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GOOGLE @15

ENTERING MID-TEENS, THE COMPANY HAS TRIED ITS HAND AT MANY THINGS. BUT IT IS SEARCH THAT HAS KEPT IT ON TOP

Fifteen years is a tiny speck in the context of corporate stalwarts (the likes of IBM, GE and P&G were founded over 100 years ago). Yet, when it comes to a poster child of the Web such as Google, it is a long period.

Curiously, when I searched as to when exactly the search giant turned 15—on Google, of course—the results were a mixed bag, not unlike the results Google throws up when you look for something online. A report on Mashable says Google has celebrated its birthday on different dates over the years (the date this year being Sept. 27).

But let us not make a kerfuffle here. Regardless of the exact birth-date, Google has given us enough reasons to celebrate its existence: Gmail, online office apps, maps, YouTube and Android, to name a few.

Not that Google was the first to make breakthroughs, nor did it develop everything on its own (it has made over 100 acquisitions). But whenever it lent its cute name and rigorous technical patronage to anything under the sun, the gesture met with raves and whistles. The brickbats were few and far between, as founders Page and Brin walked the corporate tightrope as skillfully as high-wire wizard Philippe Petit to stay true to their mantra: Don't be evil.

Google has tried its hand at several things but it is search that has kept it on top of its game. Growing amazingly fast, Google has rendered names like AltaVista, Lycos and Excite either a thing of the past or boring to netizens and investors. Even the software king Microsoft is struggling to make a dent with its re-launched search offering, Bing.

Google has been so relentlessly focused on "organizing the world's information" that it has spent lavishly on acquiring anything that could help its search business (advertising, driven by search, still accounts for over 95% of revenue). So it bought Motorola for a huge sum—not for the devices but primarily for patents related to Android. It is another matter that industry pundits are still scratching their heads over the true returns from the acquisition.

However, given that Android now dominates the smartphone pie with over 79% share, it is but obvious that Google's search grip continues on mobiles as well. And while its other projects often failed to take off, Google has rarely let that grip slacken.

I am mostly happy for Google. But as this brat enters mid-teens and grows in size and sheer dominance, it does look scary to find everything through this single funnel. Because, good intentions apart, consumers must have choices—even in where to look for those choices. Not sure if I'm feeling lucky.

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RE-PLUGGING THE DATA CENTER

Data center migration is never a happy IT decision for CIOs. But it can be executed in a hassle-free manner if planned meticulously

BY MEHAK CHAWLA

While we sit back and enjoy our much awaited national holidays every year, there are some IT heads who sit with fingers crossed and await the successful migration of their data centers. Almost all CIOs have been there. At some point in time, the data center they have been relying on is sure to run out of something – space, power, tolerance. From there begins the daunting, and often terrifying, task of migrating a data center.

Migration of a data center and all its IT assets is a complex and large-scale change management effort, involving several stakeholders, and significant investment and risk. As per Gartner, the Indian IT infrastructure market is expected to reach US$ 3 billion by 2016. McKinsey has predicted a 32% CAGR

32%
CAGR GROWTH RATE

McKinsey has predicted a 32% CAGR growth for third-party outsourced data center market in India by 2017

growth for third-party outsourced data center market in India by 2017. Quite a bit of this growth in the business of independent data centers (IDCs) is expected to come from migrations, either from captives or from other service providers.

The reasons for rising data center migrations differ from cost efficiency to regulatory pressures. Though data center migrations have become much simpler than they were, they are not without significant complexities. As Sridhar Pinnapureddy, Founder & CEO, CtrlS Datacenters, observes, "Migrating a data center is much easier today than it was few years ago, but it is still not a decision to be taken lightly or without careful consideration. Over the years, we have learnt many lessons in this area, and this has translated into better processes and a more structured approach to data center relocation."
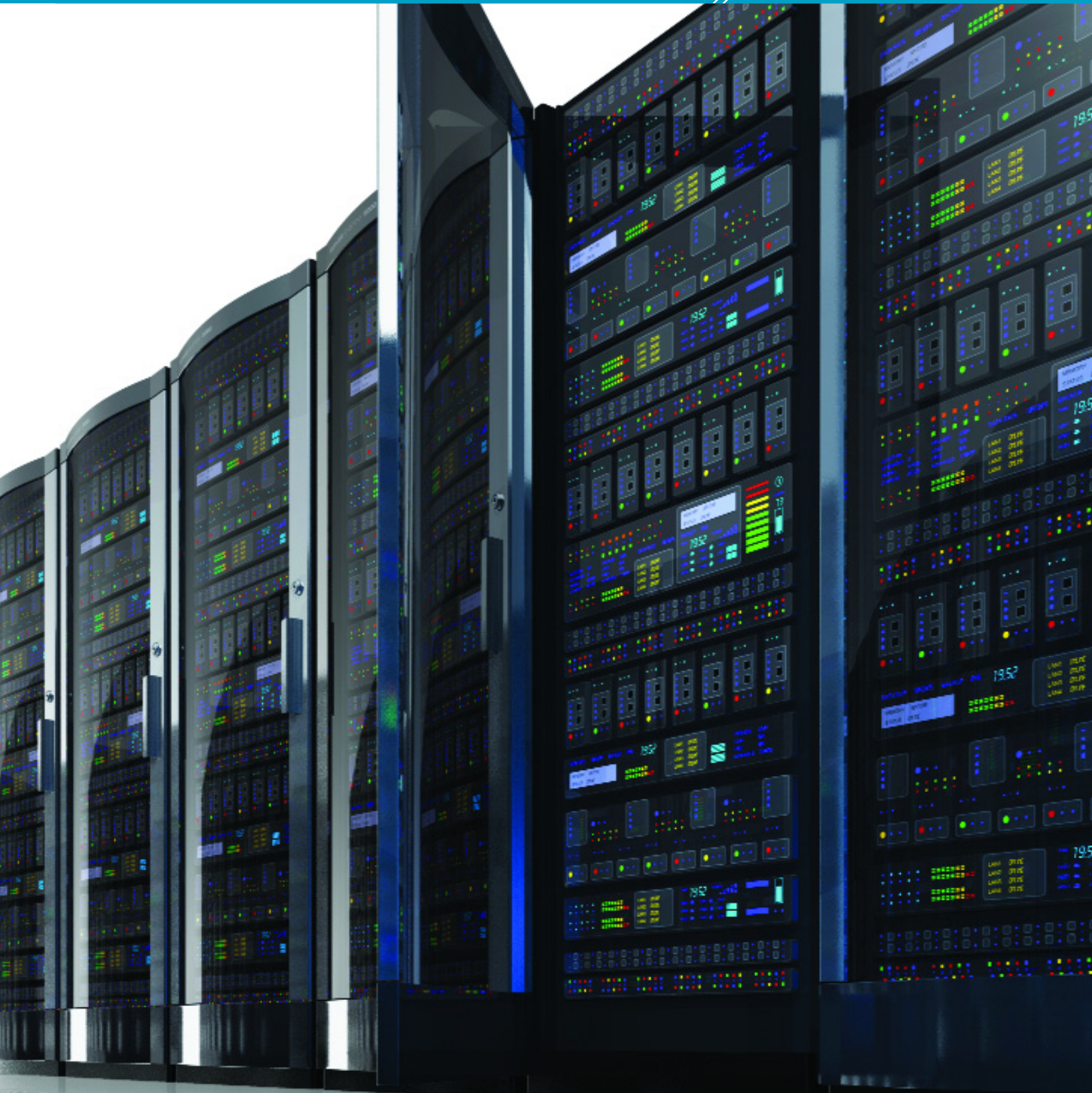
> Migrating a data center is much easier today than it was a few years ago, but it is still not a decision to be taken lightly.

Sridhar Pinnapureddy,
Founder & CEO, CtrlS Datacenters

However, what a migration certainly does involve is meticulous planning, extensive testing and a strategy involving all partners- right from the networking managers, to the service provider and the end -user. Express Computer looks at factors encouraging the migration drive, and the challenges that CIOs are most likely to face when dealing with a data center migration.

Key drivers

According to Krishna Shankaran, Delivery Manager, Infrastructure Management Services, Infosys, the primary reasons that compel enterprises to undertake data center migration are business drivers, technology drivers and regulatory drivers. Business drivers include things like mergers and acquisitions, or the possibility of lowering TCO by shifting to a new facility. There are quite a few data centers in India that are no longer able to keep up with the power, cooling and efficiency demands of today's high performance, high-density equipment. Lack of upgraded data center facilities, resulting in business disruptions, is making a strong case for data center migrations.

When it comes to technology drivers, the technologies that are compelling CIOs to evaluate migration are virtualization and cloud. "With the advent of cloud computing and a growth in consolidation requirements, there is a growing trend amongst today's businesses, with upwards of 53% of companies, planning either data center re-locations or consolidation of some kind within the next two years. Two disruptive technologies impacting the future of data centers are virtualization and cloud computing, elaborates Deepinder Bedi, Executive Director, Tulip Telecom.

"Moving dedicated applications to cloud or even modernizing applications

may drive organizations to go for data center migration," says Shankaran. Huge underutilized capacity of both servers and storage is also assisting migration decisions. According to Sunanda Das, Managing Director, Pacnet India, "Enterprises nowadays are increasingly realizing the benefits of IT consolidation and virtualization from a cost and management standpoint, prompting them to consider migrating to modern, cloud-enabled data centers. In India, migration to a hosted data center is a growing trend, with larger enterprises demanding dedicated co-location services."

Mandar Kulkarni, VP, Solutions Engineering and Private Cloud Practice, Netmagic corroborates by saying that currently, "Most of the business that is coming to us is either from greenfield projects, or from migrations."

Apart from these, regulations, especially in economies that have stringent environmental guidelines, are also triggering migrations from inefficient captives to more efficient, hosted data centers. A few companies/countries' regulations may demand a disaster recovery strategy, as a result of which organizations may need to go for migrations.

These drivers have also sparked another trend in the data center space. They have compelled many enterprises, that typically prefer to own a captive data center in the interest of security, to seriously consider the hosting option. Also, since third party data center providers are able to bring significant value to clients with varying compute workloads, the proposition of migration has become more attractive than ever before. This level of flexibility can be a major benefit for smaller organizations. Some of the smaller, internet-centric organizations are actively exercising this option. As Kulkarni mentions, "When a

> Two disruptive technologies impacting the future of data centers are virtualization and cloud computing.

Deepinder Bedi,
Executive Director, Tulip Telecom

An enterprise must engage with a strategic partner in a migration scenario, because a data center migration requires meticulous planning. A planning cycle can be as long as 3 months

captive data center runs out of capacity and becomes inefficient from a cost perspective, enterprises often evaluate migrating to a third party data center."

Migration options

Data migration, in today's virtual world, can be of two types – physically moving hardware to a new location or moving data to a different data center. Either ways, it is critically important to ensure aspects like security, business continuity and minimum downtime. So, what are the options available to an IT head, once he has decided to undertake data center migration?

According to Nilesh Goradia, Head, Pre-Sales, India Subcontinent, Citrix, "Most of the migrations are happening from captives to IDCs or to a hybrid model using bridging technologies. In such a scenario, application workload can pan across both data centers." He goes on to add that a migration scenario might be a good time to upgrade technology as well as evaluate what cloud model is best suited for your organization. "Efficiency

and manageability that comes with the cloud infrastructure in terms of workload provisioning on demand, without the need of buying too much new hardware is driving migrations." However, an enterprise must engage with a strategic partner in a migration scenario, because a data center migration requires meticulous planning. A planning cycle can be as long as 3 months, Goradia cautions.

Kulkarni of Netmagic elucidates the three key approaches to data center migrations. The first is the big bang approach. Here, the enterprise identifies a lean period (like a national holiday) and migrates the entire data center in that limited window. It works for small to medium data centers with 20-30 racks. "It's a quick method but requires extensive planning", advices Kulkarni. The second approach is big bang combined with disaster recovery. Here, the enterprise brings their disaster recovery (DR) site in play during the migration to avoid outage and still serve customers while the data center is in

CIO CHECKLIST FOR DATA CENTER MIGRATION

● **Develop an inventory:** In the process of a move, it's easy for items to get mislabeled, misplaced or lost, delaying the process of getting new data center up and running. Before the move, it is essential to develop a detailed inventory of all the data center hardware and software.

● **Schedule the move:** An efficient relocation minimizes the downtime of the business-critical systems. When organizations choose a target date for the move, they must be sure to determine the allowable downtime for the business-critical systems, and prioritize the equipment and applications that must be up and running first.

● **Choose a relocation specialist:** Hiring a single relocation company to handle your entire data center move which can provide you with comprehensive planning, technical skills and best practices required to achieve a successful, incident-free data center move.

● **Develop a budget:** Develop a realistic budget for the move, analyze the total weight, transit time, mileage, insurance, labor and other factors that will affect your budget.

● **Inspection of new site:** To avoid unpleasant surprises, CIOs should inspect the new site to verify that the utilities, network, cabling and other infrastructure components meet the requirements.

● **Perform and verify backups:** It is very important to ensure a plan for backing up and storing the data in a secure location while the move takes place. Once a backup is performed, the transferred data should be verified to check if it is complete and uncorrupted.

> For us, it wasn't only movement; we also decided to optimize our data center during this migration process.

SriRama Evani,
Principal Director & Head - IT
Services, DST India

> We consolidated from five enterprise owned data centers to a co-location hosted data center with a service provider.

