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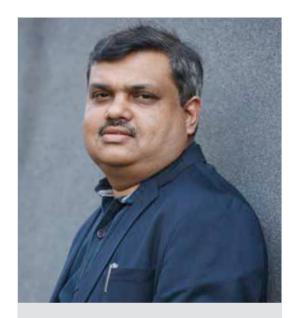
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NEXT100 At The Time Of Corona



We saw one of the toughest competitions this year for the NEXT100 2020 Awards. I do not know if the pandemic and its impact have anything to do with it

Shyamanuja Das

he year 2020 is finally—many would say thankfully—coming to an end, amidst some good news about the vaccine. At the time of writing, while the vaccine news dominates, newer warnings from the UK, WHO and Bill Gates, have made us a bit cautious. In India, the stock markets show no sign of that caution or doubt.

In short, it is a mixed, even confusing signal. What it means is that we have to live with this hide-and-seek for some time.

As we all know, technology's role in business and life—health, education, governance as well as social interactions—has been unquestionably established. While that has put this community—the IT managers—at the center of action, the credit has been hijacked. A little dissection of the joke—COVID is the biggest catalyst of digital transformation—can show you what change has happened. It is not that IT managers were not sensitized to what technology could do for business. It is the others who were not convinced. COVID convinced them.

Notwithstanding the continuity of confusion and cautious approach on the business front, it is action time for the IT managers, either way. Just the type of action would differ depending on which way things go from here.

It is in this time that the NEXT100 announcement—done digitally this year—comes to you. We did announce the awards digitally last year too, but then followed up with local events in three cities. That is not possible this time. We are getting used to too many firsts in 2020. And not all are celebratory changes.

Nevertheless, winners are winners. As part of the 1,100 winners—last year was the 10th anniversary of NEXT100—they are part of an exclusive club. We will have many opportunities to meet and interact—hopefully sooner than later.

This issue, as always, carries all that you need to know about what makes winners—the kind of companies that they work for, the industries they work in, their qualification, compensation, and size of teams they handle and so on.

I will take this opportunity to thank the jury members—45 senior CIOs—for wholeheartedly working to get the program through. This is for the community, by the community. Without them, NEXT100 is just not conceivable.

We saw one of the toughest competitions this year. I do not know if the pandemic and its impact have anything to do with it.

Enjoy the issue. Congratulations to winners. And best of luck to those who could not make it this year. Hope to see them in the list next year—or the year after. ■

Content

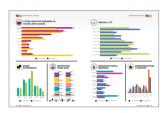




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ADVERTISER INDEX

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Editor: Vikas Gupta



EXTRA= whicular



An annual resolution that enriches, engages and adds to the repertoire of talents





Strumming Along

NFXT100 Winner 2016 **Debasish** Raychaudhuri, Assistant General Manager – IT & Digitalization, Schaeffler India shares his immense passion for playing guitar besides his other hobbies like swimming...

tion at the beginning of the year and stick to it to achieve it. I decided to improve my swimming and diving skills last year but this year, was determined to learn guitar. After watching Salman Khan's song "Oh Oh Jane Jana" in

ince many years I follow one practice, to take one resolu-

1998, I was looking for an opportunity to learn this skill. Finally, 2020 is the year when I decided to start learning guitar. I got admission in Muzic Club, Pune in January, 2020 and bought my first acoustic guitar. However, my lessons got interrupted due to my business travels to Europe and COVID-19 lockdown. Online classes were very difficult for a beginner like me. In March 2020, I was about to give up. But my music teacher told me to practice every day, and this is the only way to learn this skill. I kept practicing on single notes and uploaded the first video on my YouTube channel and Facebook page on my daughter, Pragya's birthday on 10 April 2020. I got many compliments for my first upload. I continued practicing and followed free classes from Sandy Sir's "Acoustic Pahari" channel.

One day when I was watching his videos, I saw a solo song, "Tareefan Reprise" on acoustic guitar by Lisa Mishra. I decided to play and sing it at the same time. I practiced this song 1,000 times honestly and I uploaded it online in May, 2020. I have also improved a lot on my vocal aspects through support of my mentor, Debi Roychowdhury, from Kolkata. Till now, I have performed in Punjabi, Hindi, Sanskrit, English, Bengali and Marathi...solo with guitar and original track too.

"Blessing in Disguise" – this lockdown has given a lot of opportunity to many, where we were not allowed to go outside..."No" - malls, movies, shopping, traveling, dine outs and many more time-consuming activities. Not only learning new skills, it has also given ample time and opportunity for organizing multiple training sessions in our organization for cross-functional teams. We were also able to realize digitalization projects, e.g. e-invoicing and e-way bill API integration with our SAP, sitting at home.

So, what will my resolution be in 2021? Learning a new language? Playing the piano? Learning classical singing? Planned already and started working on it!

As told to Dipanjan Mitra, Team ITNEXT



Debasish Raychaudhuri

Debasish Raychaudhuri is Assistant General Manager – IT & Digitalization at Schaeffler India. He has been a NEXT100 winner in 2016. He had served in esteemed companies

Snapshot

like Krishidhan Seeds, Rehau Polymers, Contitech India among others. He holds a Diploma in Computer Application and B.Com.





A late love that bloomed in all its glory and is now a lifelong 'addiction'

physically and watching tennis on television, but soon the reverse happened for me. All these years, the extensive coverage over television from all across the globe has just kept the passion going. The era of Nadal, Federer and Djokovic has also been instrumental in keeping the interest more than alive.

It was during my initial days in BHEL, that one evening, just leisurely, I had tried my hand at tennis and since that day it has been an integral part of my life. Very apt to quote, Russell Lynes here: "Tennis is an addiction that once it has truly hooked a man will not let him go."

An hour of tennis early morning on weekdays and extended timings on weekends is just the kick required to start the day. We have formed a group which is strongly knit with this common thread of tennis. Also, sporting activities within my organization are well supported, so over the years I have participated in many annual tournaments which just keeps me motivated and inspired.

I feel that tennis for me has now become more than a mere hobby; it is a mean to channelize the energy, maintain fitness levels and have a competitive spirit in all areas of work and life.

The pandemic has been really tough but now with the situation improving a little bit, I have been able to restart my routine of early morning tennis. Thankfully, it is one of the safer games to play these days which has inherent social distancing. In this digital era, when most of the things are now only possible online, pursuing an extra-curricular activity which is an outdoor one is a blessing.

Just wish that these masks would go off soon and the pollution is curtailed and even if it doesn't, 'the game must go on.'

As told to Dipanjan Mitra, Team ITNEXT

'Love-All'

NEXT100 Winner 2016 Gaurav Saxena, DGM - IT, BHEL shares his immense passion for playing tennis and how it boosts his life...

"I told myself to play free. You play the ball. You don't play the opponent. Be free in your head. Be free in your shots. Go for it. The brave will be rewarded here."

