

EXPRESS COMPUTER

INDIA'S FOREMOST ENTERPRISE IT MAGAZINE

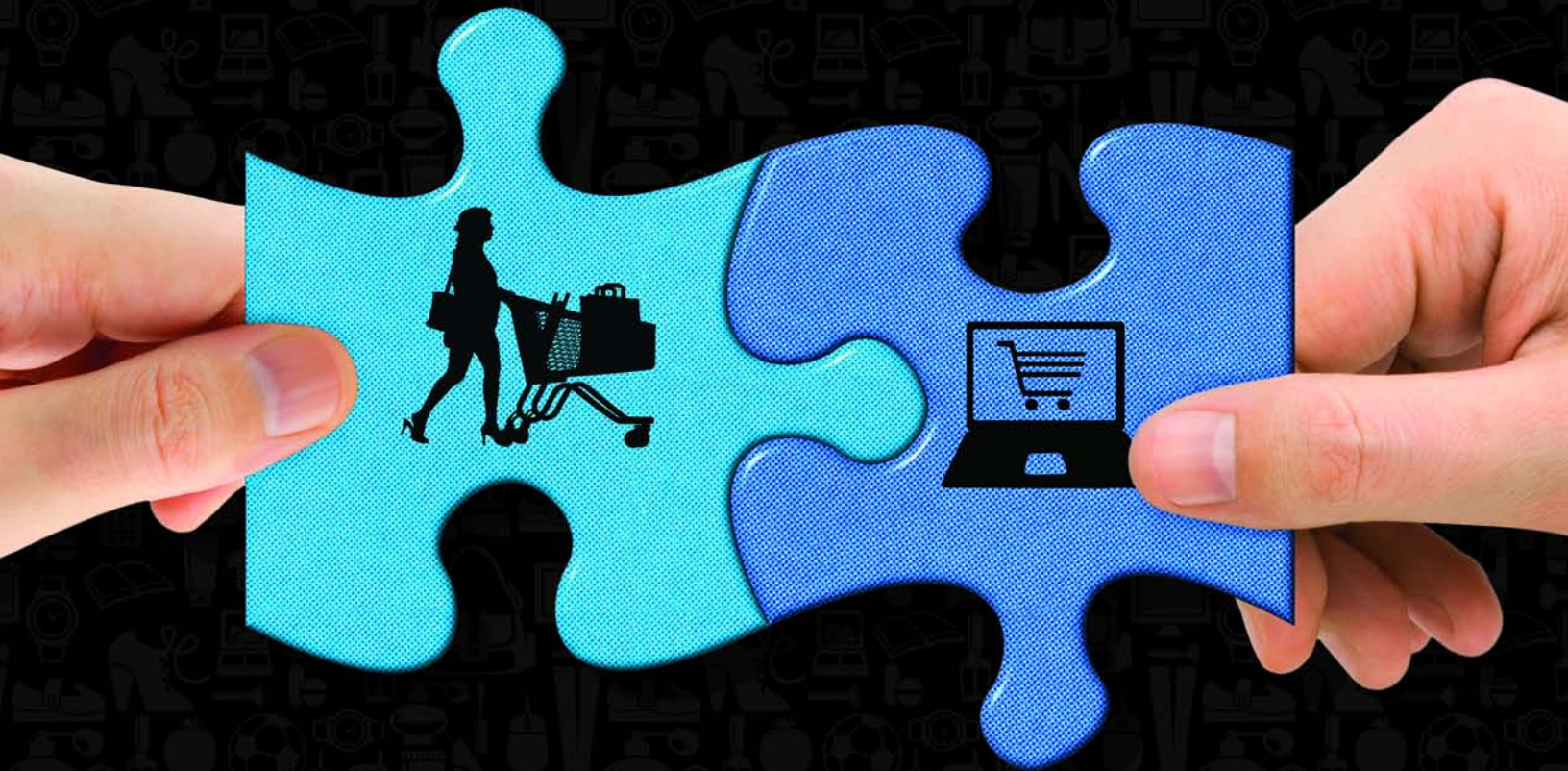
1-15 FEBRUARY, 2014, ₹75



FROM
E-INCLUSION TO
E-SERVICES

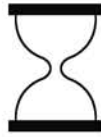
BEYOND TECHNOLOGY

How do CIOs manage dual roles?



THE RETAIL JIGSAW

With brick and mortar retail chains setting foot in the online space as well, the boundaries between e-tailers and retailers are getting intertwined. Can technology solve the retail puzzle?



You're just 180 seconds away from an instant
subscription to Express Computer

For subscription as easy as ABC, just log on to www.expresscomputeronline.com and click 'Subscribe Online'. For further information, you can also contact us on 022-67440451 or email us at bpd.subscription@expressindia.com



edit
////////

RETAIL WARS GO ONLINE



////////
THE NEXT FEW
YEARS WILL
SEE THE BATTLE
FOR E-WALLETS
INTENSIFY
AMONG
RETAILERS
AND E-TAILERS

Retail, like many other post-liberalization phenomena in India, is unfolding in a curious way. In the first wave, we saw the Shoppers Stops and Big Bazaars of the world develop millions of square feet of retail space all over India. First in the metros and then in the A and B class cities. (Perhaps we are in the C-town phase right now.)

All those glitzy malls and neatly lined up goods and goodies immediately captured the imagination of the country's swelling upper middle-class, middle middle-class, lower middle-class and what-class-you.

And not unlike other sectors, retail too had its share of growth pangs — one of the critical ones being lack of a holistic technology infrastructure that could smoothen the links in the chains' operations, sourcing and customer service.

It was not uncommon (and still can be seen) to witness frequent stock-outs, failure of barcode scanners, confusion in the loyalty schemes and poor customer redress systems.

But as the early gusty wind blew its course in the initial years of hyper-growth retail, and as converting more footfalls into additional buyers became increasingly challenging, the players took a relook at their expansion plans, store formats and, yes, technology-enablement.

The role of IT in driving business has also come to the fore with the entry and relative sophistication of several e-tailers, notably, Flipkart, Myntra and eBay, among others (global behemoth Amazon is a recent entrant that is sure to create ripples). The consumers, having gained some e-confidence from exposure to online banking and ticketing, began showing a more than transitory interest in what these guys had to offer — which, at the moment, is quite a lot, ranging from diapers to dinners.

The online retail startups were initially ignored by the “big-and-mortars”. But when the sites got significant traction from buyers, they got tense, went into brooding, and came up with their own online shopfronts.

The way the boundaries between retailers and e-tailers are overlapping, thinning or merging is interesting to watch. If anything, the next couple of years will see the battle for shoppers' e-wallets intensify (provided the nagging questions of FDI in retail are settled in a pro-growth manner and connectivity takes those next leaps in bandwidth and penetration).

Going forward, enterprise IT investments in retail should also grow beyond the current estimates of about \$2.5 billion (as per a Gartner report, this is growing annually at over 12%).

In fact, in addition to those show windows and inviting images, technology can prove to be quite a differentiator in attracting and retaining consumer interest — for retailers and e-tailers alike.

sanjay.g@expressindia.com



No1 Indian UPS
Manufacturing Company

Complete
Power Solution
for Uninterruptable
Progress

National Distributor -
Global

UPS ▶ SOLAR ▶ SERVO ▶ INVERTERS



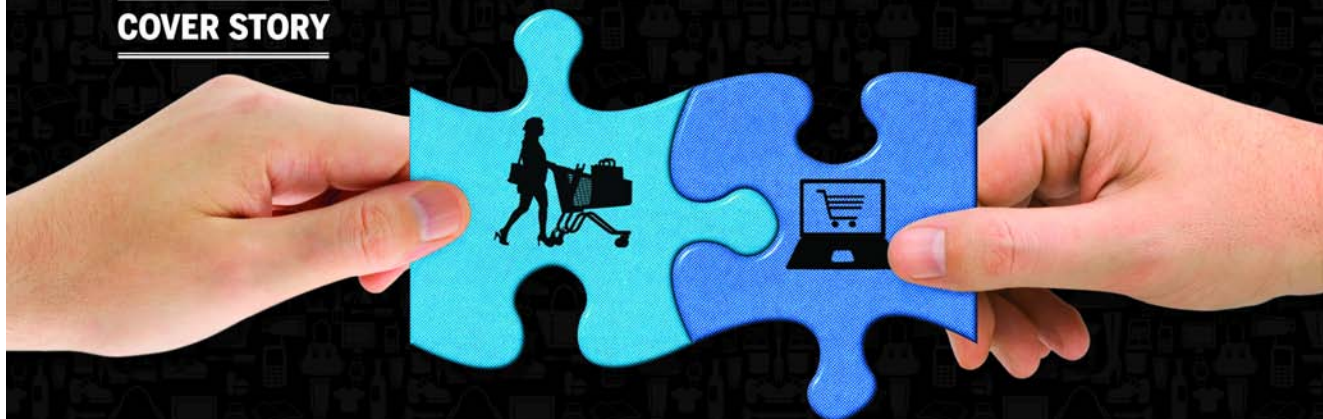
UNILINE
Power to Control Power

- WIDE PRODUCT RANGE
 - 16 REGIONAL OFFICES
 - 140 SERVICE LOCATIONS
- Products Available thru
DGS&D and State Orgns / Deptt

UNILINE ENERGY SYSTEMS (PVT) LTD. : Uniline House, Ramesh Market, East of Kailash, New Delhi - 110 065 - Sanjay Gupta NSM - 0 98102 65258 -
Tel : 011 4666 1111, 2646 9031, 2646 9108 Fax : 011 - 2648 1469 uniline@uniline.in Toll Free: 1800 1022 011 www.unilineindia.com

8

COVER STORY



THE RETAIL JIGSAW

With brick and mortar retail chains setting foot in the online space as well, the boundaries between e-tailers and retailers are getting intertwined. Can technology solve the retail puzzle?