Arun Gupta,
CIO, Cipla
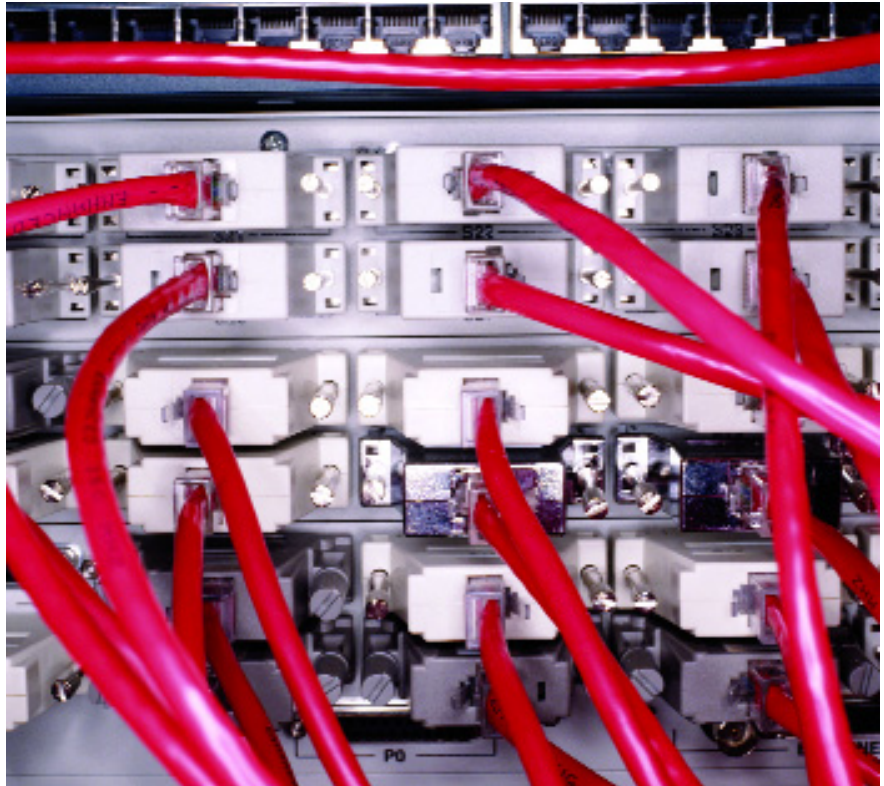
transit. Large organizations that cannot sustain downtime and have a functional DR, adopt this method. The third approach is the bubble set up. This involves creating a small network bubble and moving apps in a phased manner. Though bubble set-up is the costliest option out of these three, Kulkarni reveals that enterprises are using it for their mission critical apps. "Sometimes, customers end up using a blended approach . Bubble set up is the costlier option but it is available on a pay per use model. Big bang is the most widely used approach. BFSI is the sector that is doing big bang with DR," he explains.

Another trend that is catching up, and coming in handy for mid-sized organizations, is data center migration-as-a-service. Since there are quite some complexities involved in moving a data center — labeling, legacy apps, Unix machines that haven't been restarted in years and security in transit, organizations are now opting for migration services that most of the IDCs provide. Cost of these services is usually on per rack+manageability basis.

Orchestrating a migration strategy

If there is a unanimous view on data center migration that is shared by the vendors and IT heads alike, it is the emphasis on planning, rather than actual execution. The one thing that IT heads must be prepared for is numerous hidden complexities. They are sure to run into legacy apps, a broken hardwired IP address, Unix machines, archaic mainframes and countless networking

Since there are quite some complexities involved in moving a data center, organizations are now opting for migration services that most of the IDCs provide

issues. Data center migration, say experts, is all about delving into detail.

Das of Pacnet illustrates some unforeseen complications that might arise during data center transition. "Migration often also requires the use of cross-platform technologies, some of which are untested and can potentially affect the speed and efficiency of migration. Factors like this should be accounted for in the planning stages itself."

Arun Gupta, CIO, Cipla shares his migration experience and the planning it entailed. "We consolidated from five enterprise owned data centers to a co-location, hosted data center with a service provider. Planning meticulously to cover each and every step and its impact, should any step not work, was critical towards successful transition. We went over the plan many times, each time refining it before execution. A team of 20 people worked for over 48 hours to achieve the migration successfully."

Any data center migration strategy should work in three parts, believes Ashok Shenoy, Regional Manager, Cloud and Data Center Sales, Cisco India & SAARC. The first part is orchestrating the complex move of mission-critical data center assets from one site to another. The second step involves ensuring business continuity, maintaining application performance and availability, and delivering operational service levels throughout the physical move, with little or no of error for costly, unplanned service outages. The final part deals with growing the investment value of the data center by evolving data center strategy to meet business objectives.

Other aspects that need to figure in a migration strategy are availability of expertise, appropriate and timely communication with the end-user, application delivery optimization, and proper testing for things like load balancers and optimizers to see if they are compatible with the new hardware models. Shankaran of Infosys points out another challenge that CIOs might face. "Managing application to application or application to infrastructure inter-dependencies is a key challenge during data center migration. If this is not done

DC MIGRATION BEST PRACTICES

A data center migration is a fresh start and a great opportunity to bring in some best practices

● **Plan for scalability:** Establish requirements that will give you a glide path for the next two life cycles of technology — six plus years.

● **Look at the layout:** Data center migration is a great time to plan the layout instead of placing hardware in an ad-hoc manner. Place the server and storage assets where they are going to make the most sense.

● **Do one time cabling:** That goes for electrical branch circuits as well as telecommunications cabling. Make sure that you have branch circuits pulled to all future cabinet locations.

● **Create a fresh inventory:** Everything that goes in the data center should be documented in the Configuration Management Database (CMDB) with an owner and notations about critical business process dependencies. Don't leave anything for later.

● **Bring in standard processes:** Let your data center build out be an excuse to bring in standardization in data center activities

properly, there is always the risk of crippling outages. Lead time required to procure new equipment and getting support on older/legacy equipment is another key challenge."

Security is definitely one of the key concerns that makes enterprises hesitant about migrating from traditional data centers to virtual data centers and cloud. Many a time, organizations are not fully aware of all the applications currently in use. If critical applications are not properly identified and assessed prior to the migration, there is a serious risk of data loss, leading to downtime. It is necessary to ensure proper backups are in place before migrating the data.

SriRama Evani, Principal Director & Head , IT Services, DST India, runs us through his experience of migrating a data center as a result of a shift in office location. "For us, it wasn't only movement, we also decided to optimize our data center during this migration process. We wanted to do virtualization and bring in cost efficiencies in our captive data center, while also expanding from a scalability perspective. The key to data center migration is planning and designing. We took almost 2 months to plan our pre-migration activities. The migration was done by our own IT team, since we have senior people who have handled data center migrations before."

According to Evani, factors to be considered in a migration scenario include data security, business continuity and disaster recovery. "Also, retrieving data from backups becomes crucial. Another typical challenge is combining virtualization with migration. A lot of licensing issues come up. We migrated about 20 racks in a phased manner."

Major challenges from a service provider perspective are to convince customers, since migration is never a happy IT decision. Also, the window is often too small. Hardware failures are another problem, and the service provider has to ensure that all machines are rebooted well in advance.

Post migration blues
So you have just completed your data center migration. But can you claim it to be successful yet? Well, a migration is

> **Most of the business that is coming to us is either from greenfield projects or from migrations.**
>
> **Mandar Kulkarni,**
> VP, Solutions Engineering and Private Cloud Practice, Netmagic

During the migration process, IT heads must be prepared for numerous hidden complexities. They are sure to run into legacy apps, a broken hardwired IP address, Unix machines, archaic mainframes and countless networking issues

almost identical to setting up a data center from scratch. As a result, there is much post-migration work to be done. IT heads not only need to justify the migration investment, but also grow it to improve TCO and RoI of the new data center.

Upon completion of the data center migration, it is imperative to take one additional step: the incorporation of knowledge, updated processes, procedures and documentation into the normal support structure of the IT infrastructure. Post the migration, it is also important to ensure that no traces of data are left behind in the old servers. The three most effective ways to do this, according to Pinnapureddy are: physical destruction of the hard disks on which the data was stored, degaussing, a

technique where a strong set of magnetic fields are passed over the hard disks to ensure that the old data can never be recovered, and finally sanitizing, which involves overwriting the disks completely with junk data to ensure that none of the old data can be recovered from it. "There are certified tools available in the market that enable complete sanitization of disks," he explains.

Apart from ensuring data security, there are several tests to be run, applications to be optimized, network loops that need to be corrected and cloud strategies and protocols to be implemented. So the CIO's work doesn't really end with infrastructure migration. It actually begins from there.

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MPS: TOWARD EFFICIENCY

Currently a tech alternative for greater print control and efficiency, Managed Print Service is likely to emerge as a favorite with CIOs in tune with their mobility, cloud, or collaboration plans

BY HEENA JHINGAN

Almost every enterprise today swears by services. The CIOs are busy hunting the best from a plethora of offerings available "as a service"— be it software, video, storage or platform. In some IT savvy enterprise alcoves, the commonly known Managed Print Service offering is already being referred to as Printing as a Services.

There definitely is logic behind that. Managed Print Service has evolved way beyond the concept of cost per copy (cpc) or providing an assessment to right size the fleet. Most Managed Print Services (MPS) today entail the outsourcing of the fleet and document strategy to ensure the customer's business process optimization goals are met. Experts

believe, defining MPS can be a confusing journey and trying to understand all MPS functionalities can be just as daunting. A section of the industry describes it as an end-to-end system designed to manage an organization's entire document output infrastructure by streamlining supply channels, equipment acquisitions, maintenance
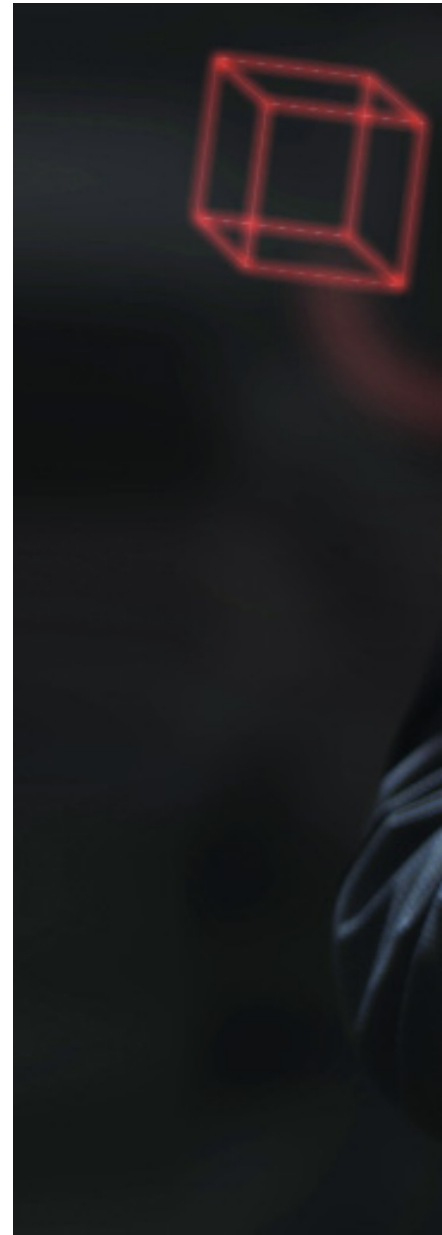
support and establishing rules based workflows.

In any form, the key drivers for the uptake of MPS are cost reduction and improving efficiency by rationalizing the print environment, which most Indian enterprises at present desperately need. The market has lately seen enterprises in India using MPS to identify waste and reduce print bills. Having witnessed the scope, more and more enterprises tend to partner with large solution providers to simplify, better manage, and reduce the cost of their print infrastructure.

Vishal Awal, Executive Director, Services, Xerox South Asia quotes an Ernst & Young report that pegs the Indian MPS market Rs. 430 crore and expects it to grow to about Rs. 1350 crore by 2015. According to the Ernst & Young report, BFSI and telecom, being early adopters, are expected to continue to be the dominant spenders of MPS in years to come. Contribution of manufacturing including automobile, FMCG is expected to increase slightly by 2014 from current 20-22%.

> **MPS includes consultancy, on site manpower, management of access rights. It encompasses various core and non-core activities.**
>
> **V. Balakrishnan,**
> Executive General Manager- Market Sales, Konika Minolta

> **CIOs have become very sensitive to secure printing, as they realize that one of the obvious sources of information leakage is hard copies.**
>
> **Nitin Hiranandani,**
> Director - Printing, PPS, HP India

The report finds that the contribution from healthcare and energy and utilities sector is currently low owing to the low level of privatization of these sectors. Verticals like media and entertainment, travel, transportation, hospitality and logistics, construction and real estate, government and education are currently less than 3-4 % and are likely to remain low in the coming years.

On the vendor side, the Indian MPS stage is currently well populated not only by OEMs such as HP, Canon, Lexmark etc and System Integrators like HCL, but also with managed service providers led by IT and copier resellers. As the MPS-edge is slowly cutting through skeptical mindsets, apprehension is giving way to an increased awareness and buy-in of the potential customer base.

Analysts see a major push of these services coming from the fundamental shift — shrinking printing spends of the companies. According to research firm Gartner, the first quarter of 2013, the combined serial inkjet and page printer, copier and multifunction product (MFP) market in India, saw a 8.9% decrease from the first quarter of 2012. The report finds that the total end user spending on printing remained almost flat, witnessing a fall of 1%. In the face of such a situation of depleting revenues, the vendors have no choice, but to supplant their traditional print business model with a services and software strategy, one that will provide better margins and arguably tighter, longer relationships with clients.

Seeing a gap where customers demanded a product plus service, with customization for their individual needs, Xerox from being a pure products company ventured into the managed services space. At present, services account for 50% of its revenues. Another

key player in the space, Canon expects to garner Rs 100 crore in sales and service revenue this year from its managed document services business in India alone.

Decoding MPS

Nitin Hiranandani, Director - Printing, PPS, HP India explains that vendors could have different offerings depending on their strengths.

"We have a three pillar MPS strategy — optimize infrastructure, manage the environment and improve workflows. Optimizing infra is about devices or the hardware, involves looking at the number of devices vs number of users, volumes of prints, what kind of printers — mono or colour, A3 vs A4 etc, which we enable by our software called the WebJetadmin, that can be deployed on the network of the customer and through that the customer can look at all the print data," he says.

He adds, the second important leg is about managing the print environment enabled by security and job accounting solutions. "A secure print environment has become a standard discussion in every enterprise. CIOs have become very sensitive to secure printing, as they realize that one of the obvious sources of information leakage is hard copies. Besides, this has a dual advantage of green. You are actually cutting cost and carbon footprint. It is a win-win all through. Finally, it is about improving workflows."