- Roger Federer

"It's no accident that tennis uses the language of life: advantage, service, fault, break, love...The basic elements of everyday existence, because every match is life in miniature"

- Andre Agassi

ports has always been a part of my life since childhood and I am lucky not to have spent those early days on mobiles and tabs. Of course there were distractions such as video games and all, but still going out with friends in evening and weekends was always a top priority.

In our country so obsessed with cricket, it was bound to be my first choice during those days. It was initially cricket played



Gauray Saxena

Gaurav Saxena is DGM - IT at BHEL. He has been a NEXT100 winner in 2016. He completed his Bachelors in Computer Science from IET,

Snapshot

MJP Rohilkhand University, Bareilly in 1999. He holds numerous IT certifications from Oracle and iSec Services.

INDIA's FUTURE CIOs AWARDEES



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Ipsita Ansumala Senior Manager, TietoEVRY India



Omhari Arora Senior Manager, Panasonic India



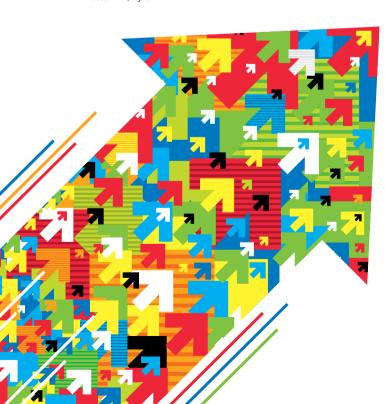
Sumit Asthana General Manager, Samsung SDS



Abhilash Balan Deputy Vice President, Bharti Axa General Insurance Co



Subhash Bankey General Manager, Adani Transmission





Goutham Bende Associate Director, Ramco Systems



Sandeep Bhandari Senior Manager, Collabera Services



Samrat Bhatt Chief Security Officer, Aviso Al



Sagar Bhosle Senior Manager, IndiaFirst Life Insurance Co



Tarundeep Bindra Head - IT, McCain Foods India



Ajay Choudhary Project Manager, Shemaroo Entertainment





Rupjit Choudhury Senior Manager, **BPCL**



Sanjay Dahiya Senior Manager, TMF Group



Satyajit Das Director - IT, Capgemini Technology Services



Shakyasingha Das General Manager, Samsung SDS



Subhasish Das Assistant Manager, Wipro Consumer Care



Bhushan Deo Chief Security Officer, Thermax



Mahesh Deshpande Senior Manager, HSBC Software Development India



Sridhar Dharmarajan Assistant General Manager, Karur Vysya Bank



Denis D'Souza Vice President - IT & Broadcast Technology, Reliance Broadcast Network



Mahendra Dubey Assistant Vice President, Gujarat Gas



Vishal Dugar Director - IT, Cognizant Technology Solutions



Santosh Dwivedi Manager - IT, **Bechtel Corporation**



Pankaj Garg Director - IT, Aristocrat Technologies India



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Debangshu Ghose Project Manager, TietoEVRY India



Sachin Godse General Manager, AGS India Transact



Manoj Gupta Head - IT Infrastructure & CISO, Indus Towers



Mohit Gupta Chief Security Officer, MothersonSumi **INfotech and Designs**



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Varsha Kakati Head - IT, Mercedes Benz India R&D



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Ajay Kumar Senior Strategy Consultant, IBM India



Ravi Kumar Chief Digital Officer, Exide Industries



Vijay Kumar Manager - IT, TVS & Sons



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Nitin Parashar Manager - IT, Reliance Digital Platform & Project Services



Biren Parekh Vice President, Intellect Design Arena



Mandar Patkar Head - IT, GIA India Laboratory



Retheesh Pillai Head - IT, Raksha Health Insurance TPA



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Mayuresh Purandare Head - IT (Infrastructure & Security), Marico



Roman Rafig Vice President, **IGT** Solutions



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Manoj Raman Head - IT, HDFC International Life and Reinsurance Co



Sanjay Rastogi Vice President, Reliance Jio Payments Bank



Gopal Rathore Head - IT, Voltas Beko Home Appliances



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Devender RawatDeputy General Manager
- Infrastructure,
Aditya Birla Group



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President,
Reliance Retail



Saikat Samanta Head - IT, Videocon Industries



Avdhoot Sant Manager - IT, Mahindra & Mahindra



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LB Sharma General Manager, BPCL



Rohit Kumar Sharma Senior Manager, T-Systems ICT



Shridhar Sharma Manager - IT, Maruti Suzuki India



Vikas Sharma Group - Head IT, East West Seed International



Ajit Shrivastava General Manager - IT Solutions & Delivery, Vodafone Idea



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Samarjeet Singh Associate Director, Mindtree



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FIFO Future



Shyamal TannaDeputy General
Manager,
Vishakha Polyfab



Jeetendra Tawade Manager - IT, Syngenta Services



Kunal Thakur Associate Director, Ocwen Financial Solutions



Siddharth Vaish General Manager, Varun Beverages



Vamsi Vandrangi Enterprise Architect, Tech Mahindra



Sunil VuppalaDirector - Data
Science,
Ericsson India



Balasaheb Ware
AVP & Head Information Security,
Datamatics Global
Services







IT managers registered for the NEXT100 process

applicants completed the psychometric

total interviews conducted by the Jury members

of the winners have between 11 to 20 years

of the winners are aged between 36 and 45

of the winners are based out of Mumbai and Delhi NCR

of the winners work in services sectors

Popular Qualifications

■ Bachelors: Engineering & Technology, Computer Science, Commerce

of winners work in turnover of INR 5,000

of the winners work in organizations with IT budget of INR 25 crore or above

Popular Hobbies

Travel, Music, Cooking, Cricket, Reading & Books, Photography

of the winners receive an annual compensation exceeding INR 30 lakhs

of winners have more than 10 people reporting **Popular Certifications**

ITIL, PMP, CCNA

Popular Business & Management Expertise

Project & Program Management, IT Strategy & Planning, Vendor Management, Budgeting & Financial Management, Customer Support & Service Management

Methodology

The selection process for the NEXT100 2020 commenced on 15 June 2020 with a call for applications. The entire IT manager community was informed through a series of e-mails, print advertisements, and the social media. By 1 September 2020, when the application closed, there were 2,586 applicants who had registered for the process.

The selection of the award winners was done through a three-stage process, as in the past years. In the first stage, all award aspirants had to complete a detailed application form—and provide extensive personal and professional information, including education, technical skills and work experience. They also had to nominate referees who could support their claim for consideration for the award.

In the second stage, applicants took two psychometric tests: Personality profiles tests and emotional quotient & intelligence tests. The tests were administered online by Paris-based Central Test International. Every applicant who completed all the tests received a free, personalized copy of the assessment reports for reference.

The NEXT100 jury members identified a set of criteria (including education, length and quality of work experience) to prepare a short list of candidates for the interview stage.

Every shortlisted candidate was independently interviewed by two NEXT100 jury members.

Separately, independent recommendations were obtained for each candidate from the designated referees, including current supervisors.

The scores and evaluations assigned to all candidates in every stage of the selection process were input into a proprietary scoring model that assigns carefully calibrated weights to various factors. The final list of NEXT100 award recipients, listed in this magazine, is an outcome of this scoring model.