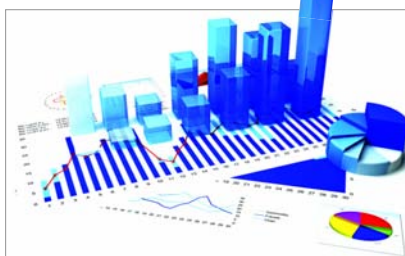
feature



CIOS IN DUAL ROLES

CIOs are often expected not just to tackle technology but also shoulder additional roles and responsibilities to drive their respective enterprises. How do they manage?

40



BI: WHAT COUNTS

Are you looking to roll out a business intelligence project for your organization? Take a look at the scenario unfolding at ABC Corporation before you take the plunge

46

column

CUSTOMIZE YOUR DEFENSE AGAINST APTs

By Dhanya Thakkar

52

BYOD: BEYOND THE DEVICE

By Sudhir Narang

54

E-LEARNING AND SOCIAL COMPUTING

By Sumeet Anand and S.M. Nafay Kumail

56



event

16

15TH EXPRESS TECHNOLOGY SABHA 2014

Day 1: Tamil Nadu Governor, K. Rosaiah's keynote centered around inclusive growth, provided an apt opening to the 15th edition of the Express Technology Sabha

Day 2: Day 2 was action-packed and opened with a keynote address that focused on citizen-centric services for governance

Day 3: An engaging presentation by Rajesh Aggarwal on new trends in governance, and many other informative sessions made up for a fitting finale to the event



in the news

58

» Google sells Motorola Mobility to Lenovo for \$2.9 billion

59

» Tata Docomo to offer communication services at MIAL

60

» CeBIT, iSPIRT to promote India as a product nation

» Oracle expands cloud services for India

62

» Citrix, VMware, NComputing lead the pack in client virtualization: IDC

» Lenovo to acquire IBM's x86 server business

» Cambium Networks opens wireless facility in Bangalore



interviews

14

CARDI PRINZI

President of Enterprise Markets at Pacnet

“Dynamically provisioning bandwidth across Asia is pretty unique”

45

ALAN TREFLER

Founder and CEO, Pegasystems Inc

“Our core strength is to link business and technology”

57

RAJ NERAVATI

Chief Operating Officer, Cigniti Technologies

“Absence of established ROI makes automation an expensive affair”

EXPRESS COMPUTER

INDIA'S FOREMOST ENTERPRISE IT MAGAZINE

Vol 24. No. 23. 1-15 February 2014

Chairman of the Board

Viveck Goenka

Editor

Sanjay Gupta*

Delhi

Heena Jhingan, Pupul Dutta,
KTP Radhika

Mumbai

Jasmine Desai, Harshal Kallyanpur

Bengaluru

Pankaj Maru

DESIGN

National Art Director

Bivash Barua

Deputy Art Director

Surajit Patro

Chief Designer

Pravin Temble

Senior Graphic Designer

Rushikesh Konka

Layout

Vinayak Mestry, Rajesh Jadhav

Photo Editor

Sandeep Patil

MARKETING

General Manager

Dr. Raghu Pillai

Deputy General Manager

Harit Mohanty

Deputy General Manager

Prabhass Jha

Circulation

Mohan Varadkar

Scheduling

Rohan Thakkar

PRODUCTION

General Manager

B R Tipnis

Manager

Bhadresh Valia

MUMBAI

Shankar Adaviyar
Business Publications Division
The Indian Express Ltd.,
1st Floor, Express Towers
Nariman Point
Mumbai 400021, India.
Phone: (91-22) 6744 0000, 2202 2527
Cell Phone : +91-9323998881
Fax: (91-22) 2288 5831
Email: shankar.adaviyar@expressindia.com

NEW DELHI

Navneet Negi
The Indian Express Ltd.,
Business Publications Division
Express Building (Basement),
9 & 10 Bahadur Shah Zafar Marg,
New Delhi - 110 002
Tel: 011 - 23465670, 011-23465665
Fax: 011 - 23702161
navneet.negi@expressindia.com

CHENNAI

Johnson Rajkumar
Business Publications Division
The Indian Express Ltd.
New No.37/C (Old No.16/C)
2nd Floor, Whites Road,
Royapettah, Chennai - 600 014
Phone: Board : 044 - 28543031 - 34
Fax : 044 - 28543035
Direct : 044 - 42285520, 42285518,
42285534
E-mail: johnson.rajkumar@expressindia.com

BANGALORE

Gunjan Chauhan
Business Publications Division
The Indian Express Ltd.
502 Devatha Plaza, 5th Floor
131 Residency Road
Bangalore - 560025
Tel: 22231923, 24, 41, 60
Fax: 22231925
E-mail: gunjan.chauhan@expressindia.com

HYDERABAD

E. Mujahid
The Indian Express Ltd.
Business Publications Division
6-3-885/7/B, Ground Floor,
V.V Mansion Somaji Guda,
Hyderabad - 500 082

Tel: 23418673, 674,
Fax: 23418675, 66631457
E-mail: e.mujahid@expressindia.com

KOLKATA

Debnarayan Dutta
The Indian Express Ltd.,
Business Publications Division,
National Highway-6 (NH 6)
Mouza- Prasastha & Ankurhati,
P.S Domjur, Dist Howrah - 711409. Kolkata.
E-mail: debnarayan.dutta@expressindia.com

KOCHI

The Indian Express Ltd.,
Sankoorikal Building
36/2248, Kaloor-Kadavanthara
Road, Opp. Kaloor Private Bus Stand
Kaloor 682 017
Tel. Nos.: (0484) 2343152, 2343328
Fax.: 2343153.
E-mail: raghu.pillai@expressindia.com

JAIPUR

The Indian Express Ltd.,
C-7, Dwarika Puri, Jamna Lal Bajaj Marg,
C-Scheme, Jaipur 302001
Tel: 370002/371272, Fax: 376606

BHOPAL

The Indian Express Ltd.
6, Vidya Vihar, Professors Colony,
Bhopal - 462002 Madhya Pradesh
Tel: 0755 - 2661988

AHMEDABAD

The Indian Express Ltd.,
3rd Floor, Sambhav House,
Nr, Judges Bungalow, Bodakdev,
Ahmedabad 380 015
Tel: (91-79) 26872481 / 82 / 83
Fax: (91-79) 26873950

Important E-mail contacts:

bpd.subscription@expressindia.com
(for all subscription-related queries)
sanjay.g@expressindia.com
(for editorial-related matters only)

IMPORTANT

Whilst care is taken prior to acceptance of advertising copy, it is not possible to verify its contents. The Indian Express Limited cannot be held responsible for such contents, nor for any loss or damages incurred as a result of transactions with companies, associations or individuals advertising in its newspapers or publications. We therefore recommend that readers make necessary inquiries before sending any monies or entering into any agreements with advertisers or otherwise acting on an advertisement in any manner whatsoever.

Express Computer

Reg. No. MH/MR/SOUTH-132/2012-14 RNI Regn. No. MAHENG/49926/90

Printed for the proprietors, The Indian Express Limited by Ms. Vaidehi Thakar at Indigo Press, (India) Pvt. Ltd. Plot No. 1c/716, off Dadoji Konddeo Cross Road, Byculla (E), Mumbai 400027 and Published from Express Towers, 2nd Floor, Nariman Point, Mumbai - 400021. (Editorial & Administrative Offices: Express Towers, 1st Floor, Nariman Point, Mumbai - 400021) Editor : Sanjay Gupta (*Responsible for selection of News under the PRB Act.) Copyright © 2012

The Indian Express Ltd. All rights reserved throughout the world. Reproduction in any manner, electronic or otherwise, in whole or in part, without prior written permission is prohibited.

And now, the future



Express Computer has for over two decades been providing IT professionals with just what they need to stay ahead. The complete picture.



Cover Story | Trends | Case Study | News Analysis | Products | Interviews | News | CIO Profile

To advertise, please write to raghu.pillai@expressindia.com



Retailers

e-tailers

THE RETAIL JIGSAW

With brick and mortar retail chains setting foot in the online space as well, the boundaries between e-tailers and retailers are getting intertwined. Can technology solve the retail puzzle?

BY PUPUL DUTTA

“There’s no luck in business. There’s only drive, determination, and more drive.”

This quote from Sophie Kinsella’s book, *Shopaholic Takes Manhattan*, reflects the current situation in the retail industry wherein retail giants are competing with one another in order to grab a larger pie of the business. And while there are discounts

and freebies to lure the customer, companies are also adopting newer technologies to bring down their operational costs and, at the same time, provide a better customer experience.

Besides, with the growing popularity of social networks that influence the choices of consumers, traditional business models are undergoing a massive transformation driven by digital technologies.

Globally, the retail automation market is expected to reach about \$973 billion by 2018, growing at an estimated CAGR of 13% from 2013 to 2018, according to a MarketsandMarkets report. Given that the organized retail market in India is only now beginning to come into its own, and the fact that the neighborhood stores are still dominant, there is tremendous growth and scope for automation solutions in India. The retailers are increasingly tying up with solution vendors for leveraging radio frequency identification (RFID), smart card and Wi-Fi technologies, among others.

Issues plaguing the industry

Despite advancements in technologies, the retail industry is still plagued with a lot of issues that can be resolved only by adoption of better technologies or approaches. Customer stickiness is one of the prime issues which most big retailers face. Given the myriad choices, it is easy for customers to move from one shop to another which may offer even the smallest of discounts.