Typically every MPS customer is highly customized, notes V. Balakrishnan, Executive General Manager- Market Sales, Konika Minolta, a relatively new player in the Indian MPS space.

As Balakrishnan puts it, MPS, for them includes consultancy, on site manpower, management of access rights. It encompasses various core and non-core activities, there could be over 60 odd services under the fold.

In India, there have been some pioneering enterprises that have taken the lead to embrace MPS. Xerox India boasts of clients like Vodafone, Cisco and Standard Charted Bank. However, for vendors it still a learning period as to what customers want. It is still a phase where both vendors and CIOs are experimenting with how to leverage the service to its best.

The print strategy

At present, most CIOs are focused at attaining greater efficiency at lower capex and incorporating basic security and management tools that allow retrieving prints anywhere on the network. Going forward, organizations will be compelled to take a holistic approach that factors MPS into their over all workspace strategy and ensure that this is tied to their mobility, cloud, or social business and collaboration agenda.

Experts believe such a comprehensive approach will become more prevalent as enterprise business and IT decision makers will start looking beyond siloed elements of their organization to see the bigger ecosystem and how it needs to flourish to create productive, future-proof workspaces for their resources.

Rajesh Uppal, CIO at India's top car maker Maruti Suzuki, feels the IT heads of his league shouldn't be spending their IT energy on printing and the entire activity should be outsourced.

"It makes sense to outsource the entire process if that can bring greater efficiency and cost savings. From our association with Canon, we are looking at cutting printing cost by over 20% and at the same time improving employee

INDIAN MPS MARKET IN NUMBERS

₹ 430 Cr
(2013)

₹ 1,350 Cr (expected in 2015)
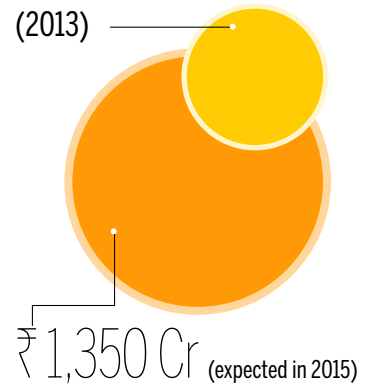
50%

AT PRESENT, SERVICES ACCOUNT FOR 50% OF REVENUE FOR XEROX

₹100cr

REVENUE IN SALES AND SERVICE EXPECTED BY CANON THIS YEAR

> It makes sense to outsource the entire process if that can bring greater efficiency and cost saving.

Rajesh Uppal,
CIO, Maruti Suzuki

> The talks with SMBs are now not focused on just printing SLAs, but on service SLAs as well.

Bhaskar Joshi,
Head, Marketing - Office Imaging
Solutions Division, Canon India

device ratio from 2:1 to 6:1," he says.

Another first mover in MPS space, Yes Bank has been a believer in outsourcing of non-core activities, Suren Shetty, Senior President & CIO says they outsource every bit of IT that is commoditized. Since the bank was using different devices across branches and operating centers, the system lacked standardization. The IT team would spend a considerable amount of time keeping track of the annual maintenance contracts, re-order quantities, and tracing consumables like toners and cartridges.

"Technology in the domain of printing is fairly standardized. It is the service that makes all the difference," says Shetty.

The strategy was two fold to save capital and bring in smooth efficiency. Shetty elaborates, " We decided to deploy Canon Multifunction Printers coupled with a managed document services contract. We deployed entry-level MFDs at the branches that house fewer employees and opted for the mid and high-range MFDs for the corporate offices. This helped us save capital expenditure we would otherwise have incurred. Under this rental business model of five years for all the MFDs, Canon will manage all the printing services, including consumables, on a per-click model."

For real estate developer BPTP that handles global accounts like Merrill Lynch, confidentiality of information was a bigger challenge than management of the devices. They had to manage the volumes and keep them confidential as some of the prints were value documents like the government issued stamp papers. In such a situation, it is always better to have an audit trail on the company's print, scan and copy activities.

Letting users authenticate and retrieve print jobs, helps maintain confidentiality and reduces wastage. Reports can be generated to have a transparency about who prints what.

Conversely, for industries like retail, where documentation does not happen at a very large scale, print demand is mostly for purposes like in-store signage, billing etc.

Ranjit Satyanath, Customer Care Associate & Senior General Manager, Solutions & Technology, Shoppers Stop explains that if printing is down it affects their communication with the customers.

He says, "With dependency on these printers increasing, it became a challenge for our in-store FMS people to manage the expectation from the user teams. We currently use HP's MPS only for device management for our 65 stores and four warehouses across 13 cities. We may at an opportune time consider using it in other areas as well."

Like any other new change in the system, MPS too can be difficult to adapt to. The role of an effective change manager is critical to keep the ball rolling. Balakrishnan observes that under efficient change manager, the rate of success of the project can go up by at least 5%. In Maruti's case, they chose to take the lead as change managers.

A positive development here is the fact that the SMBs in India are also waking up to the importance of MPS. A report by AMI Partner notes that 18% of these organizations are now using managed printing and publishing services. The study shows that at present, SMBs are not really interested in using device management infrastructure or workflow management and mainly gravitate toward printing done on pay-per-page basis.

Industry watchers feels that it is going to be interesting to see how OEM vendors will break the MPS maze for India's SMB space. Currently, quite a lot of the print-jobs of these SMBs actually go to the unorganized, so called Print Jobbers (neighborhood print shops that provide printing or copying services). There is definitely a latent demand for "print-solution-in-a-box" concept. There are certain "specialization" opportunities where each Jobber may address different SMB customer segments that include architects, planners, educational institutions etc.

The SMBs also might not be have the budget for sophisticated solutions. Interestingly, Bhaskar Joshi, Head Marketing - Office Imaging Solutions Division, Canon India points out, "The

The growth of digital communications is reshaping the print market, and is impacting the use of print and production methods used to deliver it

talks with SMBs are now not focused on just printing SLAs, but on service SLAs as well. These customers are looking at print control at a cheaper price point."

Printing the future

The Indian chapter of the MPS story is still being developed. Several factors like cost benchmarks, poor understanding of benefits of the offering have been keeping the demand low. The vendors too are grappling to provide support in tier-2 and tier-3 cities. Stringent SLAs, under such situations become impossible to deliver. The Indian PSUs have traditionally been a tough segment to crack due their decentralized operations and procurement procedures. More importantly, the segment's inherent resistance to change has kept this segment quite passive to the trend.

The global market has become attuned to the trend. Canon's Joshi sees a revolution in the making in the printing space. He says that the traditional in-house print room or central reprographics department (CRD) awaits a big makeover. The growth of digital communications is reshaping the print market, and is impacting the use of print and production methods used to deliver it. These changes are creating opportunities for print rooms not only to win business from outsourced print providers but also to redefine their role within the enterprise.

Increasingly, organizations are using the latest workflow technology to deliver on demand printing services like web-to-print technology that enables print rooms to streamline their print orders through an online portal. Web-to-print solutions are now inching closer to marketing asset management tools offering even greater functionality such as, allowing users to select pre-approved marketing materials such as brochures and customizing them online using design templates. Needless to say, the next couple of years will see significant developments for print rooms.

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> " If printing is down, it affects our communication with the customers. "
>
> **Ranjit Satyanath,**
> Customer Care Associate & Senior General Manager, Solutions & Technology, Shoppers Stop

BYOD: Managing the Generational Divide

It is critical to understand the nature of the workforce when organizations formulate and implement Bring Your Own Device policies

BY SCOTT ROBERTSON

We are a society that knows no bounds. Technology has propelled us into a state of omnipresence and an intense desire for omniscience via channels such as Twitter, Facebook, LinkedIn, Instagram and a plethora of other social media. The rise in the number of millennials entering the workforce – the first of whom have now reached their 30s – is already posing a challenge to traditional work practices. These gen Y folks, representing one of the fastest growing segments in today's workforce, have been exposed to a rapid evolution in technology as they grew up. The next generation, known as the pluralists or gen Z, is also coming of age; and it's not unusual for these kids to be reading e-books on Kindles at primary school. Baby boomers and those belonging to gen X are trying to keep their feet on the ground amidst the technology explosion and learning to understand the ways of the next generation.

Given this state of play, it is critical to understand the nature of the workforce when organizations formulate and implement BYOD policies. The main dilemma that security experts are now facing is how to implement a long term BYOD strategy in line with strategic business priorities when competition for acquisition and retention of talent is fierce.

According to Gartner, CIOs in 2013 have rated 'mobile technologies' as the number 2 most important technology priority. This coupled with their business priorities that include 'reducing enterprise costs' and 'attracting and retaining the workforce' at number 7 and 8 respectively, proves how critical it is for them to implement BYOD policies that work in their favor with minimal risks for security breaches while achieving their business and technology objectives. However, this wish list is a double-edged sword that requires careful planning after undertaking a thorough audit of their workforce demographics.

We have entered an era where presidential campaigns are won and lost based on the market segmentation and strategic use of social media and its reach. A blanket BYOD policy that enforces a 'one size fits all' edict by blocking or limiting access to social media or Internet is not going to win an organization talent, let alone loyalty. Any policy that sounds like a Biblical commandment of 'thou shalt not' will be resisted by the tech-happy millennials who are profiled as outspoken and very comfortable with the prospect of changing

many jobs before they settle into the one they like. Consumerization of IT is real and it's not only here to stay, but grow both in size and scope. So how can an organization manage the generational divide when creating BYOD policies?

Treat them like adults

The old adage of 'you reap what you sow' is extremely pertinent in this case. Never lose sight of the human element when setting policies. The gen Yers are adults and have been for some time and expect to be treated as such. They are desperate to make their mark in this world. Before any policies are designed and enforced, it is therefore important to consider getting the employees involved in the process to gain their buy-in. Unlike the gen Xers who are independent and self-sufficient and used to enforcement of policies, the gen Yers like to be involved in solving the world's problems. In making them feel like they are a part of the solution rather than cause of all the issues, organizations have a better chance of gaining their commitment to safer BYOD practices and ensure compliance sustainability.

Support social media

Social media facilitates knowledge sharing and expansion of networks. Most gen Yers, and even gen Xers now for that matter, rely on industry updates via Twitter and LinkedIn news feeds. Social media is a great vehicle to promote a company's brand name as pure word of mouth that is always perceived much more favorably by the public, than cash for comment. Hence, do not immediately assume that use of Facebook or other social media applications means that employees are wasting their time. Instead, it is much better to review and examine the nature of the applications traversing the network before making any draconian moves that could grind productivity to a halt.

Keep it simple and keep it real

No one likes to read long laborious documents. IT should focus on policy to "keep BYOD simple." The policy should be clear with a list of acceptable devices and operating systems that can be supported. Tech-savvy employees can then utilize what they like, knowing that they are

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A blanket BYOD policy that enforces a 'one size fits all' edict by blocking or limiting access to social media or Internet is not going to win an organization talent, let alone loyalty

responsible for the management and well-being of their device if IT does not support it. Once in place, communicate these policies regularly to employees as short, sharp and interesting messages so they are aware of the real risks of a breach.

Tailor your AUP

Developing an acceptable use policy (AUP) that is meticulously customized to a particular organization is important. Off-the-shelf solutions will only cause long-term compliance issues and complications. Once in place, ensure that the policies are applied to a segmented network. Sensitive data should always reside on a different network than that which is open to guests, contractors or other non-employees. With a segmented network, IT can apply one set of policies for employees and another set for guests.

Create a secure ecosystem

BYOD policies are not going to work in isolation. Creating a secure ecosystem will ensure that all entry points in an organization are secure and the risk of breaches is mitigated. Some recommendations to create this ecosystem are:

■ Use scalable security solutions that allow an organization to easily develop and amend policies and layers of security to suit the changing workforce demographics is critical.
■ Most security breaches are due to poor configuration of firewalls that are too complicated. Solutions that allow quick and easy segmentation of networks make the job less taxing for IT administrators.
■ With the VPN capabilities of a security solution, administrators can enforce acceptable use policies for mobile, remote and road warriors who need to access corporate data anytime, anywhere. These controls even protect users in the most hostile environments, such as hotels and public Wi-Fi hotspots.
■ Security solutions with application control and web surfing controls also makes it easy for IT to setup and administer policies around acceptable and unacceptable web surfing activities. Since such services reside at the gateway, they are agnostic to the type of device that an employee brings in. Therefore, safe web surfing practices can always be enforced.

BYOD is only going to become more prevalent with the changing workforce and the 'new normal' of the accepted work patterns. With it, come new sets of challenges and opportunities for businesses as well as their IT departments. This means that a BYOD strategy that is flexible, agile, cross generational and 'human' is critical for success and data security. As part of a strong BYOD strategy, having well-designed policies and end user agreements in place will be key as long as an organization has the employee buy-in and understands its generational divide.

Scott Robertson is Vice President - Asia Pacific, WatchGuard Technologies.

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SPEEDING up
THE CLOUD WITH FLASH

With low latency and reduced power consumption, flash memory can help accelerate application performance and enhance server utilization in cloud environments

BY GREG HUFF

The rapid increase in processor performance and the deployment of highly virtualized data centers has placed increasing stress on conventional storage to the point that it is now often the main bottleneck to application performance, and just as importantly, to server utilization. Flash memory, with its low latency and reduced power consumption, holds the key to accelerating application performance and increasing server utilization As with anything new, flash was initially considered risky by cautious IT managers who believed it would be difficult or disruptive to deploy. Success by early adopters is now changing that view.

Breaking through the storage bottleneck

Multi-core processors and virtualized, multi-processor servers have dramatically improved server storage input/output (I/O) rates, while bandwidth and I/O operations per second (IOPs), the preferred metrics for assessing and improving storage performance, have increased to surpass 200,000 to 250,000 IOPs for common workloads. The problem is that most databases and other applications with heavy I/O processing require writes to storage to complete before continuing, causing transactions to stall and servers to be under-utilized—a dynamic that has now made I/O latency the primary limiting factor in server storage performance.