To ensure that the NEXT100 awards are completely fair and unbiased, no member of the ITNEXT editorial team was involved in the selection or elimination of the award winners, nor are editors and staff of ITNEXT magazine a part of the jury panel.

As in past years, the NEXT100 awards program draws on the knowledge and support of the CIO community.

Forty five senior executives who comprised the jury of the NEXT100 awards, collectively represent many hundreds of years experience in IT and corporate management, were involved as advisors, interviewers and selectors this year.

The jury panel debated, deliberated and decided on the award winner selection process—and conducted detailed interviews of all shortlisted applicants.

Psychometric Tests



the NEXT100 awards take two psychometric evaluations—a personality test and an emotional quotient test-that are

administered by Paris-based Central Test. The results of the tests are factored into the total evaluation of the candidate. All candidates who take the evaluations receive detailed personalized reports that can be used for self development.

The Central Test Personality Inventory for Professionals (CTPI-R) test provides an assessment of work related personality traits that play a crucial role in performance. According to the test designers, CTPI-R conforms to the standards of scientific validation set out by the International

Test Commission, and the American Psychological Association.

The workplace competencies are defined as "clusters of knowledge, skills and attitudes that are predictive of superior performance in a given job". According to Central Test, the competency scores in the CTPI-R are not a 'direct assessment' of competencies but an 'assessment of proximity' of the test taker to the profile of others who have demonstrated a high level of that specific competency.

The assumption behind this method of evaluation is that people with similar profiles will be more likely to exhibit similar abilities. As the scores are derived from an assessment of proximity to an ideal profile, they give an indication of the extent to which the candidate is psychologically inclined towards high performance on

a specific competency. The score on each dimension of competency also provides an indication of the extent to which the person is trainable on each competency.

The Emotional Quotient test, introduced for the first time in 2018, assesses the ability to perceive, understand and manage one's own emotions and those of others—an essential leadership requirement in modern times.

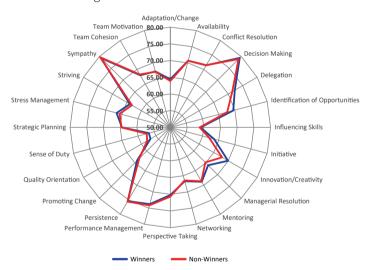
The personality test measures four dimensions - intra-personal intelligence, personal development, self-assertion and leadership. The participants are measured across 12 parameters: adaptability, selfknowledge, self-motivation, self-control, assertiveness, self-confidence, interpersonal skills, self-esteem, optimism, resilience, mediation & influence, empathy & lucidity.



Workplace Competencies

According to Central Test, the CTPI-R test has been standardized on an international group of 5,000+ working managerial professionals. The test uses a continuous scale of 0 to 100% to deduce 24 competencies that are relevant in the workplace. The conclusions are based on statistical studies and theoretical models.

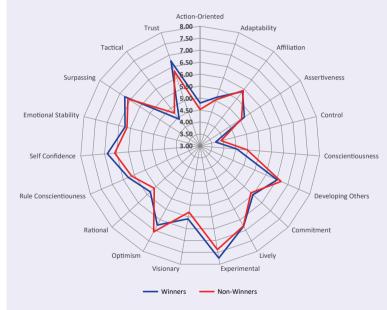
The overall analysis of workplace competencies of NEXT100 applicants reveals that there is not much of a difference between winners and other applicants when it comes to workplace competence. The only two areas where there are some noticeable differences between the two categories are innovation and stress management. In general, all contestants show good decision making and sympathy, while sense of duty and quality orientation are low among all.



Personality Profile

The CTPI-R test provides an assessment of work-related personality traits that play a crucial role in performance. The test measures work personality across 19 dimensions. These dimensions are organized into four groups: People Management, Perception Mode, Self Management and Change Management.

The test results are reported on a scale of 0 to 10, with 0 implying a low level and 10 implying a high level of conformance to the behavioral characteristic. As compared to other applicants, the winners exhibit self-confidence and trust. They are also more experimental. Non-winners show better optimism! Good luck for next time!



- Sympathy:
- Perspective Taking
- Stress Management:
- Delegation:
- Performance Management:
- Decision Making
- Conflict Resolution:
- Mentoring:
- Team Cohesion:
- Innovation/Creativity:
- Networking:
- Managerial Courage:

- Effectively identifying and understanding the needs of another person.
- Taking a step back to analyze facts and situations
- objectively before acting or deciding.
 Managing one's own emotions and remaining calm and productive in challenging situations.
- Assigning tasks and responsibilities appropriately, according to individual abilities and needs.
- Monitoring, managing and evaluating employee performance in order to maintain standards and targets. Making the best possible choice based on the information available, as well as being able to explain these decisions Maintaining harmony within the team by mediating
- Taking responsibility for employees' development and progression by coaching them to help them improve. Encouraging activities that will enable united and
- . Thinking outside the box and looking at things from new
- Making contacts and developing a network of influential people for potential opportunities
- Speaking confidently and setting limits when the situation demands it.

- Persistence:
- Initiative:
- Strategic Planning:
- Team Motivation:
- Promoting Change:
- Adaptation to Change:
- Availability:
- Identification of Opportunities:
- Influencing Skills:
- Sense of Duty:
- Striving:Quality Orientation:

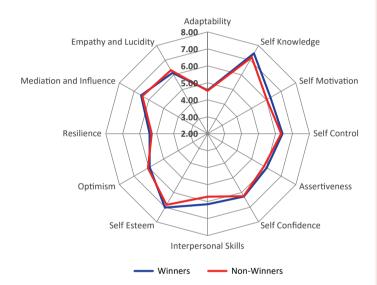
- Demonstrating determination and maintaining a high level of energy in the performance of duties.
 Seizing opportunities and being a driving force to create
- or move things forward. Establishing action plans to anticipate future
- Leading a group of people towards a common objective by winning their support and pushing them to surpass themselves
- Communicating a new vision in an engaging and inspirational manner to encourage involvement. Being able to adapt to change, adjusting one's behavior
- or attitude to an environment and people Being committed to the organization and being willing to
- help others whenever possible. Understanding the market perfectly in order to be able to identify and seize business opportunities.
- Promoting ideas and convincing others, as well as communicating in an assertive and tactical manner. Respecting and adhering to codes of conduct, remaining honest, and being reliable.
- Constantly seeking to excel and surpass one's goals. To be meticulous with an eye for detail to ensure the highest level of quality and service.

Emotional Skills

The Emotional Quotient test assesses the ability to perceive, understand and manage one's own emotions and those of others. The participants are measured across 12 parameters: Adaptability, self-

knowledge, self-motivation, self-control, assertiveness, self-confidence, inter-personal skills, self-esteem, optimism, resilience, mediation & influence, empathy & lucidity.

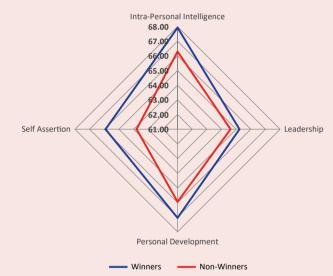
The NEXT100 winners were ahead of other applicants noticeably in self-knowledge, self-esteem and interpersonal skills even though non-winners led in empathy & lucidity.