Furthermore, transparency and tracking of supplies, customer data, global data synchronization, management of inventory etc. are some of the other pain areas.

“Some of the common challenges that retailers face are supply chain optimization and getting warned early about stock exhaustion, followed by customized marketing for customers,” notes Dinesh Jain, Country Manager, Teradata India.

Human resource retention is another key challenge that retailers are facing. Attrition rates are high and with shop floor resources continually changing, the IT solution should be such that it is simple to learn so that a new resource can be put on the floor as fast as possible.

Punit Agarwal, CEO, Promart Retail India, adds that retailers today need better transparency between systems and better tracking to integrate systems from manufacturer to consumers to obtain customer and sales information. All this information not only helps in preventing wastage but also gives a better understanding of the clients in question.



The global retail automation market is expected to reach about \$973 billion by 2018, growing at an estimated CAGR of 13% from 2013 to 2018

So, customer experience management remains the lifeblood of retail businesses. “Retailers in the organized sector have started focusing on solutions and products that will help them deliver better experience. They are now looking for technology which will empower them with a 360 degree customer view, help with cross channel orchestration, integrates with social networks and also provides ease of operations over hand held devices,” explains Virender Jeet, Senior VP - Technology, Newgen Software.

Shift in technologies

Engagement with the customers is now the key success factor. Today's customer is well informed and most of the time, when he comes to the store, he is almost sure what he is looking for. In this scenario, if the representative engaging with that customer is also not equally equipped, the entire experience just nose dives.

“Empowering employees is one of the most crucial aspects in the business now. It is important to enable sales associates with all the information they need to make the most of face-to-face time with

customers. A customer walking in the store is a ready prospect and an effective engagement will make sure that he becomes a loyal customer,” explains Samik Roy, Director and Business Head, Microsoft Dynamics (Applications) Business, Microsoft India.

“This needs intuitive tools that offer information about him (customer) readily. Arm the employees with relevant information through role centers — dashboards, devices that deliver sufficient set of information relevant to each individual customer, so they can make a relevant conversation,” Roy adds.

Most Indian retail organizations have started investing in customer facing technology; offering assisted sales being one of the key aspects which helps them reach out to consumers. Many such investments are underway. Kiosks, loyalty programs, e-commerce are examples of the same. “A good shopping experience and after sales support is important to ensure customer loyalty but offering additional benefits ensures same footfall again. Therefore, retailers offer customers with add-ons like discounts,

freebies, extended warranty, etc. from time to time,” explains Chandan Chakraborty, Head – Information Technology and Service, Digiworld.

Along with this, big retailers are offering 'shop while sitting at home solutions', i.e. e-commerce. These websites not only enable customers to shop at a convenient hour but also compare multiple brand products in one go. This helps the customer who wants to understand the product before going to the retailer shop and making the final purchase.

According to Agarwal of Promart, retailers nowadays work closely with their vendors to predict consumer demand, shorten lead time, reduce inventory holding and ultimately save costs and increase consumer satisfaction. “In a country like India, where the consumer is the king, the main focus of any retail chain is to keep the consumer happy. They try to keep track of the consumers’ buying pattern and their choices in order to increase consumer loyalty,” he notes.

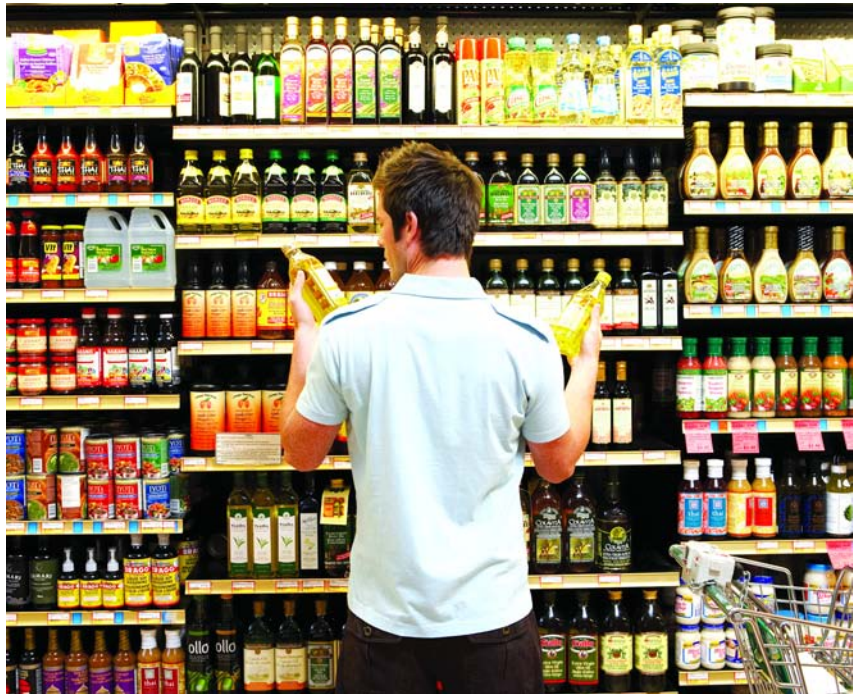
Technology is also being leveraged to provide project management capabilities to monitor the progress of store launches. Management of logistics and innovative use of video analytics can help enhance customer experience, thus helping companies build affinity towards a particular brand.

Roy of Microsoft further adds that the future of retail lies in multi-faceted customer engagement known as omnichannel retail. “Times are changing with more and more consumers making on-line purchases; an increasing number of consumers looking to Facebook for information on their favorite retailer before making a purchase; consumers entering shops and posting about their buying decision etc. Retail organizations are looking to expand and re-define their physical store locations to drive a more direct and personalized brand experience,” he explains.

Integrating CRM and ERP

Increasingly, the trend is to integrate CRM with ERP that offers not just full end-to-end functionality and capability but also flexibility to organizations to deploy resources as per their needs.

A TALE OF TWO RETAILERS



SSIPL Retail, a leading specialty retailer of premium international sports and lifestyle brands in India such as Nike, Levis, Lotto and United Colors of Benetton, with over 350 retail outlets in the country, decided to deploy Microsoft Dynamics for Retail. Today, more than 250 stores are live, giving the organization great value from this project. Microsoft’s solution has empowered the company to be dynamic, by delivering a complete shopping experience with a seamless and differentiating solution for point of sale (POS), multichannel management, store operations, e-commerce, merchandising, financials, supply chain, and more. It has helped SSIPL handle more than one million transactions per day ranging from purchase orders and sales orders to invoices and transfer-in/out for all 250 stores. Dynamics AX helped the company integrate all store front processes with the head office and manufacturing functions. It delivered a 360 degree view of the organization with centralized control and near real time data. “SSIPL today is confident of meeting their growth plans and we are happy to be their partner in this journey,” said Samik Roy, Director and Business Head, Microsoft Dynamics (Applications) Business, Microsoft India.

Myntra, a popular e-commerce website used Facebook as a marketing channel to acquire new customers, increase engagement with existing customers and create strong brand credibility among target consumers. Their Facebook advertising was aimed to achieve objectives that included - targeting of the exact demographics of potential active buyers on Myntra, increase in the number of fans on its official Facebook page and reach out to friends of fans (using sponsored stories) to become fans of its Facebook page. As a result, Myntra saw a 120% increase in transactions originating from Facebook over a period of six months and 25% of their overall revenue can actually be attributed to Facebook. “There was an astonishing 300% increase in reach among Facebook fans as well within three months,” notes Myntra spokesperson. The retailer now further intends to scale up their marketing efforts using this channel. The case of Myntra exemplifies what brands can achieve via Facebook advertising, especially when it costs as little as \$5 a day.



A good shopping experience and after sales support is important to ensure customer loyalty but offering additional benefits ensures same footfall again.

Chandan Chakraborty,
Head - Information Technology and Service, Digiworld



It is important to enable sales associates with all the information they need to make the most of face-to-face time with customers.

Samik Roy,
Director and Business Head, Microsoft Dynamics (Applications) Business, Microsoft India



IT companies like Microsoft are already offering such solutions with attractive features. The company's flagship offering, Microsoft Dynamics for retail, covers PoS, merchandising, multi-channel management, e-commerce, order and supply chain management, financial, CRM, loyalty and integration, along with Microsoft Kinect for a unique customer experience and much more. "All of this is on one platform and is one end-to-end solution. Having said that, the solution offers full flexibility to organizations to deploy things as per the need. Even if an organization has a competitive existing solution, they can deploy unique parts of our solution, e.g. POS, store management, CRM, loyalty and integrate the same with the existing solution," says Roy.

With consumer being the key driver, it has become imperative for retailers to have a solution that gives them a consistent view of customer across multiple channels — which is possible only by having a single source of truth as far as customer information is concerned. Same holds true for inventory as well. With consistent and seamless information of these two parameters (customer and inventory), across all the channels, an omni-channel approach is becoming the only choice that retailers have today.

Giving his perspective, Sunil Nair, Vice President - IT, Max Hypermarket India says, "Another advantage of having

an integrated system is that it helps in predicting consumer trends, maximizing operational efficiency, giving visibility to business in terms of demand generation, improving supply chain efficiency and manage vendors effectively."

Beyond brick and mortar: e-tailing

With changing times, shopping is not just restricted to going to malls or to a nearby kirana store. The world is fast moving towards online shopping giving consumers the freedom to shop anytime, anywhere. In such a competitive environment, retail giants are finding it tough to compete with online stores and keep up with their efficiency. Not just are consumers spoiled for choice but they are also given heavy discounts to keep them coming back.