This shift has renewed the focus on the enormous I/O latency gap between a server's memory and hard disk drive (HDD) storage: 100 nanoseconds versus 10 milliseconds, respectively—a difference of five orders of magnitude. I/O to a storage area network (SAN) or network-attached storage (NAS) is even higher, owing to the intervening Fiber Channel or Ethernet network, which also frequently becomes congested with deep I/O queues waiting to be serviced.

Flash memory breaks through the bottleneck caused by storage latency by bridging the gap between main memory and even the fastest-spinning, shortest-stroked HDDs. Whether deployed as a solid state drive (SSD), or as an adapter, flash can accelerate application and workload performance up to 30-fold, an increase that improves server utilization.

Direct-attached solid state storage
The closer the data is to the processor, the better the performance. This is why applications requiring high performance normally use direct-attached storage

(DAS). With a typical SSD read latency of about 200 microseconds and write latencies often around 100 microseconds, using SSDs to supplement or replace HDDs can substantially improve application performance. And because SSDs have the same connectors and host interfaces as HDDs, they can be deployed seamlessly in standard server storage bays, or other external or internal configurations. Even the logical unit number (LUN) assignments can remain unchanged.

Although both Serial ATA (SATA) and Serial-Attached SCSI (SAS) SSDs can be used for DAS, SAS is the better choice for higher performance. While some applications can saturate the bandwidth of existing SAS SSDs, which operate at 6 Gb/s, 12 Gb/s SAS drives are now becoming available. And dual active/active interfaces hold the potential for 24 Gb/s SAS. By contrast, SATA drives, which target client devices, operate only at 3 Gb/s or 6 Gb/s with no roadmap for higher throughput.

Another option is to put the flash memory directly on the Peripheral Component Interconnect Express (PCIe) bus. Current PCIe cards consume up to 25 Watts of power (versus the 9 Watts in a storage bay), enabling higher flash performance at higher capacities, and have more lanes for higher throughput (8 versus the 1 or 2 in a storage bay).

A new class of products has emerged that integrates flash caching directly into PCIe-based RAID controller cards. The cards have no extra cables or drive bays for SSDs, or LUNs or mount points. Hot, or frequently accessed, data is automatically recognized and stored in flash on the card, while cool data is automatically migrated to HDDs attached to the RAID controller, usually improving application performance and server workloads 4- to 5-fold. Additionally, these controllers dramatically accelerate rebuild time, and maintain performance in the event of a hard disk failure. These plug-in devices enable simple upgrades and promise to be the most transparent, least disruptive way to accelerate applications and workloads.

Whether deployed as a solid state drive (SSD), or as an adapter, flash can accelerate application and workload performance up to 30-fold, an increase that improves server utilization

Deploying an all solid state Tier 0 for some applications is now even feasible. Decisions about using flash for a particular application typically focus only the storage layer, pitting HDDs against SSDs with an emphasis on the capital expenditure. But a look at the application layer reveals that SSDs often reduce total cost of ownership despite their higher up-front cost.

Solid state storage is more reliable, easier to manage, faster to replicate and rebuild, and consumes less power than HDDs—advantages that make it easier to satisfy service-level agreements and avoid penalties for falling below acceptable service levels. And just as importantly, the superior performance of SSDs produces far higher server utilization, reducing the number of servers and associated software licenses and service contracts required to accommodate the same application workload. In some cases, SSDs can reduce other system-related costs 5 to 10 times while delivering a better user experience.

Flash cache acceleration for SAN and NAS
With flash memory capacity far exceeding what is possible with Dynamic RAM (terabytes versus gigabytes), flash caching has become a highly effective and cost-effective way to accelerate performance and improve virtualized server utilization. Flash memory is also non-volatile, another important

advantage in a cache for write operations.

Like DAS, flash cache typically delivers the highest performance when deployed directly in the server on the PCIe bus. Intelligent caching software places hot data in the low-latency flash cache, a process that is transparent to applications. With no external connections and no intervening network to a SAN or NAS, the hot data is quickly accessible. And even though flash memory has a higher latency than DRAM, flash delivers superior performance because its significantly higher capacity dramatically increases the cache hit rate. Holding an application's entire working dataset in the flash cache is even becoming commonplace.

Efforts are also underway to virtualize flash cache, in effect making it a pooled resource like virtualized servers and SANs. Moving an application to another virtual machine (VM) currently requires copying the cache to the new host. With virtualized flash cache, these moves will be immediate and transparent.

Emerging Express standards
PCIe flash adapters deliver exceptional application performance but lack standardization and critical storage device attributes like external serviceability. These limitations will begin to disappear starting in 2013 with the advent of new standards optimized for flash. Support for the PCIe interface on an externally accessible storage midplane will use a new Express Bay standard with a new storage form factor SFF-8639 connector. The Express Bay provides four dedicated PCIe lanes and up to 25 Watts of power to accommodate ultra-high performance, high-capacity enterprise SSDs in 2.5- or 3.5-inch drive form factors.

Because the Express Bay is a superset of and can coexist with standard drive bays, this evolutionary enhancement assures compatibility with existing SAS

MEMORY / STORAGE GAP

Processor		
L1 Cache	1 ns	
L2 Cache	10 ns	
Main Memory	100 ns	

"100,000x   **Latency Penalty for leaving Memory Hierarchy**

T1 Storage	10,000,000ns (10ms)
T2 Storage	20,000,000ns (20ms)
Near Line	>20,000,000ns (>20ms)

Flash memory fills the void in both latency and capacity between main memory and fast-spinning hard disk drives.

and SATA drives. And support for new SATA Express (SATAe) and SCSI Express (SCSIe) SSDs will also be provided in standard bays by multiplexing the PCIe protocols atop existing SAS/SATA lanes.

Will flash ever completely replace traditional spinning media? Not any time soon, as there is no real advantage to using SSDs in slower storage tiers or for bulk data storage. But in the fastest tiers, flash is already delivering substantial benefits, freeing servers and applications

to do more work with less infrastructure, and the number of applications are growing fast as datacenter managers see the growing ROI flash delivers. For most users, the best practice is to continue using HDDs for their high capacity and low cost, while beginning to integrate flash where the additional performance is required and the benefits outweigh the higher initial cost.

Greg Huff is Senior Vice President of Corporate Strategy for LSI.

Even though flash memory has a higher latency than DRAM, flash delivers superior performance because its significantly higher capacity dramatically increases the cache hit rate. Holding an application's entire working dataset in the flash cache is even becoming commonplace
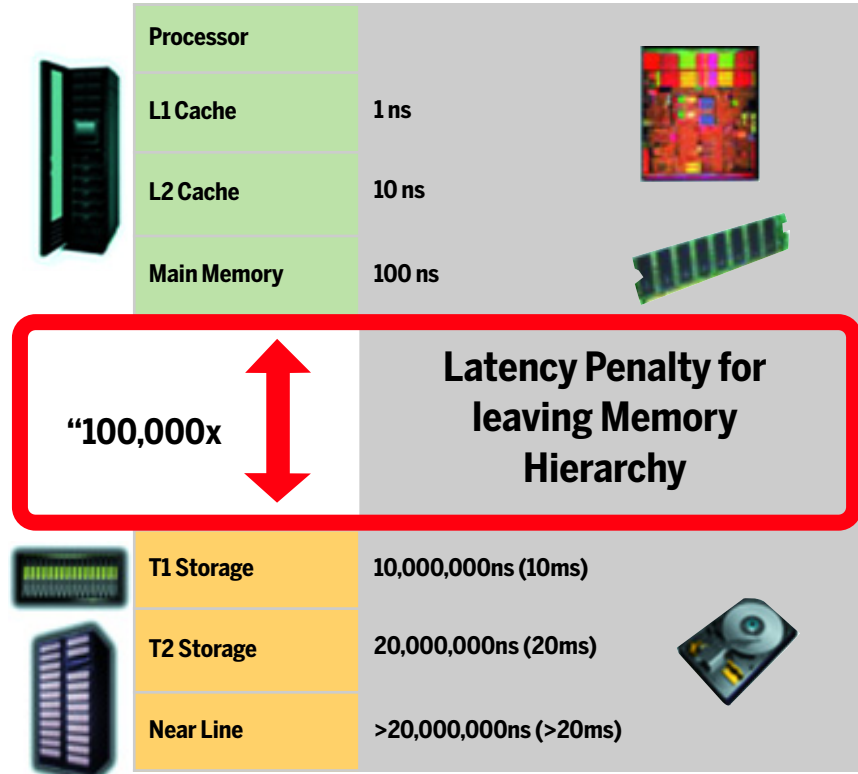
Bobby Joseph, Country Director, India & Middle East, Plantronics, talks to Heena Jhingan about the company's performance in India and the importance of software integration in its products

"We are trying to put a lot of software into our products"

How is Plantronics' enterprise business shaping up in India?

We fundamentally operate in three segments - contact centers, enterprise unified communications and retail. On the contact center front, it is a known phenomenon that the IT/ITES sector is on a slowdown, and the growth here has been relatively flat and our businesses also reflect that.

Based on usage, enterprise users can be divided into two groups. An enterprise user in Plantronics terminology would be anybody who uses a terraphone for more than three hours. Today, if you look at the office environment, it's becoming more open and to do a more secured call is not possible in an open office. The other part of it is Unified Communications, which is being driven by companies like Microsoft, Cisco and Avaya etc. That bit is growing and is growing 100% year on year for Plantronics and that is a big area for future growth.

Though mobile penetration is high in India, headset usage has not really picked up to that extent. So, for us the retail business is not very big. First, we do not advertise and secondly, we are expensive as we do not make cheap quality headsets. Our growth is limited to key select markets largely tier I and II cities on the retail side.

How is the contact center demand evolving and how is Plantronics offering to plug the gaps?

The contact center space is largely divided into two parts — international and domestic. International contact center space in India is somewhat matured. They use good quality telephone systems and headsets and we have a dominant share in that market. The real challenge lies in the domestic market, which is just evolving.

For example, if you call one of the domestic banks, you might hear the background noise and that is not good customer service. But if you look at the MNCs, they invest in noise cancellation headsets. It will take some time for domestic market to go through that evolution.

> The contact center space is largely divided into two parts — international and domestic. International contact center space in India is somewhat matured. They use good quality telephone systems and headsets and we have a dominant share in that market. The real challenge lies in the domestic market, which is just evolving.

At this point, domestic contact centers are not worried about what happens to health of the people, what happens to the hearing of the people if they use a non standardized headset or if a particular headset allows you to make long duration calls. Eventually, they will start considering that as well. There is a really long way to go before India catches up on the domestic side. We do have products for this segment and at the right price points.

UC is no more just about hardware. How does Plantronics leverage software?

We have always tried to move away from being just headset manufacturers and look at ourselves as providing enhanced communication to the users. We just don't make hardware, but are trying to put a lot of software into our products.

For example, the 'Voyager Legend' with intuitive intelligence. Assume a customer is a Microsoft unified communicator, the moment he moves away from his laptop, the status doesn't really change till it switches to idle mode indicating the user's absence, but that's not real time. Real time change is when you move away from your laptop and the status immediately changes from available to busy or not available or away. And that's what our headset does. The moment you move away using a Voyager Legend, "on my Laptop" the status will change. That's where we built value with software.

For people working on Salesforce, one of the biggest pain points is typing the data in whereas there is a third party application called Popcorn from a company called ThreeWill which is available only on Plantronics headset. It can be downloaded to give voice to text input on Salesforce. At this point of time, users can download it only on laptops or desktops. The next version will also support mobiles. There are a lot of applications that Plantronics is building over the headset and that differentiates us from the competition.

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FINDING THE
RIGHT FIT

Aircel takes an integrated approach to data warehousing and BI for a comprehensive view of customers in order to push best-fit products

BY HEENA JHINGAN

With about 10% share of the Indian telecom pie, Aircel has come a long way from being a regional player in Tamil Nadu and now offers a slew of voice, data and enterprise solutions. The company, co-owned by Malaysia's Maxis Communications, has emerged as one of the fast growing telcos in the country.

However, despite the pace of growth, the cellular operator till some time back lacked a single window view of its customers. Robert Sewell, Head-Technology Solutions Group, Aircel, says that they depended on a variety of heterogeneous systems used to capture huge amounts of customer data. He explains, "Business users faced a grueling task of extracting information from the vast amount of data in disparate systems. This created numerous problems in providing robust, sophisticated analytical capabilities to business users and made it difficult to get an integrated view of customers to analyze customer demographics, usage patterns and social behavior."

Such systems make the processes time consuming and it also becomes difficult to establish relationship between various parameters. The operator thus,

needed an enterprise data warehouse (EDW) solution atop which they could integrate the business intelligence (BI) tools to make analytical inferences.

The warehouse strategy

The cellular operator evaluated several major EDW providers but having rated them on various technical, strategic and commercial factors, Aircel decided to close on Teradata as it offered a combination of these factors to match the company's business needs.

Along with its IT partners Wipro, Aircel's IT team set out on implementing the solution. Sewell informs that they decided to follow a phased deployment approach, the first phase commenced in August 2011 and went live in February 2012, followed by Phase 2 in October 2012 and finally they closed the third Phase in March this year.

Aircel Enterprise Data Warehouse was set up on Teradata Appliances. This, Sewell says was done carefully, keeping the processing and data warehouse layers separate so that ETL (extract, transform, load) processes do not affect the end user query performance. "Data gets processed on Teradata 5x/6x series boxes, which is then moved onto

Teradata 2x boxes through data mover utility," he explains.

Dinesh Jain, Country Manager, Teradata India believes since the telco operations are very complex, it is better to have different stacks for processes. "Aircel's total analytical ecosystem amounts to about 250TB, in such scenarios it is important to keep it simple," he stresses.

Once this was done, Sewell adds, "As part of Enterprise BI, other technologies were also used. We deployed SAP Business Objects, BO Explorer, BI on Mobile, a Hadoop based platform for faster processing of profile attribute and recommendation/campaign management tools."