Leadership Suitability Fit

Emotional Intelligence measures four dimensions - intra-personal intelligence, personal development, self-assertion and leadership, based on the parameters. The NEXT100 winners led other applicants in each of the four parameters and did so by a good margin.



Self-knowledge:

Being self-aware means being able to identify what emotions are being felt and what sets them off; it means listening to one's own desires, needs and motivations. People who are self-aware know how to analyze their own reactions and

Self-motivation:

behavior. This trait determines the ability to find the resources within oneself in order to become and remain motivated. People who have this drive will adopt a positive attitude in any situation and will show perseverance and tenacity.
Self-esteem corresponds to how much one values oneself. By

Resilience

Self-esteem:

Self-esteem corresponds to now much one values oneself. by recognizing their own strengths and weaknesses, people understand what they are worth and they are not dependent on what others think; they thrive more easily. Resilience is the ability to get back on one's feet after disappointment or failure. By learning from mistakes, people are better able to cope with failure and struggle. High resilience allows people to move forward and not be burdened with people.

Self-control:

burdened with regret. Self-control is an important asset for becoming socially accepted. This refers to the ability to control impulses and excessive reactions such as anger, exasperation, anxiety or excessive featuring such as angel, exasperation, aristery or melancholy—so that people can think and act calmly in any type of context. People who demonstrate good self-control give an impression of stability. They can cope with difficult situations such as conflict or stress without revealing their feelings and they are able to ease tension.

Adaptability:

reeings and trey are dole to ease tension.

Adaptability is an essential characteristic for building good social and occupational relationships and fitting in an environment. Being able to adapt means being able to let go of habits and to easily change points of reference. Adaptable people are able to share opinions and feelings, while taking specific situations and points of view into account.

Optimism:

Self-confidence:

• Empathy and Lucidity:

Assertiveness:

• Mediation and Influence:

Interpersonal Skills:

Optimism is one facet of emotional intelligence and also a result of emotional intelligence: feeling good about oneself and one's relationships leads to more confidence in the future. Being optimistic means being generally happy with life, seeing the positive side of things and thinking that the best is yet to come. Being self-confident is, above all, having a strong belief in oneself and in one's abilities. Self-confidence can manifest itself in personal skills allowing us to surpass our own objectives and gain autropomy. It also enables us to tarkle itself in personal skills allowing us to surpass our own objectives and gain autonomy. It also enables us to tackle challenges and unexpected events more serenely. Empathy is about putting oneself in another person's shoes and understanding what is on his or her mind, all while staying true to oneself. Being similar to clear-sightedness, empathy helps a person understand the big picture and read between the lines, in terms of psychology (such as figuring out the unspoken goal of someone trying to sound convincing) or facts. Being assertive is the ability to express oneself and make one's voice heard without being uselessly aggressive. Assertive voice heard without being uselessly aggressive. Assertive people can find their place more easily in a group and share opinions and feelings more effectively. When a situation calls for confrontation, an assertive person will not turn away. This is why being excessively assertive can be seen as being arrogant. This trait evaluates the ability to develop arguments, motivate others and inspires enthusiasm, thanks to a good understanding of who people are and how they react. Mediation and influence also refer to an ability to reconcile

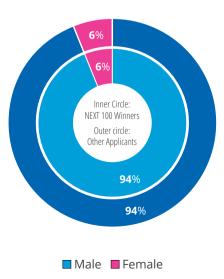
diverging points of view in situations of conflict. Having good interpersonal skills means being good at forming and maintaining relationships with others. Being authentic is a must! People who have good relationship skills can easily share their emotions and feelings and they feel comfortable in groups and communicate without difficulty.



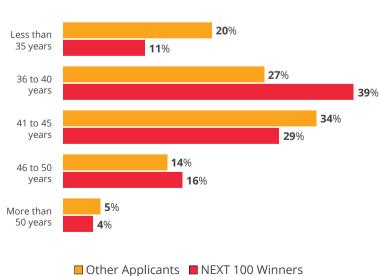
N NUMBERS

Know what differentiates winners from other applicants...