To deal with a situation like this, brick and mortar stores have launched their online versions too, enabling customers to order online and pick up from their nearest store.

"Catching a consumer's eye is the most difficult thing to do in this universe. A lot of times consumers don't know what they want until you show it to them. The biggest testimony of this, are some of the very well known online stores which give its users the best buying deals and experience across categories. But once a consumer gets educated and the organized sector realized this, we saw the birth of online specialty stores like Croma and the likes — the outcome is that we see Croma also competing with Flipkart," says Abrar

Shaikh, Founder and CEO, Squeakee.

To sum it up, technology is providing retailers (both brick-and-mortar and online) innovative ways to seize strategic opportunities. The new consumer is a multichannel shopper who interacts with retailers via multiple touch points and expects a seamless cross-channel experience.

Dawn of a new era

Retail in India has changed since the past few years. This is just the beginning of a changing era in the world of retail. All that the end consumers want today, and, in the future, cannot be obtained without the use of technology. Today's retail landscape offers unprecedented opportunities alongside some daunting challenges. Economic factors, the increasing choice in products and shopping formats, and unparalleled access to information are fueling today's empowered shoppers, who expect more from their retail experience. It is also clear that the focus of the retail experience has expanded well beyond the walls of the physical store, and now includes everything from the retailer's website and call center to marketplaces and social networks. One can notice that for many products, the end consumer or customer has already decided which product to buy even before entering the retail shop. A true multi-channel and omni-channel retail experience is the call of the day!

Social media is another aspect of today's retail. With customers posting shopping choices on Facebook and the likes not only helps brands but also puts pressure on the manufacturers. Word of mouth technique which has worked over the decades has just become more popular over the past couple of years, with Twitter handles and Facebook pages of all the popular brands.

Sachin Rao, Country SMB Manager, Facebook says, "For decades now, businesses have relied on the recommendations of friends and family to acquire new customers and grow sales. Facebook takes this word-of-mouth marketing and amplifies it, bringing the offline world of mouth publicity to the online world and helping brands to build their business online, or to it scale up. It

holds true for both large and small brands. For many e-tailers specifically, time and money are available in limited proportions and Facebook has been made as an easy-to-use, cost-effective way to promote their companies — in a manner very similar to how people are accustomed to using Facebook personally."

A lot of online retailers are already using Facebook, because it simply involves setting up a Page, posting updates and promoting posts. But the key is now to graduate from the 'likes' business, to listening and engagement. A stronger and more aligned listening and engagement strategy will ensure better business rewards for a brand.

Furthermore, a self checkout solution is another aspect for retailers to increase their profit margins. "Today, a number of companies are using the self-service kiosk for the sale of their products, thus reducing the time spent by customers waiting in the billing queue and manpower cost required for the billing process. However, this technology is still in the development phase in India, especially in the retail sector, but once implemented, it would have a great utilization in the future ahead," notes Chakraborty of Digiworld.

Going forward, we are likely to witness mobility solutions like queue busters which will help customers transact anywhere in the store and provide a personalized experience during the purchase. Market experts also foresee a much greater adoption of big data and analytics. "Personalization will take customer experience to the next level. Big data and analytics will be used to bring together several pieces of information such as customer history, social media posts, time of the day, etc. Mobile devices will become pivotal to retail activity. Apps, in-store digital displays, hand-held devices with store associates and field staff will see a huge adoption," asserts Salil Godika, Chief Strategy and Marketing Officer and Industry Group Head, Happiest Minds Technologies.

But a lot of ground still needs to be covered before we will see shopaholics taking India.

pupul.dutta@expressindia.com



Facebook takes word-of-mouth marketing and amplifies it, bringing the offline word of mouth publicity to the online world.

Sachin Rao,
Country SMB Manager,
Facebook



An integrated system helps in predicting consumer trends, maximizing operational efficiency, giving visibility to business in terms of demand generation.

Sunil Nair,
Vice President - IT,
Max Hypermarket India

CARDI PRINZI
PACNET

Cardi Prinzi, President of Enterprise Markets at Pacnet, speaks to Jasmine Desai about the company's network, growth strategy, and its latest offering for enterprise, service provider and carrier customers

“Dynamically provisioning bandwidth across Asia is pretty unique”

What is Pacnet's presence in the APAC region?

We offer network services and data center services. We are opening a 6 megawatt data center in Singapore. We own the largest sub-sea fiber in the APAC region. We are the only non-Chinese carrier to have a license to conduct telecommunication activity in China. We have an MPLS license in China. We focus a lot on MNCs and Asian companies that need support in Asia. It will tell them how much bandwidth have they got and what the latency is. Many customers are still going to buy traditional network services. But for us, it is bringing the concept of cloud economics to network. In India we have Points-of-Presence (PoPs) in Mumbai, Bangalore, Chennai and Noida. We work with data center providers. In those data centers, enterprises, whether they are a customer or not can connect to PEN (Pacnet Enabled Network).

We have a very robust backbone. We did a 100 gigabyte upgrade to our network system. We have multiple fibers coming to multiples markets all across Asia. We have actual fibers coming in Singapore from different location and converging in Hong Kong. We have the capacity to support PEN. As customer demand starts increasing, we will be able to go to these network POPs and put a PEN switch into the device in POP, such that the customer can just plug in. Even SaaS providers could access this to provide services to their customers.

What key reasons would draw enterprises to PEN?

Dynamically provisioning bandwidth across Asia is pretty unique. It really becomes network-as-a-service. For example, an organization has a data center in Bangalore and Mumbai. We will pre-provision PEN for a customer and they can specify the bandwidth they want between these locations and define their SLAs. With a click of a mouse, the network will be up.

This is unique to other software defined network announcements. It guarantees latency and offers pay-as-you-use option to customers. Typically, customers buy private lines and pay for bandwidth on a whole. Pacnet customers



How is SDN a part of PEN?

SDN sits on top of the network and allows Pacnet to create Bandwidth-On-Demand through PEN. Consider a tap with flowing water, wherein, the tap knob is the SDN interface which determines how much water flows through the tap and customers are billed accordingly. In this situation, PEN is the pipe through which water travels through the tap. We are going to create a situation where it is bandwidth on demand.

can choose what they pay depending on the usage and get bandwidth, latency and connectivity as per their needs. It is an attempt to bring the economies of the cloud into the network.

How can PEN help when it comes to addressing the growing complexity in data traffic?

We expanded our capacity this year and believe that the ability to choose an SLA of their choice is the greatest asset we offer to our customers. We do not own and operate major DCs in India. Network PoPs are located in data centers in Mumbai, Noida and Chennai and we operate a small data center in Bangalore. We offer Ethernet, private line and MPLS connectivity in the country. All POPs connect in India to Chennai and through this, we direct traffic to Singapore, Japan and US etc. We work with Sify in Chennai and Netmagic in Mumbai.

What does PEN mean for existing Pacnet customers?

The existing customers of Pacnet can get access to NaaS easily. PEN customers can provision dynamic bandwidth within minutes either through Pacnet Connect, a Web-based portal, or via an Application Programming Interface (API), eliminating the need for manual processes. This gives them the control to customize and configure network based on their performance and quality of service requirements.

Customers can also get pay-as-you-use bandwidth-on-demand connectivity and network, through the hybrid cloud gateway operating on an OpenFlow based software controller. PEN allows customers to access major multiple or large carriers and data centers through the Pacnet network and create a virtualized cross-connected environment.

For Indian customers, we see more demand for services back in US. The biggest challenge here is network stability. It is really important to have a robust IP network network through which to re-route traffic.

jasmine.desai@expressindia.com



EXPRESS
Technology
Sabha
An Express Group Initiative

CHENNAI | JANUARY 16-19, 2014

15th EXPRESS TECHNOLOGY SABHA
FROM E-INCLUSION TO E-SERVICES



CITIZEN-CENTRIC E-SERVICES

In line with the theme of the 15th Express Technology Sabha, K Rosaiah's keynote focused on how the central and state governments can bring about inclusive growth



K Rosaiah, Governor of Tamil Nadu delivering his inaugural speech

TECH SABHA CHENNAI 2014

Citizen-Centric
e-Services | PG 16

Mapping e-Literacy
To e-Inclusion

New Era in
Government IT | PG 17

Security Reimagined

Panel Discussion:
e-Inclusion to
e-Services | PG 18

K Rosaiah, Governor of Tamil Nadu, inaugurated the 15th edition of Express Technology Sabha on January 16 at Hotel Leela Palace, Chennai. The annual event, which sees around 100 senior Government IT leaders from across India share ideas, best practices and innovations on e-Governance, opened with the ceremonial lamp lighting by Rosaiah, Anant Goenka, Director & Head - New Media, The Indian Express, and Sanjay Jaiswal, Senior Vice President, The Indian Express.

Setting the tone for the event, Rosaiah said, "Both the central and state governments should work together to usher in e-inclusion by leveraging ICT. The governments will have to assume participatory role to do that."

He stressed that effective utilization of IT is imperative to offering better services, business interactions, and greater revenue generation opportunities. "Modalities should be developed to deliver citizen-

centric services online," he said.

Pointing out that the first step toward e-Governance has been taken in the country in the form of enablement of online payments of bills and taxes, and procurement of documents like birth certificates, he said, "This is a welcome move, yet we have a long way to go."

He urged the state governments to work on tighter inter-department integration that will be critical for reducing the response time for citizen facing services. "It is not just about reducing time, what is more important is that a time limit should be fixed for the PSUs to respond to citizens," he added.

In his capacity as the Chancellor of the University of Annamalai, Rosaiah appealed to the technical institutes in the state to raise their levels of IT education.