The implementation brought together various lines of business and over 20 varied data streams into a central data hub. Now with the integrated data view provided through the EDW/BI solution, the cellular service provider is able to get a comprehensive view of the customer life cycle, which includes tasks such as customer identification, acquisition, customer relationship management, retention and value enhancement.

According to Sewell, the implementation has eased the processes
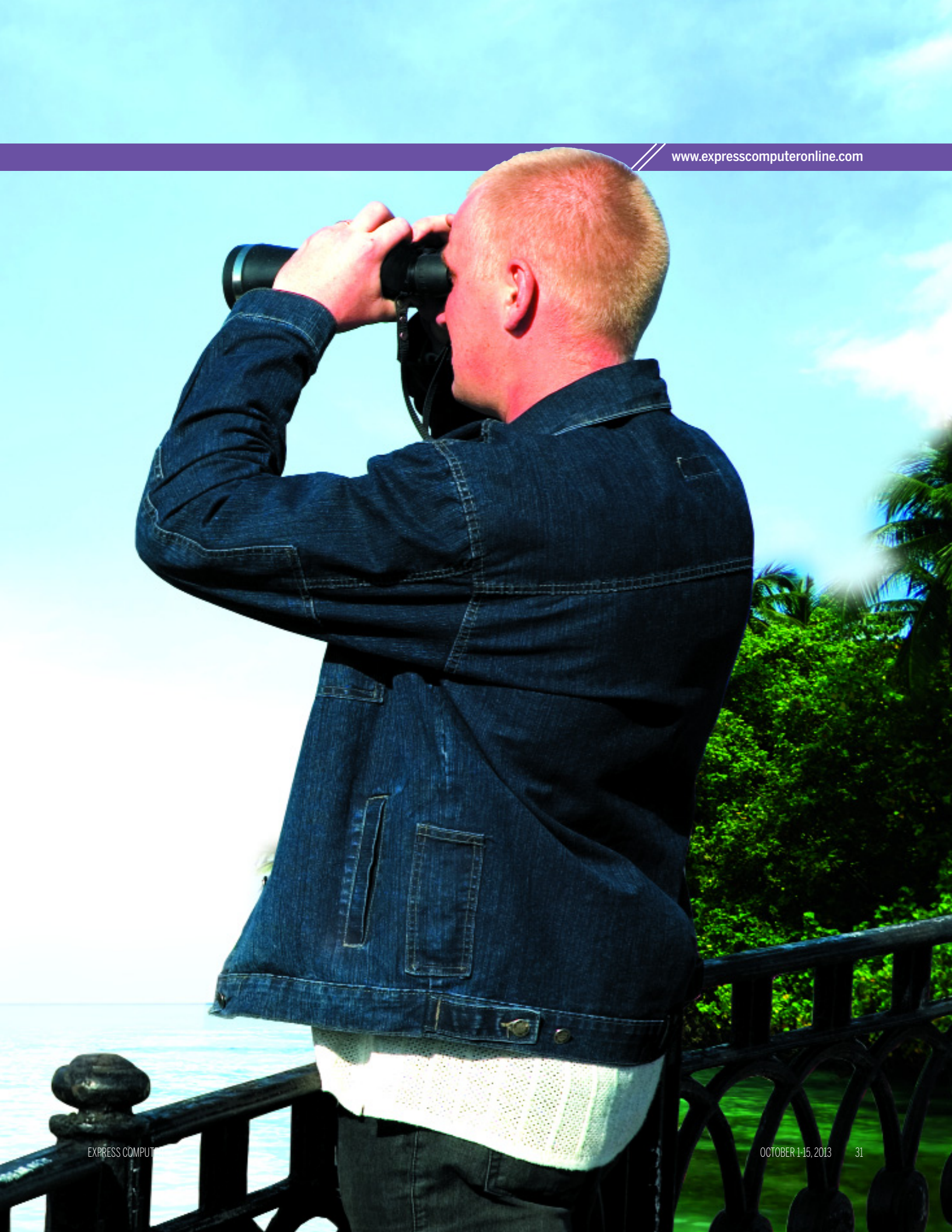
> Leveraging on the customer profiling framework, we have started implementation of predictive modeling, including churn, cross-sell/up-sell and revenue forecasting.

Robert Sewell,
Head - Technology Solutions Group, Aircel

The availability of an integrated, centralized and online business view through BI eliminates the need to keep offline data repositories, resulting in significant savings

for not just one, but various departments. For instance, the device department is now able to classify customers based on device/handset type. With BI, KPIs such as device-wise revenue, data around ARPU, rotational churn and age on network are available to the business.

"Leveraging on the customer profiling framework, we have recently started implementation of predictive or statistical modeling, including churn modeling, cross sell/up-sell and revenue forecasting," he explains.

Aircel's sales and marketing team now closely maps KPIs related to network cell site as this allows them to monitor performance of each cell site and plan campaigns to extract maximum benefits from low utilized network sites. This has also helped in promoting geography based product constructs.

Since sales executives need to access data on the go, Aircel needed to invest on BI on mobile. "So we innovated with releasing the BI KPIs over SMS — this helps in pushing information to the sales executives on the field as and when needed," he says.

The best part of the implementation is the availability of an integrated, centralized and online business view through BI, which eliminates the need to keep offline data repositories. This results in significant capex savings, covering risk of data security and substantial savings on off-role resources that were earlier required for manual data processing.

Challenges

Bringing about 20 data streams together is definitely not an easy thing. As Jain points out, data modeling plays a critical role in making the analytical tools effective.

Even though a group of customers might be using similar products and services, they might have different usage patterns based on their segments, geographies and devices used. Getting such insights can be an arduous task for telecom operators. Post excessive discussions and workshops, Aircel modeled its profiling framework.

Sewell says that a bigger matter of concern for them was the fact that their EDW was evolved parallel to the

development of enterprise (source) applications. Any change in the flow or architecture of the source application had a direct impact on EDW project timelines. "We could handle the change because we managed to maintain synergies within teams through effective communication processes," he reasons.

He adds that since data from many streams used to travel to the EDW/BI via multiple hops, ensuring data completeness and manual reconciliation was a mammoth task. Implementation of auto reconciliation at each data hops and alert triggering mechanism at various stages for data loading/processing was an innovative approach that has resulted in optimal data quality, user satisfaction and ease of manageability.

This being Aircel's first EDW implementation was a reason that till now, the business users viewed the business intelligence and EDW key performance indicators (KPIs) from a mere operational perspective and this had to be changed. They involved a business analyst, functional SPOCs (single point of contact) and the EDW project life cycle team to overcome this challenge.

Fine tuning ahead

With completion of the third phase, Sewell informs that all major milestones have been achieved and they are now under an optimization phase. Following the initial implementation, Aircel undertook a couple of critical initiatives, including integrating the system with advanced analytical tools and implementing BI on mobile.

However, the operator believes there is still a lot more to build. Future plans call for building capabilities of processing unstructured data in the BI platform and enhancing social media analytical capabilities. Also in the offing is the integration of the platform with operational systems to close the loop with analytical outcomes, so that operational systems can save CPU cycles (the time in which a single instruction is fetched from memory, decoded and executed). The idea is to add business value at an operational level.

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In a conversation with Harshal Kallyanpur, Henry John Seddon, Vice President, Global Field Marketing, QlikTech, talks about the changing BI and analytics scenario, the impact of social media on enterprise applications and more. Excerpts...

"Companies need to empower business users to do analytic reports themselves"

There is a lot of action happening in the BI and analytics scenario today. How do you see this space changing or evolving?

What we are seeing is that business users' needs are changing. About five years ago, it was okay to provide business users with a monthly report with some statistics. If they need something else, they create an Excel sheet and get away with it. Today, they are expecting to go to their businesses with their own devices and have the ability to access corporate information through those devices. There isn't enough IT stuff to produce report after report and push them to these users. Companies need to empower business users to do it themselves.

With the emergence of social media and mobile devices, a lot of data is getting generated on the consumer front. How does it affect the development of BI and analytics solutions?

It's rare for somebody today to make a decision just on their own. For instance, someone buying life insurance would go over the Internet, get some answers and then talk to someone with the domain expertise. What we are finding is that our customers are asking for a user environment where they have access to all the information, navigate through that to get answers to questions and share these answers online so they can collaborate with others to form a consensus.

With our software, we can allow one user to do some analytics and share that dashboard with another colleague with the click of a button. In old days, the security team would build policies that would prevent people from having enough information to make decisions. Worse still, people would find other ways to access information and share it, which further increases the risk to data.

Did you foresee something like this happening and start off with a road map which would eventually lead you to the present stage?

I wish we could say that. But when we started 20 years ago, we developed a solution that was 'in-memory' and that wasn't fashionable then. It wasn't popular then because memory was expensive and CPU processing was expensive.

> About five years ago, it was okay to provide business users with a monthly report with some statistics. If they need something else, they create an Excel sheet and get away with it. Today, they are expecting to go to their businesses with their own devices and have the ability to access corporate information through those devices. There isn't enough IT stuff to produce report after report and push them to these users. Companies need to empower business users to do it themselves.

That caused us to become very clever about how we use CPU and memory.

Today, CPU and memory continue to get cheaper. You can today load terabytes of data in memory and share it with thousands of users with a relatively cost-effective infrastructure.

With the traditional solutions, we heavily relied on databases and disk power which is slow. Today we see others taking the in-memory approach. However, with QlikView, you do not have to buy an extra database, while HANA requires you to buy a specific piece of hardware and is designed to run on their [SAP's] ERP systems. HANA is an engineering solution to a bad design problem.

Which features of BI solutions do you think work well in the Indian market?

A lot of users find it difficult to use a BI solution. The key strength of such solutions is ease of use; in-memory processing is as relevant in India as in any other part of the world. The cost-effectiveness of the solution, however, is very critical in the country. Through PoCs, we have been able to demonstrate that they can deploy our solutions within weeks, with a relatively small investment and scale it out. Our top few verticals here are BFSI, automotive, FMCG, consumer electronics and IT/ITeS.

A common question we face from enterprise customers is, "I have BusinessObjects or SAS. Why should I go in for another tool?" We explain to them that what we do is very different from what these tools do and we add value and protect their current investments.

What we see across the globe is companies that start with SAP for months, don't get anywhere and then start looking elsewhere for answers. If you take the Indian scenario, the largest user base that SAP or IBM Cognos have in an organization would not be more than 150 or so. We have got customers where there are thousands of users. Even if a traditional software like Cognos is given to, say, 2000 users, they cannot use it effectively as it is complex to use and needs the help of an IT expert.

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For a Robust
NETWORK

To maintain its leading market position, Muthoot Group overhauls its network with help from Juniper Networks

BY JASMINE DESAI

Strong networks can be compared to backbones. And just as backbones keep our bodies healthy, networks enable businesses to succeed in today's connected world.

Financial services provider and gold loan leader Muthoot Group recently undertook one if its most significant networking implementations with Juniper Networks.

Spanning 16 diverse fields, serving millions of customers across the nation, and serving an assortment of industries, Muthoot Group's network is spread across 21 states and four Union

territories. To maintain its leading position in the market, the group required a mission-critical, robust and scalable network.

Says KNC Nair, CTO, Muthoot Group, "We were doing transaction processing in a distributed way earlier. A branch used to have a small server, and all customer data and queries at end of the day were updated to the central database. It had lot of its own limitations, the major one being there was no real-time update."

Having an urgent need for a robust and scalable network, the company began the arduous process of searching for a suitable vendor. Apart from Juniper Networks, Muthoot evaluated other vendors like HP and Cisco. Mentions Nair of Muthoot, "The organization gave weightage to installation base and the availability especially for client-base running to 7,000 branches, with around 40-50,000 users. Thus, it was very vital for us that the solution gave very good performance and should be easily scalable."

The organization did a POC (Proof of Concept) with the help of network and equipment provider and found that Juniper gave best performance in their environment. It took six months to properly connect all branches and Muthoot went live with the solution in June 2012. Muthoot has deployed Juniper Networks SRX Series Services Gateways and EX Series Ethernet Switches at its data centers and branch offices across India. Muthoot migrated the data into new systems, and every week they would convert around 200 branches. The group has a Level 3 co-located data center in Bangalore at Trimax. All of Muthoot's branches connect through this data center through MPLS broadband connectivity or single VPN.

Counting benefits

The tangible benefits after the implementation immediately started pouring in. Mentions Nair, "One of the major benefits we have had from the implementation is that we now have centralized control. Transactions are being carried out on a real-time online basis. Earlier, in a distributed system we had to believe that everything was all right. Everything now is centrally
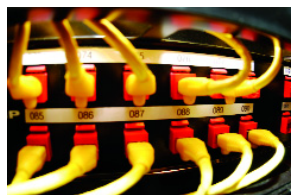
controlled, so there is no facility at the end-users to change anything." Also, day-to-day monitoring of customers for repayment etc. is possible today. The new network enables Muthoot Group to guarantee its customers that their loan applications will be processed in a matter of minutes now.

Muthoot does not believe in following the crowd, so it tread on a different path from the standard network linked from the branch level. Normally, financial organizations go for MPLS lease-line or ISDN lease-line as the connectivity lease with the branch level. In their case, the organization wanted cost effectiveness. Thus, they fine tuned their applications, all of which are developed in-house, to work in a normal broadband connection.

The main advantage has been that many of its rural branches can work smoothly using these connectivity options. Having already provided functionality to the branches, now the organization will be utilizing the same platform for offering other channels also. Customers can use normal internet for managing their account and transacting on it. Muthoot has also joined the mobile race by providing a mobile interface, so that customers can access the system anytime anywhere on mobile devices.

Giving advice on what organizations should not miss while proceeding for similar deployments, Nair says, "Organizations should do a POC very early. They should make sure that it meets all the required parameters of response time, scalability, etc. That is essential before deciding the partner, vendor and the system. Also, the solution should be implemented in a phased manner." Muthoot itself took around nine months to migrate from a decentralized to a centralized system, which included data migration, training people, setting up the system, etc.