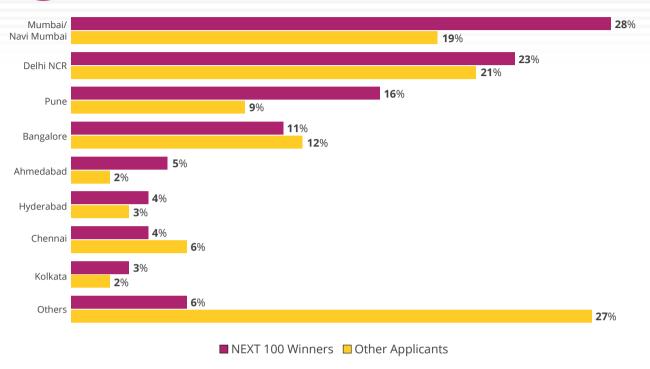


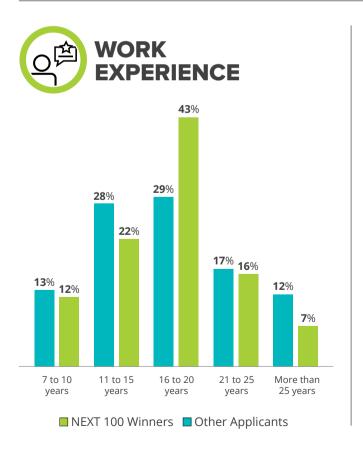


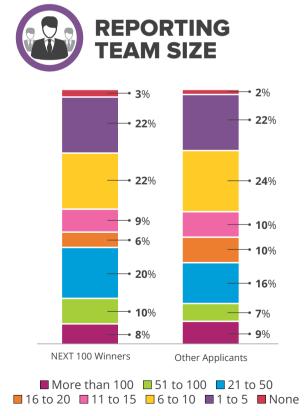


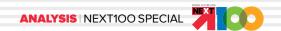




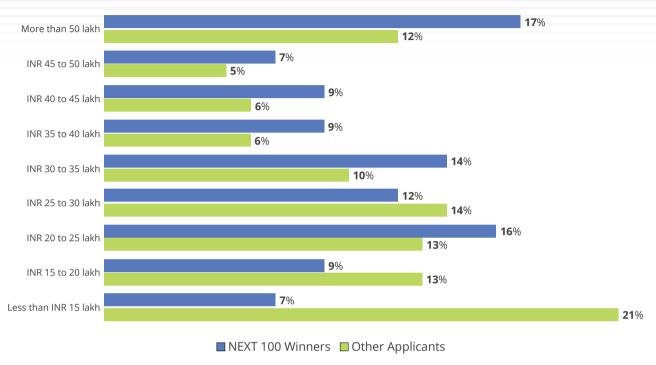


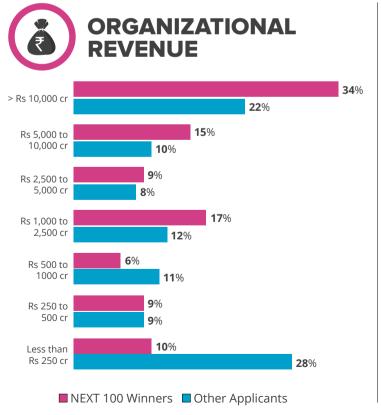


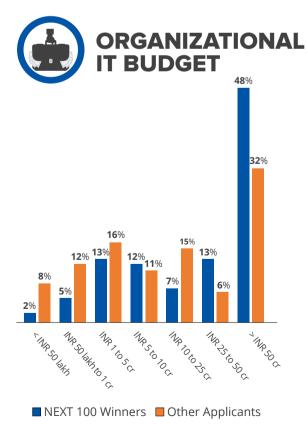






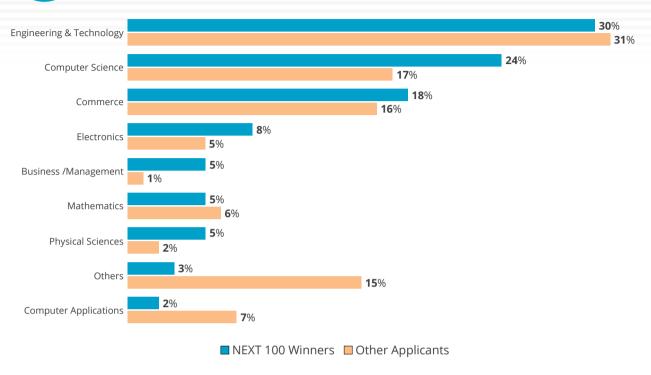










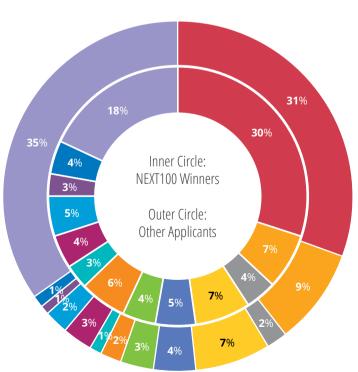


■ Power

Others

INDUSTRIES THEY COME FROM





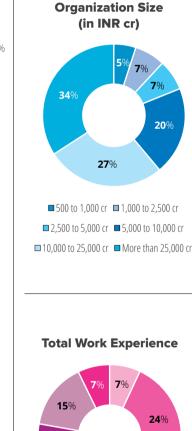
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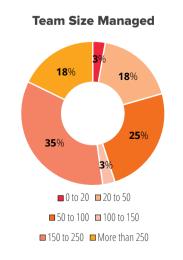
MEET THE JURY

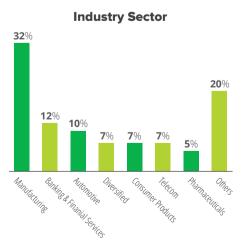
The NEXT100 Awards program draws on the expertise, contributions and support of India's CIO community. 45 senior executives from India's leading companies were involved in reviewing and validating the NEXT100 process, determining the selection criteria and interviewing the aspirants

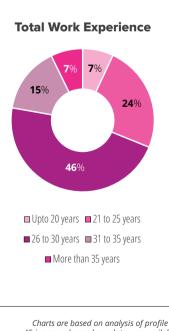












Charts are based on analysis of profile of 45 jury members whose data was available



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Shiva Shankar Vice President & Head -Datacenter Operations, Reliance Jio Infocomm



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The 11th edition of NEXT100 Awards employed a rigorous, multi-step process to honor and recognize **INDIA'S TECHNOLOGY LEADERS OF TOMORROW**. The winners of NEXT100 Awards represent an elite club of achievers that have set new benchmarks with their pursuit of excellence

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"The NEXT100 Awards provide a perfect platform for next-gen IT leaders to achieve the next level of success. This can motivate them further, boost their learning, reskill them and ensure they achieve business goals

by understanding business needs and adopting the latest technology."

Gyan Pandey CIO. Aurobindo Pharma

"It is good to see young, energetic individuals winning the NEXT100 Awards. The selection process is very rigorous. So it is heartening to see the right talent come through this with new ideas and people working in new areas of IT."

Nirita Bose

Senior Vice President & Head - IT, Axis Asset Management Co

"The NEXT100 is a great program and its quality is improving every year. The expectations are also increasing with that. We expect the next-gen IT leaders to have a good understanding of the husiness needs and measure their work on a regular basis through metrics."

Puneesh Lamba

CTO. Shahi Exports





"The NEXT100 Awards have been an enriching experience, right from start to finish. Some of the other awards like CIO Summit are project-driven but the NEXT100 has taken into account comprehensive traits, which are not only about what you know, but also what your insights are. So this inside-out approach is the most fullfilling part of it."

Avadhut Parab

Associate Vice President & Head - IT. Wockhardt



"The NEXT100 Awards is a tremendous platform where technical guys like us can meet, learn from each other, and share our knowledge & experience."

Gagan Chopra

Assistant General Manager, JSW Steel

"The platform provided to us by NEXT100 has been amazing. It is certainly very encouraging to aspiring CIOs and future IT leaders. This will also enable winners like us to focus on and contribute more to our organizations."

Raiendra Bhandare

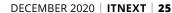
Vice President – Technology, IDFC Securities

"The entire NEXT100 program is very exciting. It is a platform for me to meet my peers and learn about emerging technologies. It propels our career

in the right direction. Moreover, the program is extremely wellorganized."

Shini Saiu

Manager, JSW Steel







From all of us at ITNEXT, a sincere thanks to our Jury for their invaluable support in making the

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Creating A Human Firewall Through A Culture Of Security

Identifying suspicious behaviors, keeping devices up-todate, and practicing safe cyber behavior should be built into the fabric of all job roles to ensure that the human firewall continues to stand firm

By Rajesh Maurya

hether they know it or not, employees can pose a significant risk to the security of enterprise networks and the data they hold. Considering that 68% of organizations feel moderate to extremely vulnerable to insider attacks, as noted in a recent study, it's clear just how significant this issue is. In addition to those that are considered malicious insiders, these threats can also be attributed to the group known as the "accidental insiders." According to this same study, security teams view falling victim to phishing attacks (38%) as the top cause for accidental insider threats, followed by spear phishing (21%), poor passwords (16%), and browsing of suspicious websites (7%). In other words, opening the door for cyber criminals can be as simple as clicking on a link or downloading a file without taking the time to determine whether or not it is legitimate.

Careless and negligent behaviors can have a lasting effect on organizations, especially in the case of a data breach. And with more employees working from home, unable to walk over to a co-worker's desk to get their thoughts on a suspicious-looking email, these individuals are more likely to be susceptible to social engineering attacks. With this in mind, it is more important than ever that CISOs prioritize their employees' cybersecurity awareness to help them understand the role they play in keeping networks secureand reducing the insider threat risk.