Enhanced collaboration, IP surveillance, and effective backup and disaster recovery will be critical for facilitating superior governance and offering value added services to citizens, he concluded.

Mapping e-Literacy To e-Inclusion

Ashwini Kumar Sharma, Managing Director, National Institute of Electronics & Information Technology (NIELIT), started the session by stating that e-Governance has nothing to do with IT professionals. It is a way of using IT to make decisions.

Inclusion is considered as a set of individual entitlements like human freedom, autonomy, dignity and equitable participation in society and everyone has a right to achieve this. E-inclusion is effective participation of individuals and communities through their access to ICT.

According to him, the five basic components of e-Inclusion are digital literacy, financial inclusion, e-Governance, e-Livelihood and inclusion of disabled/disadvantaged sections.

Explaining why e-literacy is important for e-Inclusion, he said India stands third among all nations in terms of Internet usage. At present, Internet drives about 1.6% of the country's GDP. In developing countries, this figure is 3.4% and India needs to achieve that.

He said that the four pillars of e-Government are people, process, technology and success. There is huge potential for capacity building in people and resources which can only be done through e-Inclusion.

He concluded saying that digital literacy is the most important component for e-Inclusion and NIELIT has started a course on computer concepts, an 80 hour program. Currently, there are more than 5,000 training centers in India and 14 lakh candidates have already taken the course.



Ashwini Kumar Sharma

New Era in Government IT

A citizen's experience is very different from that of an employee, said Aneesh Dhawan, Regional Enterprise Head, VMware, in his presentation.

According to him, people tend to create comparisons in their mind about their experience at office versus the government processes which are still largely manual. The question is how well does the government provide the services and ICT is just a tool. Using IT renders the services much faster. Presently, the entire landscape is undergoing a change.

"For example, now we hardly go to a bank and do most of banking over phone and Internet. Our citizen-centric experiences are now real-time with lots of mobile and social applications," he explained. He mentioned that these days time to provision new services has come down from months to days and hours. This could further be reduced to minutes or seconds.

He said the way today's IT works is also very different from that of yesterday's. From application

perspective, we still have applications coded for mainframe.

Explaining that virtual data center is very much a reality today, he said everything is abstracted and since abstract pool is created, nothing is under-utilized.

Presently, we need to have a situation where any device can be used for a certain application. That is where end-user devices come into play. For instance, in government hospitals the reports still do not come on time. The hospitals can be more efficient by consuming tablets or any other mobile device.

"Applications need to be bought to citizens much faster. A recent survey by Gartner indicates that agility, efficiency and how simply application can be made available are major drivers. As per a survey by VMware across APAC, 60% of organizations have virtualized their infrastructure. It is a journey, he said.

The session ended with Dhawan saying that VMware is working on solutions that will help enterprises to minimize TCO and build for future.



Aneesh Dhawan

Security Reimagined

Steve Ledzian, Senior Systems Engineering Manager - South Asia, FireEye, shared some interesting numbers defining the cyber security threat scenario globally. Perhaps this is what made his presentation an engaging one and helped him win the runner-up trophy for the Best Speaker at the event.

Through his presentation, Ledzian focused on explaining what enterprises could do to protect their e-assets.

He quoted an industry report which finds that about \$20 billion are spent annually on various security solutions in the form of anti-virus, firewalls, etc. to protect digital assets.

"And the attackers are investing as well, as they now have high value targets," he said.

Ledzian pointed out that gone are the

days when the attacker was a lone teenager. Today, it is about organized cyber crime, there are economies involved in cyber warfare.

Secondly, it is the issue of the malware itself. Anti-virus companies categorize malware threats as signatures and if a malware ever comes back, the security software can recognize and protect the system, but now signatures alone can't work. Signature-based technology, is in fact vulnerable.

Thirdly, attacks are happening on all fronts. This is why the industry is seeing breaches time and again. The new breed of dynamic attacks evade signature based defense.

He said that about 95% of companies are victimized by signature threads. According to an agency report, 650 new threats emerge per week. This is a global



Steve Ledzian

problem and attacks are happening to and from every industrialized region.

He wrapped up his presentation saying that BYOD (bring your own device) is the next big thing that enterprises needed to start working on from a security perspective.

Panel Discussion : e-Inclusion to e-Services

The panel on the theme of the event stressed on means and methods for removing roadblocks and paving the way for citizen satisfaction



Left to right: Subhomoy Bhattacharjee, B.N. Satpathy, Manoj Aggarwal and SP Singh

Even though the first block in the way of e-Governance has been removed by putting the IT infrastructure in place, the real challenge that the government faces is in

building the right kind of services and the service delivery models, in addition to ensuring citizen satisfaction through benchmarks for service delivery.

The panel was moderated by

Subhomoy Bhattacharjee, National Business Editor, The Indian Express. It discussed the various ways in which, the government could translate the benefits of e-Inclusion and the kind of services



Audience listening to the panelists intently

that will further pave the way for inclusive growth in the country.

B.N. Satpathy, Senior Adviser, Planning Commission, Government of India, pointed out that technology can be a complete failure if it does not meet the expectations of the users.

Agreeing that service is more critical than technology itself, Manoj Aggarwal, Inspector General of Police, Government of Gujarat said people want faceless service. He quoted examples from his state where they had succeeded in integrating the systems with the backend and they were now able to register FIR online for non-cognizable complaints.

“We provide police certification clearances online. We have developed e-complain processes for the citizens on our portal. We also have a database for stolen vehicles,” he said.

He explained that at times, there can be certain limitations posed by law, for

instance, the section 154 of IPC mandates the FIR to be signed by the complainant.

GS Naveen Kumar, Special Secretary - IT&E, Government of Uttar Pradesh, responded to that saying, “These factors should not demotivate IT intervention. Let us first make the system IT enabled, laws can be altered accordingly. First the ecosystem needs to be created.”

According to Satpathy, not every service can be online, the government will have to first understand the users before actually developing a service. “Mobile penetration in the country is greater than that of internet, especially in case of the lot that needs to be included. So, services will have to take into account their user base and their comfort with the technology.”

Besides, the government agencies cannot work in silos, so consolidation of the backend at various agencies, will go a long way in the success of the government's initiatives of e-

Governance. He felt that project implementation in the country is very slow, the government must act now to equip itself to handle this slow down.

Talking of ways to expedite the processes, SP Singh, Adviser, National Institute of Electronics & Information Technology (NIELIT), DIT, Government of India said the common services centers (CSCs) will have to be optimally utilized for facilitation of basic services to rural population and bridge the digital divide.

Bhattacharjee interjected to bring up a valid concern that in most cases, the government has a one-way system of interactions. Instead, the systems need to be interactive. “Will consolidation in terms of services be a way of improving the communication between the government and the citizens?” is the question he suggested participants and the audience should ponder over in the days to come.

TECH SABHA CHENNAI 2014

Making Governance
Citizen-Centric | PG 20

Security Strategy in the Year
of Elections

Enabling Business
Continuity | PG 21

Analytics in Government

Effective Governance
through Visual
Collaboration | PG 22

Next-gen Security for Better
e-Services | PG 23

Securing Networks for the
Future

Making IT Agile | PG 24

Smart Technology for
Healthcare | PG 25

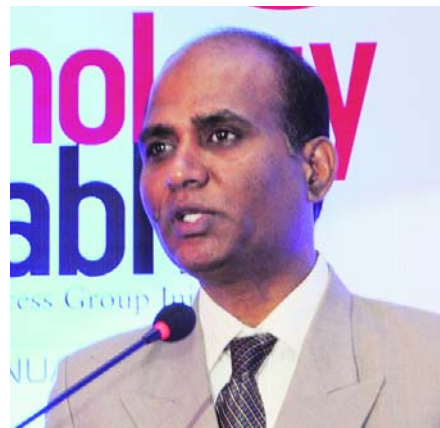
Information Management in
New Era ICT | PG 26

Speeding up Implementation
of e-Governance
Projects | PG 27

A Combative
Approach | PG 28

MAKING GOVERNANCE CITIZEN-CENTRIC

Day 2 was action-packed and opened with a keynote address that focused on citizen-centric services for governance



S. Chockalingam

S Chockalingam, Inspector General of Registration, Government of Maharashtra, demonstrated how his department has leveraged technology to make citizen-facing services smoother.

He said no one can say that property registration is not needed. To simplify this process using technology was not as easy for them either. The department's vision is to bring higher levels of transparency, effectiveness, efficiency and accountability in the administration and they realized that the focus should be on the citizens rather than the system.

"In Maharashtra, till 2002, all processes in the department were manual. Then we digitized with iSarita in 2012. By end of January, Maharashtra would like to start e-Registration. The citizens' requirement is mainly to check earlier transactions, know stamp duty and registration fees, make online payment, do data entry, book time-slots. For each of these now there is a system. Right now, records of last 11 years are available online," he said.

He further explained that there are

various online delivery channels like - Search, e-ASR (annual states of rates), GRAS, e-Stamps, e-SBTR, public data entry currently present. Maharashtra and Karnataka are pioneers in computerization of registration process.

Chockalingam observed that there are several benefits associated with online registration. It gives efficient registration within 10 minutes, improved quality of registration services; there is no need to submit photocopy of document; it is a transparent process (data entry is done by the citizen), post data entry, a CD is given to the citizen along with a signed copy.

"It empowers the registrants to search previous transactions themselves. It allows centralized monitoring and informed decision making through a central dashboard. A lot of time of the citizen is saved as there is no need to visit multiple offices. Document download facility is also available for select SROs. The entire document registration process happens in the central server. As soon as document is registered, the related transaction is available the very next moment for search on eSearch website," he informed.