The future plan for Muthoot involves analytics as well. At present, the company is developing MIS tools for analytics. Talking about other future plans, Nair says, "Maybe in future we will apply for a banking license; after that we will upgrade our applications."

> ' Organizations should do POC very early. They should make sure that it meets all the required parameters of response time, scalability, etc. '
>
> **KNC Nair,**
> CTO, Muthoot Group

The new network enables Muthoot Group to guarantee its customers that their loan applications will be processed in a matter of minutes

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SMALL MATTERS

Small data in embedded intelligence can indeed liberate the Internet of Things as more and more devices plug in

In the 2002 sci-fi thriller Minority Report, Tom Cruise is greeted by automated displays with personalized messages as he enters retail stores. That was how screenplay writers believed the distant future would look like. Today, we actually live in that world. It's no secret that there are already billions of things connected to the Internet. Service providers are always looking out for opportunities to plug in even more devices to the 'Information Superhighway'. This firmly established trend is the foundation of the Internet of Things (IoT).

The IoT describes a world in which actual 'things' such as devices, data and locations are all interconnected with applications and users over the Internet. Anything that can be connected to the Internet will soon be. This will transform how people and systems control, interact with and experience the world around them, sparking new products, services and job opportunities. From mobile devices to tiny microprocessors in sensors, to networking and mobile infrastructure, to servers — exciting new products and markets beckon.

IoT capabilities can be added to just about any physical object in areas as diverse as clothing, medical devices, household appliances, home automation and industrial controls. This new world will need cost-effective sensing technology that can last for years, not hours. These sensors gather small amounts of data for long periods. These tiny amounts of data are the building blocks of what has become known as 'big data' — the huge amounts of data currently being generated that, on the one hand, enable powerful new big picture analysis of trends and behavior, but on the other, present pressing capacity challenges for networking and mobile infrastructure.

What is Small Data?

One's digital trail is the genesis of Small Data. We generate these miniscule pieces of data because most of us use some form of mobile technology that is always connected. As a result, we all leave digital traces. Tweeting or posting on social networks, or searching for the best e-commerce site that sells books through search engines all emit digital traces. This data can then be aggregated and converted into market intelligence to enable service providers to tailor service offerings to their target customers.

Today there are scores of data players that specialize in collecting customer data for online retailers. They use that real-time data accessibility to build customer intelligence, thereby enabling clever discounting to attract them and enhance customer experience. Similarly in the IoT world, little bits of data will come from sensors and other embedded intelligence in connected devices in the workplace and in the home. This is the small data that will play a critical role in your regular, everyday world.

Small is big

Let's examine how small data in embedded intelligence is being applied to the problem of finding a parking space in a busy city such as Bangalore. In future, there will come a time when connected devices will collect and distribute real-time data about parking spaces both on roads and in Multi-level Car Parking (MLCP) areas across the city. This will ensure considerable time and fuel savings for drivers since it will mean you do not have to circle the same area again and again looking for parking space. This kind of small data will be generated by energy-efficient parking bay sensors armed with long-lasting micro-controllers. We have already seen similar deployments in other countries and it will soon become a reality in India as well. The challenge ahead lies with connecting these data streams to provide viable, diverse services with the support of a strong ecosystem.

Guru Ganesan is Managing Director of ARM India.

Anything that can be connected to the Internet soon will be. This will transform how people and systems control, interact with and experience the world around them

USING SOCIAL TECHNOLOGIES

BY **SUMEET ANAND AND S.M. NAFAY KUMAIL**

How to synergize the corporate mind and how not to

WE NEED TO UNIFY STRUCTURED DATA AND UNSTRUCTURED CONTENT AS A BIG DB AND THEN MAKE IT COLLABORATIVE WHILE ORGANIZING IT WELL FOR EASY AND MEANINGFUL DISCOVERY

Social computing seems to have come full circle. The euphoria has been replaced by serious appraisals. The hype is fading and hubris not taken as gospel anymore.

It overshot even what its inventors probably had in mind. From letting friends know what you are doing and connecting with friends, it effected big political changes. Businesses also started experimenting with it—looking at it as an opportunity as well as a threat. Companies first banned it, fearing loss of productivity and critical information flying out with ease, but they also began offering their increasingly younger workforce some sort of enhanced intranet. Some solutions were internally conjured up while others were acquired from the sundry social technology solutions or legacy upgraded versions.

Two things happened. In response to banning, people took more fiercely to social media, often trying to solve their work-related problems out in the wider public networks. People also did not like the hurriedly cobbled together in-enterprise networks that companies offered. These tools ended up as bulletin boards for whining and for other less meaningful activities. This led business leaders to doubt the utility of in-enterprise networks and social platforms.

While this was variously happening, several challenges emerged. The solutions to the problems employees faced were often not within but 'out there'. So every employee took the long and arduous journey, trying to find the relevant but sans motivation and facility to collaborate. Search and organizing stuff in a discoverable way just in time, have also been getting increasingly difficult.

In this rather collective confusion, some clear trends and specific solutions are emerging.

Social yet secure

If you put many constraints and ask people to share only the relevant up front, it is not going to happen. If you don't make the cycle of expression, organization and discovery seem like a breeze, it is, again, not happening. However, in an enterprise context that needs to follow compliance, the solution should be flexible in the way that you can define access to content and data. It should allow people to express freely but securely.

Unification and intelligent discovery

Information discovery is a complex issue because information is ubiquitous and in many forms, while discovery needs to be unified and intelligent. The problem is not information overload but failure to filter. We need to unify structured data and unstructured content as a Big DB and then make it collaborative while organizing it well for easy and meaningful discovery.

We should allow people to pull information from the web, legacy data, and from their own wider networks. Once they have begun sharing stuff, you will have to sift through it and organize it for them. And, finally, allow easy and just-in-time access to the comprehensive and evolving knowledge.

Higher relevance for easier adoption

For communication to turn meaningful, promote a culture of openness and collective learning. The tool should build higher relevance by being closer to people's work needs. Companies should put new and legacy data in a form that enables people to access it across the ecosystem. The framework should allow people to see value of their contribution in solving business problems and improvement in personal productivity. Organizations should see people's contribution as an important performance indicator. This is being done with varying degree of success. The sooner we mainstream it the better.

Sumeet Anand is Founder CEO and S.M. Nafay Kumail is Co-Founder of Kreeo (i-nable Solutions)
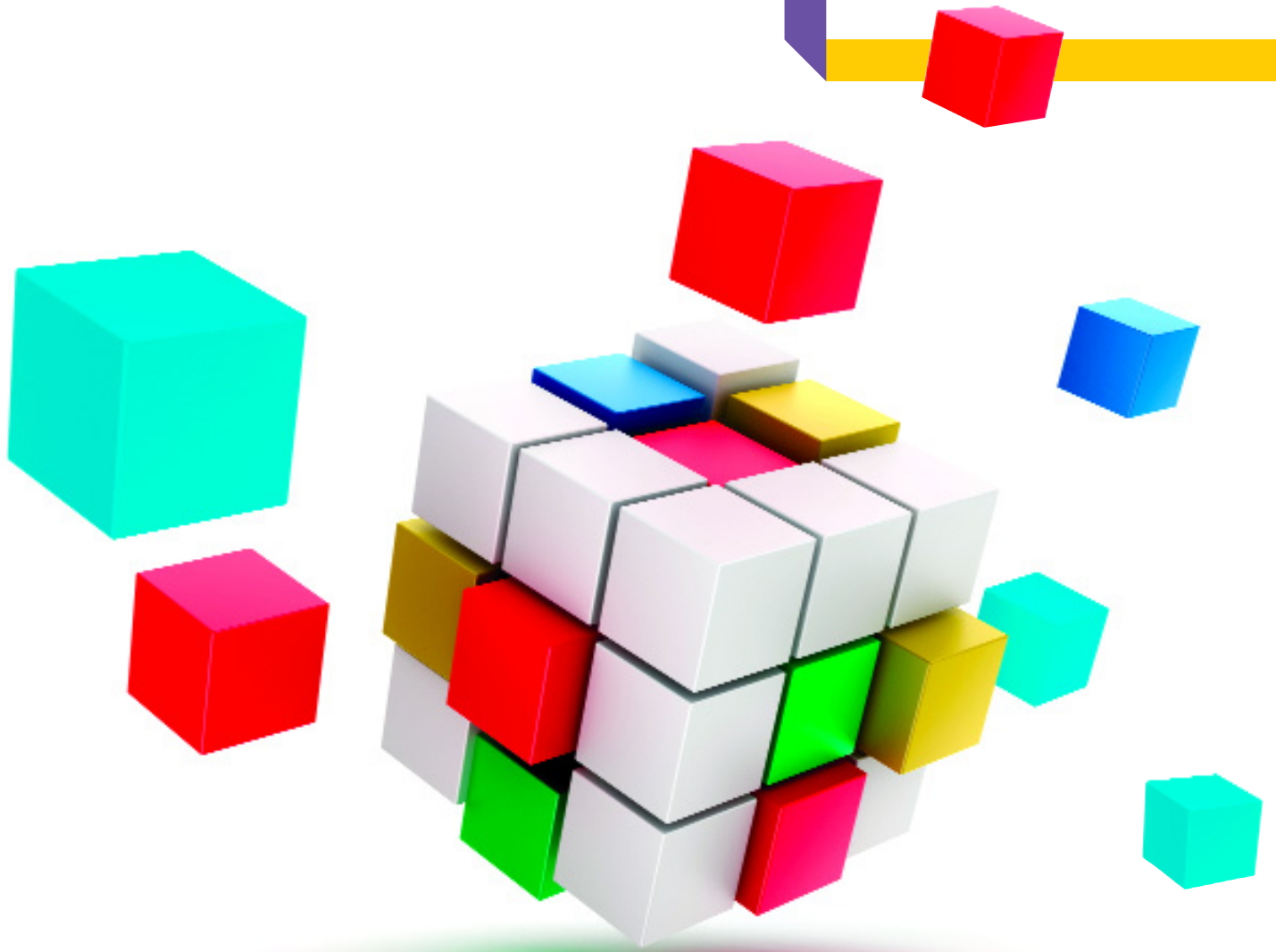
MICROSOFT
IN A FLUX

With a major restructuring underway, and integration with Nokia in the pipeline, the Windows maker is in a state of upheaval

BY MEHAK CHAWLA

On July 11, 2013, Microsoft CEO Steve Ballmer, in a long mail to employees, set in motion a broad corporate shakeup. An overhaul of the corporate strategy in Microsoft had been under speculation a few months prior to this announcement. In his mail, Ballmer unveiled a plan aimed at restructuring the software giant and repositioning it as a "devices and services" firm.

The message was not new, but the urgency had been intensified. The announcement came on the heels of a decent fiscal fourth quarter in which Microsoft reported quarterly sales of $19.9 billion. The software giant's revenue for the period ending June 30 was up 10% year over year, a result that seemed to buck the sluggish sales trend affecting the global PC industry.

The prime reason behind this restructuring is that Microsoft continues to rake in huge profits from its traditional software business-licenses sold to businesses for its Windows PC and server operating system, and Office software suite. However, the company has been losing ground in fast moving technologies like cloud services and mobile devices, where Amazon, Google and Apple have established a strong foothold.

Dubbed "One Microsoft," the major restructuring effort involves an executive shakeup and the consolidation of several principal business units and product lines along simpler tangents. Going forward, the company will be organized by function: engineering, marketing, business development and evangelizing, advanced strategy and research, finance, HR, legal, and COO.

As a result of this restructuring, Microsoft will have four engineering areas: "Operating Systems (OS), Apps, Cloud, and Devices," explained Ballmer. In what may be a fundamental change for Microsoft, it aims to make its Windows, Xbox and Windows phone platforms work more seamlessly together.

The restructuring process, which is likely to be completed by end of this calendar year, certainly has echoes of Apple's restructuring that happened back in October 2012. The iPhone makers' senior vice president of iOS Software, Scott Forstall, left the company as part of a reorganization designed to "Encourage even more collaboration between the company's world-class hardware, software and services teams." Microsoft's restructuring has been accompanied by the exit of Kurt DelBene, who will retire as president of Microsoft's Office division after having been at the firm since 1992.

This is Microsoft's first real restructuring in over a decade, and will not be easy to establish, say analysts, given the many divisions and the huge

> **'With Nokia, Microsoft has got access to what might still arguably be the best maps in the world. This is one area where Microsoft can very actively compete with Google.'**
>
> **Katyayan Gupta,**
> Analyst (serving infrastructure & operations professionals), Forrester India

> The Nokia acquisition, to many, did not come as a surprise. It is being seen in line with Microsoft's recent drive to re-brand itself as a devices and services company

churn required. "One Microsoft" and the subsequent acquisition of Nokia's devices and services business, seem aligned with the organizational branding strategy. The only piece that Microsoft was missing in their mobility story so far, was the hardware bit. Though the company did try its hand at mobility devices through their tablets Surface and Surface RT, it failed to make a dent in an already crowded market. A dent which resulted in a $900 million write-off for the company. Nokia, which is already using Windows platform for its popular Lumia series, is likely to give Microsoft the back end integration between hardware and software, something that has been missing from their mobility offerings.

Urgent makeover

There is no doubt that Microsoft's recent efforts signal the need for the company to re-brand and rebuild itself in the era of cloud and mobility, while there is still time. The analysts also feel that Microsoft did need to undergo a major shift in order to bounce back into the game, and this reshuffling drive, coupled with an acquisition that the experts largely claim to be a sensible one, is likely to give a more unified look to the company.

"Yes, restructuring will surely result in making operations more streamlined, more focused on innovation and especially aggressive in terms of presence and marketing," observes Katyayan Gupta, Analyst (serving infrastructure & operations professionals), Forrester India.

If Windows 8.1 doesn't deliver, Microsoft is in trouble, especially with rivals like Google and Apple already announcing OS updates.

So this restructuring signifies the urgent need to achieve more synergies and more alignment between hardware,

software and services divisions. "For instance, we can expect Xbox and PC divisions to get closer to each other. Microsoft will also be looking to make its hardware talk to each other. The result of this could well be a piece of extremely powerful hardware, which none of the competition can match. Because Microsoft does have the resources. One Microsoft is aimed at better aligning these resources," says Gupta.