Creating a Human Firewall through a Culture of Security

Considering employees can be the best line of defence, it is crucial that CISOs protect their organizations by including employee education and awareness in their cybersecurity strategy. By embracing this technique, leaders can ensure the workforce is prepared to face the various threats.

Regardless of job titles or roles, all employees should understand the



Considering employees can be the best line of defence, it is crucial that CISOs include employee education and awareness in their cybersecurity strategy

repercussions of a security event and how it could affect the organization and them personally. The importance of this enterprise-wide strategic approach was highlighted in a 2019 Forbes Insights survey of over 200 CISOs. When asked which security initiatives they plan to prioritize in terms of funding over the next five years, 16% of respondents noted the creation of a culture of security.

While this is a step in the right direction, establishing a baseline for good cyber hygiene must begin with CISOs helping their employees take cybersecurity seriously. This can be achieved in the following ways:

Prioritize Cyber Awareness Training

Social engineering attacks are extremely prevalent across organizations simply because they work. In fact, Verizon's 2019 Data Breach Investigations Report (DBIR) found that approximately one-third of all

data breaches involved phishing in one way or another. To combat this risk, CISOs must educate their employees about common attacks that could appear in the form of phishing, spear phishing, smishing, or other tech support scams. Whether these lessons are provided through online meeting spaces, video chat, or email, they should be prioritized. Understanding these threats and their associated red flags will be critical in helping employees avoid falling victim to fake emails or malicious websites.

In addition to teaching about common indicators of cyber scams (i.e., the promotion of "free" deals), these training offerings should also feature simulated phishing exercises designed to test knowledge and determine which employees might need more assistance. Through tactics such as these, employees will be better equipped to know when they are the target of a social engineering attack and can, therefore, act accordingly.



Whether employees realize it or not, their actions could open the door for cyber criminals to access sensitive information

Create a Partnership between the Security Team and Other **Departments**

Cybersecurity cannot fall on the shoulders of the security and IT teams alone, especially as cyber threats continue to grow more sophisticated and challenging to detect. In addition to ensuring that employees can identify phishing attacks, leaders should also encourage collaboration between the security team and other departments. This means helping both sides understand expectations. While the security team will be the expert in terms of determining the risk and threats, other departments will be critical in helping to develop user-friendly policies that are easy to follow both in the office and in remote work environments, even for those who are not entirely cyber aware.

Through collaborative efforts, CISOs can ensure that all individuals across the organization are not only aware of security policies but also understand

the impact their actions can have on the organization as a whole. Helping employees understand safe cybersecurity practices and the ramifications their actions can have should lead to improvements in how these individuals respond when confronted with a suspicious email or website, even while working from home.

When employees know what is expected and feel like they are a part of the team, they are more encouraged to follow best practices and help chip away at the behaviors that cause accidental insider issues, such as forgetting to change default passwords or neglecting to use strong passwords. And as more employees follow suit, the human firewall acting as the first line of defence to the organization will only grow stronger.

Establish Straightforward Best Practices

Even after employees are made aware of what to look for in the case

of a social engineering attack, they may still need some guidance on the next level. While it is easy to ignore or delete a suspicious-looking email, what about those that appear normal that the receiver is still unsure about? In this scenario, CISOs should encourage employees to ask themselves certain questions to help make the right judgment: Do I know the sender? Was I expecting this email? Is this email invoking a strong emotion like excitement or fear? Am I being told to act with urgency?

While these questions should help clear up any confusion in regards to whether the email is malicious. the receiver should still take extra precaution to protect themselves and their organization. This includes hovering over links to see if they are legitimate before clicking, not opening unexpected attachments, calling the sender to verify they actually sent the email, and reporting all suspicious emails to the IT or security team. By explaining these steps to their employees from the beginning, CISOs can avoid negative repercussions down the line.

Addressing Insider Threats

The ability to be cyber aware is a critical piece of the puzzle when it comes to keeping organizations secure. Whether employees realize it or not, their actions could open the door for cyber criminals to access sensitive information, meaning passivity towards security is no longer acceptable.

By prioritizing training and collaboration between departments and the security team, CISOs can lay the groundwork for a strong culture of security. Identifying suspicious behaviors, keeping devices up-to-date, and practicing safe cyber behavior should be built into the fabric of all job roles to ensure that the human firewall continues to stand firm.

The author is Regional Vice President -India & SAARC, Fortinet



Healthcare Sector And Security Concerns

As healthcare organizations transition to electronic record keeping and deploy more online services, health records are increasingly vulnerable to digital theft

By Nikhil Taneja

ealthcare providers require applications and online services to streamline processes, manage patient data and cut costs. The growth of online services and web-based content introduces new challenges, including managing and securing large volumes of patient data and 24×7 access to critical applications to ensure a quality experience for users.

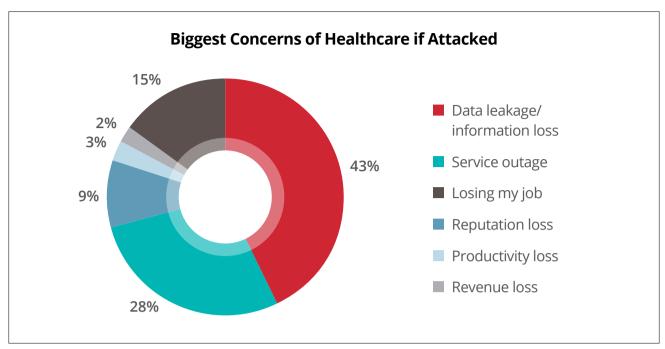
As healthcare organizations transition to electronic record keeping and deploy more online services, health records are increasingly vulnerable to digital theft. Healthcare records are highly valuable to cybercriminals because of the types of data they contain, including insurance information, payment details, addresses, etc. Everything that a cybercriminal requires to obtain a bank loan, commit tax fraud or send fake bills to

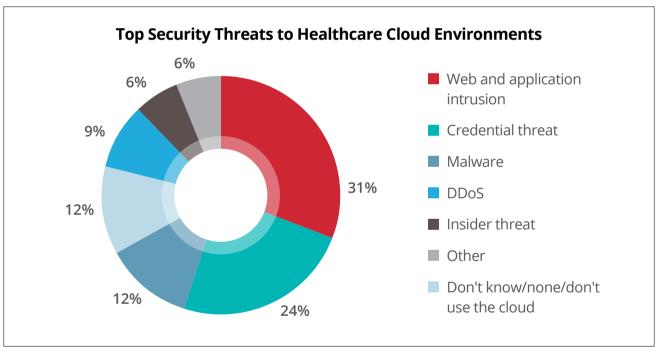
insurance companies is contained in medical records.

A Global Application and Network Security Report shows that the top two healthcare security concerns are data security and service and application availability.