Talking of department initiatives, Chockalingam said they had introduced duplex printing due to which nearly five crore pages were saved.

"We are also integrating the system with UID. There is provision for automatic data entry using UID data. When a property is being sold, IGR can verify whether it is an authentic dealer or not," he said.

Chockalingam demonstrated the IGR dashboard in real-time and how it works. He mentioned that the department believes that e-Registration should be anytime anywhere and its extension to other document types. He also envisions implementing a paperless office.

Security Strategy in the Year of Elections

According to Ramandeep Singh Walia, Senior Consultant, Checkpoint Software Technologies, India & SAARC, globally, whenever there is an election there is also an upsurge in online attacks. In such scenarios, contextual understanding is important.

Walia explained, “We need to understand if an organization is the primary or secondary victim. Is the attack an opportunistic or targeted attack? An example of opportunistic attack is when a malware has been launched for only SQL servers. Thus, anyone with SQL servers will get affected. A targeted attack is toward a specific machine, organization, individual etc.”

He raised a pertinent question, which he thought organizations need to ask themselves about how should they plan — should the organizations look at

protecting only from distributed denial-of-service (DDoS) attacks or APTs, phishing, data exfiltration and SQL injection (for last three years this has been the topmost attack)?

Talking of vulnerabilities, he cited an example of Ministry of Home Affairs in the US throwing pen drives in parking lots. It was observed that 60% of people actually picked these drives up and 27% even used them.

He went on to explain the difference between advanced threat and zero-day malware. He said, advanced threat is a permutation or combination of many types of threats with an aim. He further said that organizations today require multi-layered threat prevention solution.

He recommended that enterprises should be able to identify vulnerabilities in their organization's network, define security zones (mandatory access



Ramandeep Singh Walia

control technologies), identify main threats and define protections, analyze performance requirements, define module packages (enterprises must know everything does not go for everyone), and define specific security policies. At the same time, the organizations should be able to align their security strategy with business and analyze their data.

Enabling Business Continuity

Disasters could be natural or man made. In either case, chances are that business disruption is high and might have a severe impact on companies. Amarjeet Singh Gill, Vice President - India & SAARC, Sanovi Technologies, in his presentation, talked about the potential damage that disasters could do to businesses and how incidents of data disaster could be avoided.

Gill said that the business impact due to technical outages can be huge, as it has been seen in the recent incidents that happened to the Royal bank of Scotland or even the Northern Power Grid failure in India.

The good news is that businesses now do not look at a solution as just a disaster recovery activity, instead they look at the offering from the business continuity perspective.

Gill also pointed to the fact that there is a lack of skilled people for DR in the country. The challenge for the businesses is that they have no real time visibility into Recovery Point Objectives (RPOs), and abilities to check what kind of applications will be impacted by an incident. He further explained that the elements of DR can not be considered in isolation. Collaboration is required to manage DR activity. Applications, database, network, OS and storage /replication, all need to be looked at as a whole.

He accepted that DR drills can be expensive, disruptive and at times, may lead to long durations of downtime but they are important and at the end of the day, worth the inconvenience. According to Gill, changing application environments makes DR outdated, a fact that most enterprises ignore, so real time replication on DR site is critical.

“Every DR application needs to be



Amarjeet Singh Gill

provisioned using the best practices. Monitoring is a must to ensure that the solution is meeting RPOs, RTOs, and generating alerts against environmental changes,” he observed.

Gill also highlighted case stories of Sanovi's customers, including HDFC, a large power generation company and Aadhar.

Analytics in Government

According to Varun Babbar, Head Pre-Sales & Consultancy Practice - India & South Asia, Qlick Tech, about 71% of enterprises globally buy analytics when they want to improve decision making; however, only 25% of them actually use it.

He was of the view that the missing element here is the fact that technology has not kept pace with the users. It is the user who is more empowered and is driving the change in the technology. The technology is generally perceived to be complex and nobody wants to take up new things that are difficult to learn.

Babbar observed that actionable intelligence should be based on natural analytics. He explained that in the analytics world, people are used to

tabulated reports but when the same data is represented pictorially, it is easier to comprehend and insights become simpler to interpret.

However visualization is not the only way to offer a natural solution, there have to be other things. Technology should allow the user to work like an explorer — it should be fast, offer associative experience and support collaboration and mobility.

For analytics, he said that data is not the only parameter. Collaboration is equally important. It is innate human behavior to associate, compare and narrate, so analytics solutions should be designed accordingly.

“Insights without action have no value. Most analytics tools available today are too complicated,” Babbar said.



Varun Babbar

He said QlickTech's solution is simple and has already made it way to some of the government agencies in the country like the Ministry of Health & Ministry of Finance. The company also works with several police departments.

Effective Governance through Visual Collaboration

There is a huge difference between video and audio collaboration. And with his presentation at the Express Technology Sabha, Gagan Verma, National Head - Government Business, Polycom India, tried to explain the same.

According to Verma, in a visual collaboration environment, one tends to be more disciplined and this brings lot of impact in the working. In visual collaboration, data sharing like charts, diagrams can be done very effectively. This can be leveraged to benefit citizens through engagements like Telemedicine and Telejustice.

The current trend of mobile device proliferation is driving visual collaboration, he said. At present, India has about 64 million tablets, 3 billion videos are viewed on YouTube everyday. There is network readiness and 4G is soon going to be introduced in the country, which will make visual collaboration even more pervasive.

Verma said visual collaboration is very important for collaborative and inclusive governance. There is location liberation. It can be mobile, personal, group and immersive. For example, NTPC PowerGrid have installed Polycom's Realpresence platform.

“Polycom is also being used in SWAN projects. The Ministry of Defense already has 20 Telepresence systems deployed and they are planning to add even more. Various banks are also using our solution. Departmental collaboration, engagement and awareness, mobility and telenetworking, hiring and recruitment, education and training, program management, continuity of operations are some of the applications that can be taken care of through Telepresence,” he said.

According to Verma, all departments have more than 1GB bandwidth, but do not know where to use it. With visual collaboration, emergency management can be even more effective. For instance, the Uttarakhand disaster relief could



Gagan Verma

have improved a lot in terms of response time with such solutions. Citing another example, he mentioned that few months back, during riots in Assam, senior government officials were actually seeing the incident live on a Polycom solution and getting a stock of the situation.

At the end, one of the delegates hit the nail when he pointed out that such solutions can be effective if they can address government's security concerns and are encrypted.

Next-gen Security for Better e-Services

The panelists shared interesting viewpoints on dealing with new security threats, and suggested taking different approaches for different platforms



Left to right: Subhomoy Bhattacharjee, S. Ramani, Vijay Devnath and Kapil Awasthi

Subhomoy Bhattacharjee, National Business Editor, The Indian Express, opened the panel discussion around next-gen security for better e-services, stating that when the Snowden affair broke, it got enterprises and individuals worried. "Companies the world over were undecided if they wanted to work on US-based servers or not. Then someone suggested that we should work on typewriters, which can't be hacked," he joked. On a serious note, he asked representatives from the Railways and the Indian Space Research Organization (ISRO) about their approach to security: after all tens of millions of people plug into the railways every day.

S. Ramani, Associate Director, ISRO, mentioned that at the space organization, they are given national agendas to help the missions which need to be protected. By and large, with security they learned certain things which are in-built. For example, how can data be secured and how can the transactions be done in a

secured manner.

"ISRO is connected to the Internet fully for our business. When online services are given, retention of data is very important," he said. According to him, there is a popular belief that critical systems should be air gapped, but that does not mean they are not vulnerable to attack. Organizations should try to bring security to systems that are air gapped in nature.

"Business continuity is important to us and thus redundancy has to be built. With end-user devices proliferating, data integrity should be maintained in the back-end. ISRO has services online. Some are long-term and some one-time," Ramani stressed, adding that the system needs to identify the user.

Vijay Devnath, General Manager (Infra & Security), CRIS explained that going by the nature of their business, CRIS is not able to fix the older generation problems itself. From a back-end perspective, they are very well secured.

"We have implemented IPv6. Our immediate problem is more on protection

from frauds in terms of money which is collected from consumers and they being over-charged or undercharged. Many customers are trying to take away the legitimate usage of others," Devnath said.

He raised an interesting point that at times, we confuse security of data and safety of data. There is a big difference between the two. The vendor hype is that they put safety, security all together which is not needed. According to him, vendors keep on pushing solutions like DLP, which organizations like CRIS do not need.

"Our prime requirement is that data should not be corrupted and tampered with."

Giving a vendor perspective, Kapil Awasthi, Senior Consultant, Check Point Software, mentioned that the key today in securing the environment is how the applications are adopted and accessed. The biggest problem he faces as a vendor during audit is that customers have not configured the applications in the best possible way. Everything is not automated. But when not automated, the system can be tricked too to cause an attack.

The panel discussed that the applications are moving from intranet to web to mobile. For service delivery part, organizations are trying to move to mobiles. So how to secure this?

The panel suggested different approaches to it.

Organizations dealing with critical information have to be differently planned than e-commerce. For the latter, their business mission is to reach out as many people as possible. According to Awasthi, organizations should understand that their website should not be a channel to deliver more attacks, to make sure that any device attacked should not be a channel to pass that on to any other device.

The discussion concluded with Awasthi mentioning that sometimes vendors are not ahead of the requirement, they are just meeting the requirements. The gap is always that vendors give a solution thinking of what the problem is and not to the exact problem.

Securing Networks for the Future

With about 120 million Internet users, India has the third largest internet user base in the world today. Globally, Internet's contribution to the economy is likely to be \$100 billion by 2015.

