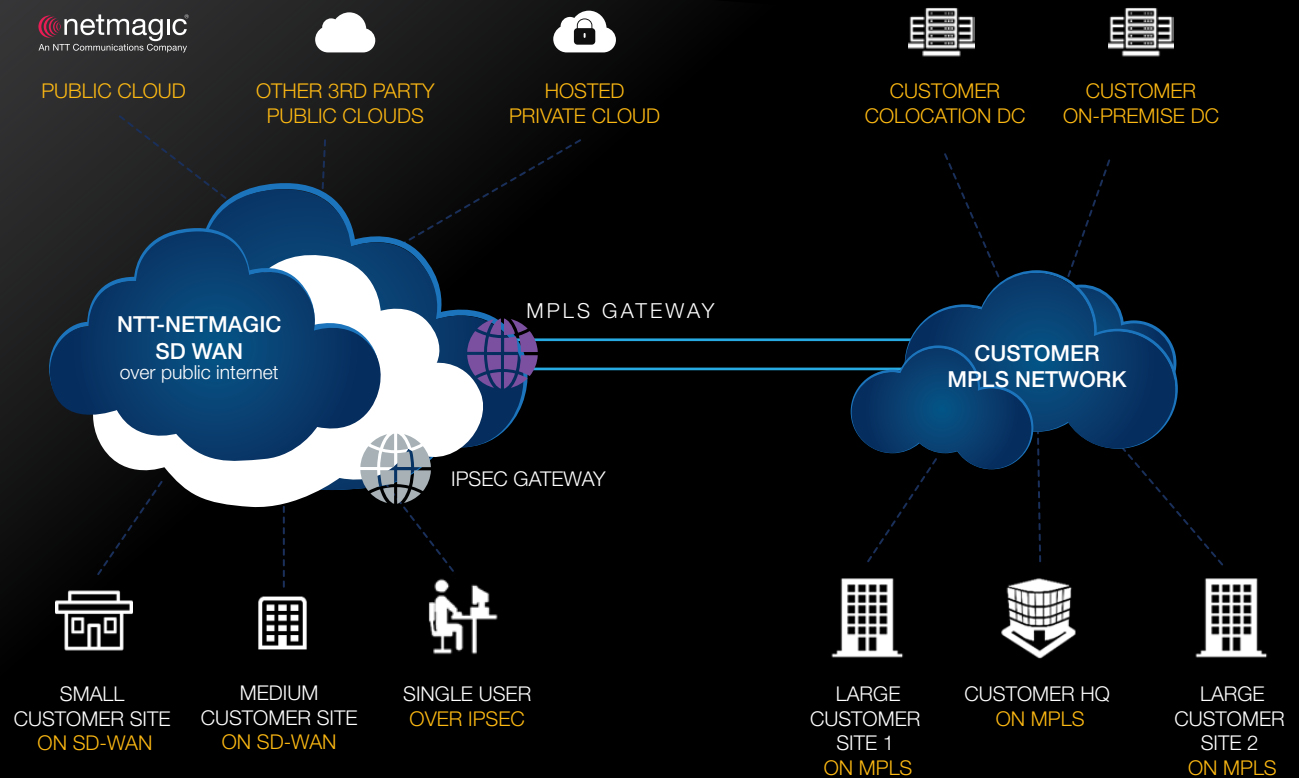
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FOR CFOs

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NTT Com India-Netmagic's SD WAN services bring you a global, cloud-based platform that consolidates all your traffic, giving you a smooth network experience. So your network now has the power to truly accelerate your business.

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- > Centralized control
- > Cost Optimization