Sensitive Data Protection

October 2019 was the worst month for healthcare data breaches since the Office for Civil Rights began list-





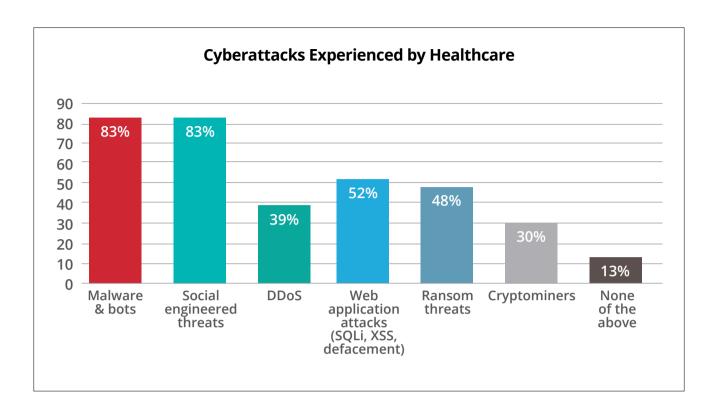
ing breaches on its website in 2009, according to the 2019 HIPAA Journal. Data breaches are still occurring more than once a day, with the average breach size increasing by 30.1% to 18,208 records in November 2019.

As per a Global Application and Network Security Report, 36% of healthcare respondents stated that they experienced daily/weekly cyberattacks in 2019.

The healthcare industry is relatively unprepared to keep data secure. It struggles with understanding the existing threat landscape while staying ahead of new threats. For example, the FDA issued new guidelines in 2018 for data security in medical devices. Medical devices, ranging from health applications on a smartphone to insulin pumps, are increasingly network-connected, creating new

security vulnerabilities. Exploitation of these vulnerabilities can lead to data breaches and even fatalities.

Healthcare industry began migrating to public cloud environments with noncritical workloads. Having seen that the benefits outweigh the risks, it has now begun migrating mission-critical infrastructure to reduce costs and transform operations while providing higher levels of service and engagement.



Based on the aforementioned report, one-third of healthcare respondents reported web and application intrusions as the top cloud computing concerns, followed by credential threat and malware.

Staying Open for Business

Healthcare providers depend on websites and online services. Their networks and applications must be available 24×7 to allow patients and healthcare professionals to access resources. Healthcare respondents to the aforementioned Radware report indicated that the most frequent attacks were malware and bots, social engineering and DDoS attacks. Greater than 40% reported productivity/operational loss, followed by negative customer experience and intellectual property loss as repercussions of successful attacks.

The global wearable medical devices market is expected to surpass USD 29 billion by 2026, according to Transparency Market Research (TMR). The rapid adoption of wearable healthcare technology has been driven by an increasing population

Healthcare providers depend on websites and online services. Their networks and applications must be available 24×7 to allow access to resources

of diabetics and wellness enthusiasts interested in tracking health metrics, according to the report.

Concerns about data privacy and security are impacting this growth. IoT devices don't have built-in security and wearable equipment manufacturers are focused on data collection and price sensitivity for production and sales. Service providers, who have to defend their own networks from threats launched from IoT devices, could potentially offer a managed network service to defend enterprises from attacks.

Viable Solutions

Healthcare providers face many operational and security challenges, and should consider the following capabilities when choosing a security solution:

- A Web Application Firewall (WAF) solution that uses a positive security model and machine learning algorithms to provide adaptive defense against the OWASP Top 10 and other threats.
- The ability to identify exposed assets and remove excessive permissions, detect misconfiguration issues and detect and defend against data breaches.
- Behavioral-based hybrid attack mitigation, combining on-premise detection and mitigation with cloudbased volumetric attack scrubbing.
- Keyless SSL attack protection, which defends against encrypted attacks without adding latency and impacting legitimate traffic. ■

The author is Vice President & Managing Director - India, SAARC, Middle East & GSI at Radware



ne financial services sector is experiencing significant commercial disruption coupled with rapid innovation as established institutions strive to become more agile and meet evolving customer demand. As a result, financial services organizations are undergoing rapid digital transformation to meet changing

customer needs and preferences, and to compete with a new generation of digital-native competitors. Hybrid cloud environments play a key role in this strategy, allowing greater speed, flexibility, and visibility over application delivery than on-premises data centers while also reducing costs.

But the move to hybrid cloud introduces new challenges as well.

So, as financial services organizations plot their strategy for transformation, firms must make critical technical decisions about the clouds and form factors best suited to host their hybrid environment. They also need to consider how they will secure web applications against evolving threats such as ransomware, data theft, and DDoS attacks through measures such as DDoS protection and using a Zero Trust model. At the same time, they must also maintain regulatory compliance, governance, and auditability across complex, fastevolving infrastructures.

To understand more about these challenges, a survey was conducted recently with Gatepoint Research involving senior decision-makers to gain insight into the current state of financial services technology and the future direction for organizations in this sector. Here are some of the key findings:

Today's Financial Services Technology Landscape

Although financial services businesses are making a steady move to the cloud for application delivery, on-premises data centers continue to play an important role.

While adoption of public cloud infrastructure is strong, with almost half of those surveyed hosting applications primarily in the cloud, most respondents (58%) continue to rely primarily on their private on-premises data center for application delivery. 35% of organizations described their environment as a hybrid cloud, though with an emphasis on their own private data center. This shows that even as transformation continues, the traditional data center remains prominent in the technology strategy of financial services organizations.

That said, the balance between on-premises and cloud infrastructure may well shift soon. When respondents were asked about their plans for the coming year, 57% of decisionmakers reported that they intend to move more applications to the cloud.

Ransomware and PII Lead Security Concerns

Today, financial services organizations face a broad spectrum of security threats, including many being targeted at sensitive customer data. The survey highlighted organizations' biggest security concerns or consequences were ransomware (57%); personally identifiable information (PII) data theft (55%); and phishing or fake sites (49%).

While threats to customers and their data are seen as the highest risk, dangers to the company's brand image and reputation were not far behind. 38% of leaders cited concerns about hacking and cyber defacement, tied with brand damage and loss of confidence. Nearly as many (37%) were concerned about DDoS attacks, which can undermine a firm's perception among customers through impaired service quality and customer experience. Meanwhile, insider attacks remain an issue, named by 28% of respondents, if not quite at the same level as most external threats.

To address the changing security landscape, many organizations have started initiatives around the Zero Trust model, in which traditional concepts of secured zones, perimeters, and network segments are updated with a new understanding that a threat can come from anywhere or anyone inside or outside the organization. As of June 2020, 41% of respondents had already established a timeline for their Zero Trust model initiative with 15% having projects currently underway. Still, nearly twothirds have no current plans or initiatives around the Zero Trust model.

Moving to Improve Flexibility, Agility, Scalability and Security

Technologies and strategies planned for the coming year reflect a key focus on the competitive requirements of fast-paced digital markets. The toptwo initiatives included moving from hardware appliances to more flexible software form factors and deploying hybrid cloud automation, manage-

ment, and analytics to increase operational efficiency.

With DDoS attacks a prime concern, 29% of respondents planned to deploy or replace an existing web application firewall (WAF) or DDoS protection solution. Surprisingly, even several years after the introduction of modern Perfect Forward Secrecy (PFS) and Elliptical Curve Cryptography (ECC) encryption standards for enhanced security, 29% of organizations are only now working to upgrade their Transport Layer Security (TLS) capabilities to support these technologies.