Securing this momentum of Internet's growth is a shared responsibility, said Vishwa Bhushan Shah, National Sales Head – Government & Defense, Cyberoam.

He said there are enterprises that do not have basic security firewalls. To keep the data secure, enterprises not just need to buy the correct appliance, but also must have the right kind of policies in place.

Shah quoted a BCG study that finds that increased IT adoption by SMEs can add 56\$ to the economic output and

create over a million jobs. At present, nearly 90% of SMEs in India have no access to the internet.

He informed that over 1.56 crore transactions per month were being conducted online for applications that are a part of mission mode projects under the NeGP and Aadhar is one such case. Security thus becomes indispensable for such volumes. Stressing that cyber security is key to security reforms, Shah said that Cyberoam's solution offers eight layers of security and is IPv6 ready.

"We have seen a lot of people in the government space using their own devices. Government's data is confidential, and the government agencies should therefore be more cautious of the devices coming into their networks and the kind of data that is carried on these devices," he said.



Vishwa Bhushan Shah

He added that most security solution providers provide security at the periphery through UTM, but what happens when the user enters the network? Therefore a security solution must provide a central view of the entire network.

Making IT Agile

With complex IT environments that enterprises today work in, organizations require software solutions that are agile. Sabarish Santhanam, CTO, Director, Agile Labs, said that bringing in agility while making software itself is a long process.

Santhanam explained that since software development is an elaborate process, where there are chances of completely misunderstood requirement specifications, there is always a gap when a final software comes. "There are prolonged coding cycles. The processes in the government can not be changed as they have grown with the departments, depending on the skills available, so development for these departments needs to be done with an extra dose of care," he said.

He further explained that mostly the software is created for the existing systems. But the same solution may not work in rural locations where internet is a challenge and that can contribute to the

failure of the software.

Since every requirement cannot be visualized while designing the software, he said that change management will always remain a challenge for enterprises. "For this the back-end needs to be flexible — if the back-end software is able to change as per the need, a more inclusive IT can be created," he said.

Citing examples from the industry he said, every government department has faced a state of confusion in terms of what they want and what they ultimately get or develop. "In fact, 60% of software solutions have delivered 50% or lesser benefits in the last year," he noted.

Talking of the company's solution, he said Axpert is a disruptive software platform from Agile that can reduce development time by at least 50%. "We have over 150 customers in 10 countries, even Wipro has used this for their government projects. With the solution, enterprises need lesser resources and can do with just database and domain expert resources," he said.



Sabarish Santhanam

He said many of the departments have complex approval flows, but their solution helps them to configure it themselves. The solution also comes with BI tools that enable organizations to slice and dice the data. Axpert comes with a router, it will be synchronized with data as and when an internet connection is available. "Many of the state governments may be facing issues of collecting data in remote locations, but router makes connectivity easy," he said.

Smart Technology for Healthcare

SK Sinha, Senior Technical Director, NIC, talked about how IT could be used to improve the quality of healthcare services, especially in rural areas



SK Sinha addressing the audience

Addressing the gathering at the Express Technology Sabha, SK Sinha, Senior Technical Director, NIC, discussed how technology could be harnessed for the rural masses, especially to provide higher quality of healthcare services.

He agreed that implementation of sophisticated technologies for rural areas is not an easy job. He spoke about the RSBY (Rashtriya Swasthya Bima Yojna) initiative. He said, so far, 34.4 million cards have been issued, 119 million people enrolled, 5.2 million have benefited, 12,000 hospitals empaneled and 15 insurance companies are involved.

One of the largest health insurance schemes in the world, he said RSBY has been started in 28 states. "It has been recognized internationally as a successful model for health insurance to the unorganized sector workers. The Government of India is trying to now expand it.

Highlighting challenges faced by an implementation of this kind, he said identifying the beneficiary is a tough thing, so NIC started using smartcard technology. Smartcards were issued to all beneficiary families. For enrollment, there is already a database available of the BPL list, from where the data is taken.

According to Sinha, it was very difficult to utilize this list. "There are village camps for biometric enrollment, family photo and data quality improvement. After enrollment, a smartcard is issued then and there. List of member hospitals and practitioners is also given. Premium

payment is based on number of cards issued," he said.

Explaining the technology being used, Sinha said, "There is a pre-defined standard for smartcard technology called SCOSTA (Smart Card Operating System for Transport Application). It provides multi-vendor platform and is certified by NIC for compliance and quality.

Insurance companies partner with technology providers and the latter can source certified smart cards, data/biometric enrollment, card printing and issuance. Crucial software components in it are chip encoding, chip data management, authentication modules and key management system which has been architected by NIC. There is active/passive authentication, biometrics verification and symmetric key based extended access."

"The cost is as fixed by the Government of India, and currently, the premium is Rs. 30,000 per annum. In the roll-out process, the beneficiary approaches hospital of choice, authentication is done and doctor recommends a pre-defined package. The beneficiary gets treatment and the hospital claims cost from insurance company," he explained.

Under the RSBY (Rashtriya Swasthya Bima Yojna) initiative, so far, 34.4 million cards have been issued, 119 million people enrolled, 5.2 million have benefited, 12,000 hospitals empaneled and 15 insurance companies are involved

Information Management in New Era ICT

With unstructured data and heterogeneous platforms presenting daunting challenges, there is an urgent need to take a relook at data architecture and real-time protection



Delegates at the Symantec Power Discussion

Digvijaysinh Chudasama, Director, Sales - Govt & Defense Practices, Symantec, and Huzefa Motiwala, Country Head - Presales for Information Management at Symantec, made sure the post-lunch discussion remained powerful and did not get too heavy.

Mentioning any organization today is being driven by IT, Chudasama said that information management and information security have emerged as key areas of concern. According to him, accelerated IT growth, with unstructured data and heterogeneous platforms is a big challenge. Disparity adds complexity and cost. With information management, Symantec's vision is to protect data and ensure that it is always available, enabling a fast and

flexible architecture and minimize information risk.

He said that information management consists of three pillars — backup recovery, information intelligence and information availability. He explained, in backup and recovery, customers need workload management, manageability and scalability and performance. The enterprises need to protect data on a variety of workloads, they want their job to be more efficient and simple, irrespective of the platform, storage and application that an organization is running.

“Symantec’s NetBackup supports all of this. NetBackup Appliance is a purpose built backup appliance with its own Linux OS, bundled with de-duplication, redundant storage. There is

a built-in WAN optimization and bandwidth utilization also comes down with this feature. Encryption is done at the hardware level. In terms of licensing, there is just one capacity-based license. It is capable of taking backup not only over LAN, but also over de-duped one. It can protect 300-340 TB of data. If organizations already have a backup server, this solution can act as a media server,” he claimed.

There was a suggestion by delegates that the solution should even do the recovery faster. As per Motiwala, when they as an organization architect solutions with customers, their foremost priority is on recovery.

According to Symantec, with this solution the number of drives required is really reduced, therefore TCO is also reduced there. “The solution gives last mile visibility into virtual machines. In banking environment this solution won zero RPO over far DR distance,” Motiwala corroborated.

Motiwala then touched upon the company’s Storage Foundation flash strategy. It is available across UNIX and Linux. It helps migrate storage without any downtime. Delegates had questions on adoption of flash SSD storage. They were of the view that a majority curve will take time as the cost is major hindrance.

Motiwala also spoke on information intelligence. He said that organizations do not know what type of data they have and who owns it. “Organizations lack clarity on how to archive. Organizations need to be more intelligent about it. If there is confidential data which is being sent out, then it should be archived and a legal hold should be put.”

The discussion ended with Symantec speaking on security and what to do about security when endpoints are moving out of the organization. “There are too many points and not an integrated solution. We are working on solutions to help organizations enable secure access to information without data leakage,” he said.

Speeding up Implementation of e-Governance Projects

With the number of e-governance transactions speeding up in the country, things have been moving faster than in the past. But much more needs to be done



Left to right: Subhomoy Bhattacharjee, G.S. Naveen Kumar, Sanjay Sood and S.K. Sinha

The e-Governance project of the government of India is on track. The good news is that while it took about eight years for India to reach the one-billion milestone, in terms of e-governance transactions, the next step of reaching two billion came much faster, in just about 55 days. However, even though the e-gov bus is moving, it definitely needs to accelerate.

The panel, moderated by Subhomoy Bhattacharjee, National Business Editor, The Indian Express, brought forward some strategies that the state governments could adopt to speed up processes.

G.S. Naveen Kumar, Special Secretary - IT&E, Project Director - e-Suvidha, Department of Information Technology and Electronics, Government of Uttar Pradesh, saw the biggest challenge in the perception that when projects start, the government thinks IT people don't

understand governance and IT people think government does not understand IT. "The State Service Delivery Gateway (SSDG) project has also touched 1.5 crore transactions, so I believe, regional backwardness will not stop IT adoption, we just need to provide the right kind of service," he said.

Presenting an update on affairs in the Union Territory, Sanjay Sood, Head - State e-Governance Mission Team, Department of IT, Chandigarh Administration, said Human Development Index in Chandigarh is about 60%, most of the region is urban dwelling. "The user will not use technology till there is usability and ease. There are around 30 sampark centers, quite similar to CSCs, and the management of these centers has been outsourced. Crime and Criminal Tracking Network & Systems (CCTNS) is fast getting digitized.

S.K. Sinha, Senior Technical Director,

NIC, stressed that for any IT-based project the government needs to develop an ecosystem; also, it will have to innovate with business models where all the stakeholders are in a win-win situation.

Kumar said that transparency means saving public money. If we have 1.5 crore transactions on SSDG and if each person was to pay a bribe of Rs 400 otherwise, it means that the system can help save Rs 600 crore of public money.