Sanchit Vir Gogia, Chief Analyst and CEO, Greyhound Research, agrees that collaboration will increase as a result of this organizational shift. "With the simplification of entire portfolio that Microsoft is undertaking, we shall see more symphony and conjoined efforts between their hardware and OS divisions. Another thing working for Microsoft here is that their Office 360 can sit beautifully in a mobility scenario. There are bigger bets placed on Windows 8.1, and though it will see traction, that's not likely to happen very soon."

Windows to mobility

The acquisition of Nokia's device and services business, according to Gogia, is not merely about phones, it is about having a footprint in hardware. "It is not about revival of a brand, it is about supply chain management for Microsoft."

The acquisition, to many, did not come as a surprise. It is being seen in line with Microsoft's recent drive to re-brand itself as a devices and services company. To that extent, it also follows the Apple story of one technology giant having full control over the hardware, device and services pieces.

"Phones today are no longer a hardware story. They are an experience and applications story. So when Symbian ship was sinking, Microsoft came up with a robust platform. With this acquisition, the platform as well the

hardware supporting it will belong to the tech giant. Microsoft already sits pretty within the enterprise market- from a data center as well as a Windows stack perspective. With this deal giving it control over back-end hardware management, it could expand its share in the mobility pie," elucidates Gogia.

The deal could also expand Microsoft's reach to market, especially in developing countries where Nokia has a lot of entrenchment in channels and consumer retail, while Microsoft has a great foothold in the enterprise and the home segment.

What Microsoft did wrong, according to Gogia, is that it invested a lot of money in mobility prior to this acquisition. "But if they do get the hardware correct, then this deal can be a very compelling story. When it comes to the application ecosystem, Microsoft has the resources and means to build it."

A tighter integration between software and hardware can also be a big driver for Microsoft's Surface in the mobility space. "However, the level of integration is very crucial if this acquisition is to yield results. The success depends a lot on how swiftly and tightly can the devices, software and apps pieces be integrated," emphasizes Gupta of Forrester.

A very important piece of this story, which not many are talking about yet, says Gupta, is the Maps bit (Though Nokia has per say not sold its Maps to Microsoft). Microsoft will get access to Nokia's Here Drive, Here Maps and Here Transit, as a part of this takeover. "With Nokia, Microsoft has got access to what might still arguably be the best maps in the world. They are certainly one of the oldest and evolved maps. This is one area where Microsoft can very actively compete with Google. Microsoft can do a lot in the maps and augmented reality space," elaborates Gupta.

The deal could also expand Microsoft's reach to market, especially in developing countries where Nokia has a lot of entrenchment in channels and consumer retail, while Microsoft has a great foothold in the enterprise and the home segment

The impact of the acquisition will only reflect by end of 2014. Though some believe that might be too late, the fact is that the smart phone market is nowhere close to saturation. It is all about bringing in innovation that will appeal to customers, opines Gupta.

India isolated?

India's position in Microsoft's corporate strategy has never really been clear. And though India has a robust developer and channel ecosystem, it has been isolated from corporate policies. Microsoft never released their tablets, Surface and Surface RT in India, a move that many analysts debated and the strategy behind which remains unclear. Even if they did not do well, a robust tablet market like India would have proved to be a great testing ground for them. Since they did not launch in India, Microsoft has no mobility hardware present in the country, something that can prove to be detrimental when they try to make inroads with mobile devices, thanks to their acquisition of Nokia.

Another complication that Microsoft might face is that in India, Nokia as a brand, might have far greater recognition than Microsoft itself, given the percolation of Nokia phones in semi-urban and rural areas. Also, a key question that everyone has been asking with respect to India is what happens to the hugely popular Asha series, because that's where the installed user base is, at the moment. Gupta believes that feature phones will continue to be manufactured under Microsoft's label. "We expect Microsoft to continue building feature phones, but they will certainly try to bridge the gap between smart phones and feature phones, both in terms of pricing and fresh capabilities." Cost bridging is one of the widely expected outcomes of this acquisition. In line with "One Microsoft", we can also expect Nokia's mobility devices to be better aligned with other Windows running hardware possessions of Microsoft. According to Anshul Gupta, Principal Research Analyst, Gartner India, "For India, the implications of hardware will be more significant, especially with Windows 8.1 in the pipeline."

Gogia of Greyhound believes that with this restructuring, which clearly centers around Windows OS and mobility, Microsoft cannot afford to sideline emerging markets. "Emerging market story will be big for Microsoft and it can't afford to leave India out of their corporate story, as they have done in the past. India has been weak for Microsoft primarily because of its cost points. That will change."

"India is strategic for all mobility firms because of two reasons. The first is the cloud computing wave gripping the country- cloud is being used for everything ranging from email, to music, to collaboration. The second aspect is India's great appetite for devices. So from a Microsoft perspective, India cannot be ignored," adds Gupta of Forrester.

However, the ripples of this restructuring are not likely to be felt in India before the end of next year. Ballmer's controversial exit is slated for July 2014, and he is expected to see through the rejig at the corporate level before he leaves. Also, Nokia's integration in Microsoft's fold is likely to happen mid next year, and it will take still more time to stabilize corporate policies. Only by then can we expect to see some structural, organizational and strategical changes with respect to channels and go-to-market. As Gupta of Gartner says, "We see no implications for India in the near future. We might see effects in some more advanced markets first."

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Kenneth Hee, Director of Business Development - Enterprise Security, APAC, Oracle, talks to Mehak Chawla about enterprise security trends, and the impact of cloud and mobility. Excerpts...

"Organizations should focus on how users access applications and data"

What are the enterprise security trends across the APAC region?

Enterprises in the APAC region, as elsewhere around the world, are increasingly concerned that corporate cyber attacks are growing in number and in sophistication. According to an Oracle sponsored CSO Market Pulse survey, the corporate answer to the rising threat levels is to spend more on security. But bigger budgets alone have not increased CSOs' confidence in delivering a highly secure enterprise. While 59% of respondents say their IT security budgets have increased during the past 12 months, only 23% say their organization has a superior strategy in place across all key aspects of data security.

Much of this investment is also reactive. Organizations are not considering long term strategies to protect information assets, especially the most crucial one – database. Most companies invest in perimeter and network defense because they believe database and application data are inherently safe as they lie deep within the firewall of the company. This is a dangerous assumption. According to a 2012 Verizon report, servers were the largest category of compromised assets (64%) and database servers were the source of 94% of compromised records involved in security breaches. Network infrastructure, by comparison, accounted for less than 1% of compromised assets.

This is why Oracle propagates an "Inside-Out" approach. Protecting data at the source increases confidence that security investments are aligned with the external threats. Protecting data in the database would also save both time and money because most of the organization's sensitive data resides in the database.

How are technologies like cloud, especially public and hybrid ones, and mobility, impacting the security framework of enterprises?

The adoption of cloud and mobility has expanded the IT infrastructure of an enterprise. A company's IT assets no more reside just within the four walls of an

How is Oracle working with Indian enterprises with respect to security?

We are focusing on sectors like telecom, BFSI and government in the country. These sectors own a lot of classified or confidential data and are more prone to security threats. They are also guided by strong regulatory compliance that mandates them to put in place an in depth, multi-layered security model. Hindustan Petroleum Corporation Limited (HPCL), TVS Motor and Aircel are a few enterprises that have deployed our security solutions.

enterprise. The composite network has become large – it even encompasses multiple countries across the globe, outsourced data centers and, more recently, private and public clouds. So it is virtually impossible to secure the perimeter completely from cyber attacks and other external threats. As a result, enterprises today have to re-engineer their thoughts to understand what is the right approach to secure information assets in a new world, where sensitive corporate data is stored and accessed from beyond the company's direct control.

For this reason, instead of focusing on more complex network security policy, organizations should focus on how users access applications and data. When criminals breach a network, they target weak user access controls as a means to acquiring valuable information assets.

What kind of security layering are companies opting for, especially the ones that have legacy infrastructures to take care of?

When burglars break into a home, they look for electronics, jewelery or cash – yet homeowners focus mostly on securing their doors and windows, not their valuables inside the house. This mindset permeates enterprise IT as well. The CSO Market Pulse survey found that two-thirds of security budgets are used to protect the network, with less than a third used to directly protect the data and intellectual property that reside inside the organization. It's clear from these results that most organizations are focusing an inordinate amount of attention on network vulnerabilities and neglecting their most valuable assets: applications and data.

We at Oracle believe that while defense parameter is important, organizations should also focus on how users access applications and data. Securing access to customer data, intellectual property and financial data at the source, i.e., the database can save companies time and money.

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WANT TO BUILD A GREEN DATACENTRE ?

Nikom - An ISO 9001 Company and member of IGBC (Indian Green Building Council-CII) has an integrated capability to design and build state-of-Art World class green Datacentres on a turnkey basis for large and medium enterprises. Having successfully designed, implemented, and executed various turnkey datacentre projects for enterprises with server farm space of 200 sq. ft. to 15000 sq. ft., Nikom has won "BEST-IN-CLASS" Award in Asia Pacific Japan Region for their significant contribution in the field of Green Datacentres and Energy Management Solutions. Nikom InfraSolutions Pvt. Ltd. one of the Elite DC Partners of many leading global brands, have been winning consistently and delivering various prestigious Datacentre projects. All the Datacentres and Energy Management Solutions designed, and implemented by Nikom are with highest standards of project excellence, and technical expertise.

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Dassault Systemes releases SolidWorks 2014 product portfolio

DASSAULT SYSTÈMES, A 3D Experience company, recently introduced SolidWorks 2014, a 3D software portfolio delivering a rich array of product offerings including 3D CAD, Simulation, Product Data Management, Technical Communication and Electrical Design. The 22nd software product release is based on theme of 'design without limits.' The latest release has over 200 enhancements, among which 90% are based on customers' feedback and requirements.

The new SolidWorks 2014 release is designed to deliver major productivity and usability gains and allow companies to spend more time on knowledge-centric tasks that help push innovation to the forefront. Productivity boosters, workflow and mobility enhancements will enable users to re-use data more dynamically, expediting the sharing of design data to help accelerate collaboration within product development. Added mobility support for Android and iOS devices would allow the more than 2.1 million SolidWorks users to connect and experience new 3D designs anywhere and anytime.

Recent market studies reinforce the importance of product aesthetics in that initial customer purchase and experience. Whether the end product is an industrial machine, a smartphone or a medical device, customers want both product functionality and appealing designs. SolidWorks 2014 helps product designers transfer their creative ideas from design sketches and images into 3D models faster than before, while expanding the set of design tools to transform ideas into products for new markets.

"Our commitment is to deliver a product portfolio that recognizes user feedback and protects users' investments," said Bertrand Sicot, CEO, SolidWorks, Dassault Systèmes. "We support our users' drive for excellence by

M Ravikumar, Sales Director, Professional Channel-India, Dassault Systèmes announcing the launch of SolidWorks 2014 in Bangalore

giving them the enhancements needed to validate and share their product design – regardless of whether it's a device to help clean the environment or technology to save a life," added Bertrand.

According to PM Ravikumar, Sales Director, Professional Channel-India, Dassault Systèmes, for past 12 years SolidWorks was just one core product company but today the company is enhancing its product portfolio in areas around its core product and new additions are focused on data management and technical communication. "India is looking to scale up its innovation index so as to leverage the opportunities which the economy is bringing. SolidWorks 2014 will help businesses up the ante on innovation in a sustainable manner," Ravikumar said.

In the last 17 years, the company hasn't changed the pricing model of its software product, but has added value to customers by adding new features and enhancements. Largely, it earns revenue from software subscriptions and last year SolidWorks reported a US$ 527.8 million revenue. In

the last five years, the company has grown in both CAD and Non-CAD segments. SolidWorks has around 2.2 million users and 180,000 customers worldwide.

Beside the areas of mechanical tool designing, ancillary machines, automotive, aerospace, power and process, the company is also focusing on new areas of medical tools and devices.

In India, seven units of the Ministry of Small & Medium Enterprises (MSME) are using SolidWorks software for training purpose. Overall, the company has some 4200 customers in India. Apart from these verticals, it has a strong focus on the education sector. In fact, about 610 educational institutes including colleges and universities are using Solidworks software for teaching purpose in India.

SolidWorks has 65,000 installed license base in these 610 educational centers. To drive the software among students, SolidWorks has made license arrangements with colleges and universities that allows students easy access to software for learning and training purpose.

ERP9 for BlackBerry comes to Tally users

ERP 9 FOR BlackBerry, the latest application for the Tally software series is now available on the BlackBerry World storefront giving existing Tally.ERP 9 customers enhanced business capabilities on their BlackBerry smartphones. ERP 9 for BlackBerry offers real-time access to critical business information on Tally.ERP 9 through Tally.NET framework.

With all the features required for high-performance business management, Tally.ERP 9 customers with a BlackBerry smartphone will not need to make frequent calls to their accounts team for information. Customers will receive instant and important financial updates for modules like creditors, debtors, bank balance, top 10 customers, inventory status and more, directly on their BlackBerry smartphone.

The app provides instant access to customer information including concerned person, email id and contact information amongst other details. Users will also be able to make a call from the customer information accessible from the creditors and debtors module.

Vikash K. Agarwal, President, Tally Solutions (P) Ltd. said, "In today's world, instant access to information is very vital and enterprise mobility using smartphones has become a business necessity. At Tally, we continuously strive to make the lives of our customers simpler and this includes bringing mobility solutions into the country. We are very happy that BlackBerry shares this vision of ours and has taken this initiative with aggression. With ERP 9 for BlackBerry now being available for BlackBerry smartphones, customers will be able to leverage the tremendous potential of Tally.ERP 9 on the move."

Commenting on the announcement, Hitesh Shah, Director Commercial Business, BlackBerry India said, "BlackBerry smartphones have always been about empowering business customers, and Tally being an important tool used across industries is a welcomed addition. The availability of ERP 9 for BlackBerry provides more value to business customers by giving them the opportunity to make important and timely decisions while on the go."