Even as cloud adoption continues to be strong, 5% of decision makers intend to repatriate applications from private cloud environments to their private data center. While not a high number, this is not entirely insignificant. Given the diversity of form factors, architectures, and deployment methods to choose from, it is important to make sure that the approach fits the organization's needs before proceeding.

Addressing the Requirements of Hybrid Cloud and Rising Demand

Moving forward, decision-makers view capabilities related to risk as especially important for their financial platforms. When it comes to the most important capabilities for financial platforms running in hybrid cloud environments, regulatory compliance, comprehensive application security and redundancy/disaster recovery are top must-haves.

In addition to the importance placed on redundancy/disaster recovery, many respondents (43%) named centralized management and analytics as important capabilities. Along with elastic scale for variable/seasonal demands (25%), this shows recognition of the requirements to provide effective service through redundancy, scalability, and a sound infrastructure.

Compared with risk-related and operational priorities, cost saw considerably less emphasis in the survey. While 28% of respondents placed

importance on automation for operational efficiency and reduced costs, just 18% prioritized flexible licensing and pricing.

Desired Benefits from New Technology Investments

As they plan new technology investments, decision-makers are motivated foremost by risk reduction—far outpacing business factors, such as revenue, customer experience, and competitive advantage.

By a large majority, security was the most likely benefit to spur funding for new technology. Operational considerations followed, including operational improvements (65%) and cost savings (63%). Regulatory compliance, emphasized earlier in the survey as a priority for a hybrid cloud requirement, was not necessarily top-of-mind in the technology funding stage—but still of high importance (57%). Revenue generation was named as a highly important benefit by only 35%, followed by customer satisfaction at 32%. Even in an industry undergoing rapid digital transformation, just 32% of decisionmakers cited business advantage from new technology as a prime factor and only 17% were moved by the ability to accelerate development speed.

The results of the survey offer a snapshot of an industry in transition, as decision-makers seek to keep control over security and compliance and maintain operational consistency, as they look to tap into the agility and scalability of the cloud. It is clear that, while security is important for digital transformation initiatives, application delivery and managing multi-cloud environments are of equal importance. Above all financial services organizations must maintain their good reputation and ensure customer trust. Firms must demonstrate that they are protecting customer assets, providing an ultra-reliable service, working with trustworthy partners and reducing risk to the business.

The author is Regional Director - SAARC, A10 Networks



Technology Facilitates Healthcare Delivery For NonCOVID Patients

Healthcare providers are adopting technology including telemedicine, collaboration platforms and mobile apps to deliver acute, chronic, primary and specialty care

By Balaka Baruah Aggarwal

otwithstanding the burden of COVID-19 virus infected patients, healthcare providers are now recouping and bracing for the long haul to deliver care for non-COVID patients using digital technologies. Patients afflicted with life-threatening diseases, such as cancer, heart

diseases, diabetics and hypertension require regular health checks and follow-up care which has been neglected due to pandemic pushing up the excess mortality rates across countries.

Excess mortality is a term used in epidemiology and public health to refer to the number of deaths from

all causes during a crisis compared to normal times and it is a more comprehensive measure of the total impact of the pandemic. The US has recorded 73 excess deaths per 100,000 people between March and August, Britain registered 96 and Spain 94 excess deaths per 100,000 during March and September, according to analysis done by the Economist. Although data on excess death is not available for India, Mumbai registered 13,000 deaths between March and July this year compared to last year, of which 6,395 casualties were due to COVID-19, according to Brihanmumbai Municipal Corporation.

Healthcare providers are responding to the crisis by adopting technology including telemedicine, collaboration platforms and mobile apps to deliver acute, chronic, primary and specialty care while minimizing exposure to the virus. Apollo Tele-Health Foundation has reportedly seen a 300% growth in demand for its services since the government provided guidelines for telemedicine practices when the lockdown was announced.

While telemedicine is not new, traditionally healthcare sector operates on a high 'touch' dynamics and adoption of telemedicine and virtual consultation was relatively slow. However, much of that resistance melted during the lockdown as care and supervision had to continue and healthcare systems have had to adjust the way they triage, evaluate, and care for patients using methods that do not rely on inperson services.

Thanks to the ongoing digitalization initiatives, large hospitals including Manipal Group, HCG Cancer Hospital, Medicity Hospitals and Apollo could bounce back with minimum disruption. As a provider focused on Oncology patient care, it was imperative for HCG to improvize and ensure business continuity. The right investments prior to the pandemic—which saw the ERP and Hospital Management System across 25 hospitals in the Cloud enabled the organization to get its act in place within a week and continue to serve patients unhindered.

"Specializing in cancer care, we had to keep operations up and running. The robust integrations with our enterprise systems wherein all patient data was readily available we could continue the care delivery using virtual consultation apps and collaboration



Healthcare providers are responding to the crisis by adopting technology including telemedicine, collaboration platforms and mobile apps to deliver acute, chronic, primary and specialty care while minimizing exposure to the virus

platforms," says Madhavi Kanumoory, CIO of HCG Hospitals.

At Manipal Hospitals, patient data is captured electronically at the point of care and uploaded to the corporate data center from which doctors can access patient records and monitor patients remotely. The hospital's mobile app which is integrated with the HIS system has seen a huge uptake since the pandemic and virtual consultations are ensuring continued services in patient care.

Says Nandkishor Dhomne, CIO, Manipal Hospitals, "Patients are able to access the hospital system and book appointments, take consultation and order medicines from the app which are delivered to the patient at home. So far we have delivered more than 15,000 virtual consultations."

The new wave of digital adoption has enabled Manipal Hospitals to even launch some new virtual initiatives such as accessing IBM Watson for Oncology wherein patients can get a second opinion on the line of cancer treatment.

Facilitated by its One Apollo system which comprises 20 million patient data, Apollo Hospitals uses its telemedicine platform to deliver continuous care to transplant patients and those suffering from cancer, diabetics and hypertension.

Medanta has an integrated telemedicine app through which patients can book consultations, receive prescriptions and patient records are stored in the hospital system. Integrated across departments, doctors access patient records for consultations and radiologists file reports online remotely. Equipped with various payment options, the app works across multiple platforms.



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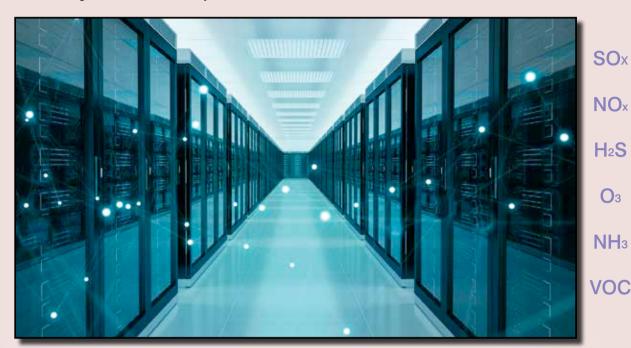
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