Netgear adds two new products to ReadyNAS family

NETGEAR HAS ANNOUNCED ReadyNAS 3220 and ReadyNAS 4220, new additions to its ReadyNAS product family. The new devices are the latest network-attached-storage (NAS) products to run on the ReadyNAS OS, introduced in March 2013. Available for the first time in 2U rackmount form with 12-bay capacity, the new ReadyNAS 3220 and 4220 will enable easy storage for businesses supporting up to 500 concurrent users.

ReadyNAS 3220 and 4220 feature a sleek new interface and the ReadyCLOUD web portal for full file management from any browser. Moreover, the newest members of the portfolio are the highest performing ReadyNAS solutions available which support 10GbE infrastructures, boast the latest in performance capability, and include technologies such as unlimited snapshots and cloud-managed replication for reducing any possibility of data loss.

ReadyNAS 3220 and 4220 are virtualization-ready with iSCSI support, thin provisioning capability, and certification for interoperability with VMware and Microsoft. The ReadyNAS 3220 and ReadyNAS 4220 are currently available with Netgear's authorized distributors in India. The price for ReadyNAS 3220 starts from Rs. 4,00,000 and ReadyNAS 4220 from Rs. 5,50,000.

HP announces new security offerings for enterprises

HP HAS ANNOUNCED new products and services that will enable enterprises to disrupt the adversary marketplace, manage risk and extend their security capabilities to better protect themselves against a growing threat landscape.

Cybercrime continues to increase, with 92% of Forbes Global 2000 companies reporting data breaches in the last 12 months. This growth is due to adversaries forming a more sophisticated and collaborative marketplace through which they share information and advanced data theft tools. Studies estimate that the global cybercrime black market has a value of $104 billion per year.

Evolving regulatory and legislative requirements are further adding to enterprises' security burden, with an estimated average cost of noncompliance at $13.7 million for global organizations. Additionally, in the world of bring your own device, IT no longer controls the endpoint, offering the adversary many more control points to attack.

HP's new products and services will enable enterprises to approach their security challenges with a single view of information security, and to manage risk and compliance. Leveraging HP's security research and security professionals, these new offerings are designed to help organizations optimize their risk postures and extend their own capabilities.

"Enterprises today aren't facing a single attacker; they are fighting a well-organized, well-funded adversary marketplace," said Ranndeep Singh Chonker, Country Manager, HP Enterprise Security Products, India. "To succeed in thwarting attacks, you need a trusted partner that can provide end-to-end security with enhanced threat intelligence to disrupt the adversary. Only HP can deliver this."

"An organization extends well beyond its four walls, it's made up of a vast ecosystem of suppliers, devices that can go anywhere and, not to mention, a web that is literally worldwide," said Susanta Bhattacharya, Director, Infrastructure Technology Outsourcing (ITO) Portfolio, Enterprise Services, HP India. "HP helps clients reduce risk and manage the complexities of protecting the flow of information—both internally and externally—enabling them to focus on driving innovation."

New offerings include HP Threat Central, HP TippingPoint Next-Generation Firewall (NGFW), HP ArcSight and HP Fortify and HP SureStart. HP Managed Security Services (MSS) help internal security teams accelerate threat identification, response and remediation by providing expertise and advanced security intelligence.

According to the company, with HP MSS, intrusions can be detected within 11.8 minutes and 92% of major incidents can be resolved within two hours of identification. HP MSS security professionals also possess global and regional knowledge of legal, regulatory and standard developments to improve overall risk posture. New offerings from HP MSS and HP Enterprise Services include the HP Supplier Security Compliance Solution and HP Distributed Denial of Services (DDoS) Protection Services.

HCL to provide IT services to Anglo American's global operations

ANGLO AMERICAN, ONE of the world's largest mining companies and HCL Technologies (HCL) have announced entering into an engagement where HCL will deliver IT services for Anglo American businesses across the globe. As a part of this contract, HCL will transform Anglo American's end user computing and data center landscape to improve operational efficiency, business agility and the user experience.

The scope of service covers end to end infrastructure services, including data center and hosting services, email services, service desk, local area network and security management, end user computing and on-site IT services, utilizing hybrid on-premise and cloud delivery models.

David Heppenstall, CIO and Head of Global Infrastructure, Anglo American said, "HCL has been one of the most successful infrastructure suppliers in the market in recent years, and we have been impressed with their solution and the people we have worked with. We are confident they will become an effective

long term partner for Anglo American."

"This contract reinforces HCL's focus on developing markets and further cements HCL's position as the provider of choice for IT Infrastructure Services. HCL will create an environment of transformation, innovation and continuous improvement of services that will strengthen Anglo American's leadership position in the marketplace, " said Ashish Gupta, Senior Vice President and Head EMEA, HCL Technologies ISD.

"This deal is also a testimony of our

growing strength as the provider of choice for the Gen 2.0 outsourcing market," he added.

HCL will leverage its 'Enterprise of the Future' framework to continuously upgrade and evolve Anglo American's IT services and infrastructure for users across multiple locations. This framework will allow Anglo American to evolve IT infrastructure services by utilizing a hybrid on-premise and cloud delivery model along with over time adoption of "as a service" model into the enterprise.

Mindtree launches Gladius, a video management software for advanced surveillance

MINDTREE LIMITED HAS launched Gladius, a video management software targeted at city surveillance, enterprise sectors, industrial and retail industries. "Gladius Video Management Software is a testimony of Mindtree's continued focus to engineer innovative solutions that simplify business and adds unique value to our customers," said S Janakiraman, CTO, Mindtree Limited.

Gladius Video Management Software will provide benefits like scalability, advanced

video analytics, smart video streaming, and can be unified with video data, access control events and alarms. It supports a wide range of industry-leading IP cameras and encoders, and will also be available as an application for iOS and Android platforms for on-the-move mobile surveillance.

The solution will be offered to customers in India and globally through a network of system integrators who will help customers with deployment and training on the software usage.

Indian service providers top Zinnov's annual GSP Rating 2013

ZINNOV MANAGEMENT CONSULTING, has announced its Ratings of Global R&D Service Providers' across geographies. Global R&D Service Providers (GSP) Rating 2013 is an annual study to assist business leaders spearheading global engineering initiatives make the right decisions in partner selection across geographies.

Indian service providers have clearly emerged as the leader and soon India will have a $1 billion Product Engineering Services player in the market, according to the study. The service providers can be broadly classified into three groups – Wipro, HCL, TCS, Tech Mahindra and Infosys, comprise of the first group that has a significant large product engineering practice and cover most of the outsourced R&D activity.

iGATE, L&T TS, Infotech, Mindtree and Symphony Teleca, are part of second group that continue to expand their coverage across verticals and are transforming to take on larger players across all the verticals. While, the third group is a set of niche companies like Aricent, KPIT Cummins, Persistent Systems, Sasken, eInfochips, Quest Global, Tata Elxsi and Tata Technologies.

Based on the study's criteria including human resource, product development capabilities, financials and others, TCS topped with the most expansive service offering across all the verticals, while Wipro and HCL being heritage engineering and R&D service providers, have deep and strong capabilities in this space, the study noted.

Tech Mahindra has emerged as a strong in this segment with strong eco-system support from the engineering capabilities of the Mahindra Group and erstwhile Mahindra Satyam. Infosys is strengthening and growing its presence in areas like semiconductors and electronics and notably, its strong training engine for Engineering R&D

gives it a definite edge. The niche leaders continue to enjoy a dominant position in their respective verticals of operations and have considerably increased the non-linear revenue as a percentage of overall revenue, according to the study.

Overall from an operations perspective, attrition has remained stable at around 14% in this segment and the companies have been able to sustain the pricing pressures and retain the billing rates. There has been a significant uptake in terms of alternate pricing models like risk rewards, revenue share and the service providers are now proactively approaching customers with these new business models. Since the last year, the service providers have significantly invested in lab infrastructure; the Indian service providers alone have invested over $25 million in lab infrastructure.

According to Zinnov study, the overall R&D spending by companies across the

world continues to grow at a brisk rate and the top 500 R&D spenders alone have invested close to US$ 560 million in R&D. R&D Globalization continues to be on the rise with India and China garnering a major share of the engineering services revenues. Over 225 new R&D centers were set up in India in last 5 years. Indian service providers continue to retain the lion's share of the overall Engineering and R&D outsourcing pie – accounting 23% of the overall market.

Currently, the total exports in the Engineering R&D outsourcing segment from India stood at US$ 16.3 billion. However, the growth in the same segment lagged the overall Indian industry growth rate and stood at 10.9%. Engineering analytics is a significant opportunity area, with over spending in this segment set to increase to around US$ 27 billion by 2017 at a rate of 16.5%, the study stated.

Juniper launches production-ready SDN solution

JUNIPER NETWORKS HAS announced the availability of Juniper Networks Contrail, a standards-based and highly scalable network virtualization and intelligence solution for software-defined networks (SDN). Contrail is a production-ready SDN solution shipping today, that is based on stable and proven networking standards. This network virtualization and intelligence solution has been in trials with more than 40 global customers. Juniper Networks is also unveiling new technology development partnerships and product integrations with Contrail that will help customers pragmatically and confidently evolve to SDN.

The solution also offers a robust analytics engine, providing a real-time view into network operations. Contrail empowers customers to quickly bring new services to market by providing a smooth transition with automatic provisioning and dynamic service chaining in cloud environments that run on x86-based servers. The commercial version of Contrail is available through Juniper Software Advantage and is offered as both a perpetual and subscription software license. Perpetual license is priced at $1,700 per socket and

one year subscription license at $1,000 per socket.

Juniper Networks Contrail, formerly known as JunosV Contrail, the network virtualization and intelligence solution is comprised of all the components needed to create a virtual overlay network: SDN controller, vRouter, and analytics engine. It is a simple way to connect physical networks with a virtual environment and provision underlying services, reducing the time, cost and risk for customers when configuring the network.

Juniper Contrail can be seamlessly integrated with Juniper Networks flagship virtual firewall, Firefly Perimeter, which is the first of many Juniper SDN-enabled security services that provides unparalleled performance, scale and coverage across virtualized data centers. With this integration, customers can benefit from simplified orchestration, provisioning and management of service-chained virtual and physical security services.

In a related announcement, Juniper Networks introduced OpenContrail, an open source software platform that makes the core software powering Contrail available through an open source license.

ZyXEL partners with QNAP for 10G Ethernet powered NAS solution

ZYXEL COMMUNICATIONS, A provider of secure broadband networking solutions has partnered with a commercial Network Attached Storage (NAS) provider QNAP to create affordable, 10G Ethernet powered NAS solution packs for small to mid-size companies (SMB). The solution packs include ZyXEL's XGS1900 series Web-managed smart 10G Ethernet switches and QNAPs TS-870U-RP NAS appliance.

To capitalize on the benefits of virtualization, SMBs need a lightning fast network and high performance storage solution. Field-tested to ensure optimal performance, the ZyXEL 10G switches and QNAP NAS solution pack claims to meets the SMBs unique needs. The joint solution promises compatibility with a range of virtualization platforms offering data center operators the reliability of a robust solution at an attractive price point.

Together, the ZyXEL 10G switches and QNAP NAS claim to alleviate network congestion and deliver backup and disaster recovery capabilities to SMBs. This is critical as more connected devices are added to the network, and the popularity of applications like video processing, business analytics and multimedia that demand large bandwidths and big storage keep escalating.

Intel launches its latest Xeon processors in India

AS THE MASSIVE growth of IT services places increasing demand on the data center, Intel India has outlined its strategy to re-architect the underlying infrastructure, allowing companies and end-users to benefit from an increasingly services-oriented, mobile world.

Intel's global data center business, which generates more than US$ 10 billion in revenues annually, develops solutions that help businesses keep pace with the increasing demand for cloud services and for managing data generated from billions of users and connected devices worldwide.

Intel's goal is to re-architect the data center to enable a common, software-defined foundation for both data centers and cloud service providers that span servers, networking, storage and security.

As part of strategy Intel unveiled its Xeon Processor E5-2600 v2 product family which promises up to 45% greater energy efficiency and 50% higher performance as compared to the previous generation. The other products Intel launched are the Intel Atom C2000 processor family, first based on Silvermont micro-architecture.

The company announced that the 4th Gen Intel Core vPro processors offer a range of enhanced capabilities across security, manageability and productivity. Intel SSD Pro 1500 Series is optimized for the business user offering secured data and more productivity to the user with faster boot and application start times.

This robust pipeline of current and future products and technologies will allow Intel to expand into new segments of the data center in India. The role of information technology has evolved from being a way to reduce costs and increase corporate productivity to becoming the means to deliver new services to businesses and consumers.

"Data centers are entering a new era

Narendra Bhandari, Director, Software and Services Group, Intel Asia Pacific, unveiling the new Xeon processor in Banaglore

of rapid service delivery and we continue to see significant opportunities for growth across network, storage and servers. In many cases, it requires a new approach to deliver the scale and efficiency required, and today we are unveiling the near and long-term actions to enable this transformation. Through this initiative, we are looking to accelerate Intel's progress in the enterprise space in India with high performance solutions that address the high performance needs of the fast evolving space," said Narendra Bhandari, Director, Software and Services Group, Intel Asia Pacific.

National Stock Exchange (NSE), the world's largest bourse in terms of number of equity trade has been collaborating with Intel to address their huge compute requirement. NSE's current application 'PRISM' was being run on the previous

version of Xeon servers and optimization & performance testing was carried out on Intel Xeon Processor E5-2600 v2 product family.

N Muralidaran, Chief - Special Projects (NSE) & Director (NSETECH) said, "The ever increasing want of exchanges for efficient and high-performance data center infrastructure, makes them early adopters of cutting-edge technology advancements. We often closely align our technology roll out with Intel's new processor releases to meet ever increasing compute needs and it reinforces NSE's leadership position".

He further added, "For PRISM, the Intel Xeon processor E5-2600 v2 product family has delivered 1.55x higher throughput than the previous generation. This brings promise for capacity expansion per $ for many other applications too."

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