"The system should be scalable and not dependent on the push from a particular technology. The government has always been talking of open source for scalability. The state government and NIC have to work together for faster roll out of projects," Sinha said.

In order to shorten the life cycle of projects implementation, Sood said skill gaps in IT need to be filled in.

A Combative Approach

One of the most engaging sessions, the discussion focused on the approach that enterprises need to take to secure their IT environments



Harmeet Kalra addressing delegates at the Power Discussion

The power discussion hosted by Check Point on Day 2 was indeed different this time for more reasons than one. The panel discussion saw a packed hall and interestingly, Harmeet Kalra, Check Point's Strategic Accounts Head, began his presentation with a slide thanking the participants.

Kalra said that last year when they met the delegates at the Express Technology Sabha, they gathered some important insights that helped them improve their approach to the market.

"With these interactions we ended up becoming so close to the customers, due to the feedback, we realized the importance of taking ownership of deployment and take care of the teething problems. We pushed our product organization to fine tune the product as per the user needs. The boost that we have got from the government business is due to the new products that we have developed for them," he said.

In his presentation, Kapil Awasthi,

Senior Security Consultant at Check Point Software Technologies, explained that today, there are two categories of victims — primary and secondary. Social media a key vector.

Pointing at the gravity of security concerns, he said that India has just 556 cyber security experts, while China has about 1.25 Lakh of them. He also warned delegates to not take IT buying decisions based on IT hype curves.

Talking about the combative approach that the company suggests, Awasthi said "In the real world, there are four elements of security — informers (that provide specific information), control room (that analyze), counter response (react to threat), and intelligence feeds (that help do threat perception).

Suggesting that security is a combined responsibility he said, the CIOs need to be prepared for collaborative activity at the national level.

The participants also expressed their concerns around security. Kalra agreed that it is a general perception that most vendors just sell their security products

and disappear without providing any after sales support. He said, "We realize the importance of support and at times we even co-own the the solution with the buyer."

P Shunmuga Sundaram, Deputy General Manager (IT), Power Finance Corporation Limited pointed out that at times, the IT head is left so helpless with a solution that he has no choice but to justify the investment that he has made in the solution.

Prafulla Kumar, Director, Department of Electronics and Information Technology - Cyber security & Cyberlaw, said that the IT head should patch up the gaps between the security policy and risk assessment and ensure it across the organization. It is very critical for the IT head to drive a good security policy to the last mile.

The session extended beyond the scheduled duration and concluded with some food for thought for Check Point to take home, and come back with improved products and services for the government vertical.

CANON POWER BREAKFAST

Managing Documents – The Smart Way

Day 3 got a power-packed start with delegates discussing the economics of Document Management Systems and Managed Print Services over breakfast with Canon



Delegates engaged in a conversation with K Bhaskar, Senior Director, Office Imaging Solutions Group, Canon India

TECH SABHA CHENNAI 2014

Canon
Power Breakfast | PG 29

eGov 2.0 | PG 30

e-Delivery of Services
during Disaster

Optimizing Business
with MPS | PG 31

Dealing with APTs

Let Machines Talk | PG 32

Panel Discussion Less Paper,
Not Paperless | PG 33

Panel Discussion : Making
CSCs profitable | PG 34

The discussion over the Power Breakfast commenced with K Bhaskar, Senior Director, Office Imaging Solutions Group, Canon India, giving an overview of the Document Management Systems market in India. He said the adoption of Managed Print Services (MPS) across the world is very high. In India, the bulk of copier usage comes from the government segment. In large corporates, usually, “anywhere print” is a given thing, wherein one can take printouts from any machine. However, it is very costly.

He felt that a customer’s job should be to just govern the hardware, and not worry about repairs etc. Organizations want to bring down unwanted prints and photocopies. By and large, the government still buys machines and ends up spending more. The success stories of MPS in the government sector are in very small pockets.

Delegates voiced their concerns about MPS. For instance, in government sector the employer trying to cut down employees’ printing is difficult. In the private sector, it is easy, because they keep a tab of day-to-day

costing. In government, the printer is looked at as a potential prestige and people like to have their own printers. Delegates also mentioned that it is difficult engage a vendor, define SLAs, and calculate RoI.

According to the delegates, in case of government departments, purchasing a printer worth Rs 15 lakh is much easier than getting an MPS bill for Rs 15,000 sanctioned.

Some of the delegates suggested that there is no need to have MPS across the organization.

Bhaskar mentioned that even though organizations are not very open to change, digitizing a document has a lot of benefits. “If one just types a keyword, it will show all relevant files and then one can take printouts. In case of MPS, one is not bound to a particular vendor. If an organization does not like the services, it can switch. Government like any other private organization is also now looking at reducing printing and going green.”

All delegates agreed that Government has a lot of budget for procurement and less budget for office expenses and that DMS is the way to go.

EGOV 2.0

Loaded with information about on-the-ground projects, the keynote kept the audience enthralled and left them wanting more



Rajesh Aggarwal

Rajesh Aggarwal, Principal Secretary - IT, Government of Maharashtra, definitely knows how to keep listeners glued. Last year he spoke about eGov 0.0, this year his presentation took a leap forward and focused on IT and the new trends in governance.

Hinting at the Aam Adami Party effect in the national capital, Aggarwal said that public opinion can never be ignored when it comes to matters of governance. "We encourage our staff to use social media, and open up these platforms for use one hour before and after the work hours."

Emphasizing the importance of social media, he said that the state government

had been working with police and other departments to keep a watch on citizen behavior.

Maharashtra, as a state, he said, understands the importance of leveraging IT for effective governance. It is important for an applicant to know the status of his application. "For this our departments are trying to provide more information online and through mobile. About 70 departments in the state are already using the mobile gateway of MahaOnline. Such efforts dramatically reduce citizen footfalls to the physical offices and boost employee efficiency," he reasoned.

The state government is also making efforts to bring in eKYC services

(electronic know your customer). "We are moving towards eKYC, it is already happening in about 1,000 branches of Axis Bank. A similar initiative will be launched at the press where around 500 to 600 people turn up daily to register the change of their names in the gazette," he said.

On the lines of Common Services Centers, the state has set up Sangram Kendras, which have tied up with the various banks and will act like banks for about 25,000 villages in the state.

He stressed that the next step for the state is to work on the analytics bit as these tools can help plug the loopholes in the system. NIC has recently developed a software to create data for PDS beneficiaries. "We are also analyzing payroll data bases. We have found potential cases of people getting salaries from two places. Correcting these could help the state potentially save Rs 1000 crore on salaries alone," he said, adding that another 20% of the state's spend could be saved by integrating analytics with the Aadhar database.

With all servers in the Maharashtra data center running on cloud, the state has set an apt example for others to take cues from. Aggarwal pointed out that over the past few years, by making an investment of Rs 5 crore (Rs 3 crore on software and Rs 2 crore on hardware) they have saved close to Rs 60 crore.

He said that at the moment, the state was working on its intranet and they were in talks with City Industrial Development Corporation (CIDCO) to plan Internet of things for smart cities.

A firm believer that the laborious work of data entry should not be done by the government, Aggarwal said, "Allow people to do the data entry and take the responsibility for it; this will improve data quality. We must propagate central standards for the databases to streamline processes."

e-Delivery of Services during Disaster

Addressing the gathering at the 15th Express Technology Sabha, B.N. Satpathy, Senior Adviser, Planning Commission, Government of India, said the ultimate objective of the government is governance where 'e' or electronic is only an intervention to expedite the governance activity.

Since the goal is to offer efficient governance, he said that the thrust should not be centered on technology alone, instead, technology should emerge as a driver for faster and more inclusive growth.

Through his presentation, he stressed that inclusion could come in many ways. Poverty reduction, group equality, equality for livelihood and empowerment were some basic ways.

"Technology should not have barriers, implying that it should be able to provide services to rich and poor alike," he said.

He believed that creating a valuable knowledge base in support of developmental planning, will be instrumental in helping the government process inclusion strategies.

Satpathy said, "The government will need to invest in ICT-enabled village resource centers (VRCs) that can act as a single window delivery system to the village communities."

He commended the government for having successfully managed some of the recent events of disaster. He said, "We should be able to generate alerts for every kind of disaster. We have done some great work, but what has not happened is that we have not been able to come up with a



B.N. Satpathy

special strategy to cater to disaster prone and hit areas."

Optimizing Business with MPS

On Day 3 of Express Technology Sabha, K Bhaskar, Senior Director, Office Imaging Solutions Group, Canon India, started the session by stating that every organization has different needs.

He observed that organizations cannot envisage a completely paperless office. The consumption of paper year-on-year is going on increasing by 32%.

He quoted an IDC report that found that about 90% of organizations cannot estimate their document costs. As per another industry study, certain companies in US spent 1-2% of turnover on their document. Typically, 10% of the office document burdened costs is related to equipment, supplies and service expenses.

He noted that on an average, office workers produce 10,000 pages per annum, of which 44% is avoidable. Nearly 10-15% of organizations' revenue is spent in creating, managing and distributing documents. About 1.1 billion trees are cut

down to supply office workers with paper. Organizations that actively manage their printer fleet can save up to 30% of printing cost.

Talking of MPS, Bhaskar said it that has a lot of benefits as it not only enhances employee convenience and productivity, it also gives a 100% job uptime. With the solution, organizations can have total control of office printing and can keep a tab of how many pages are being printed, what is being printed, who is printing how much etc.

He said, "Canon's methodology is to discover and analyze, design, deploy and transition, support and manage, evaluate and review. Canon's MDS approach is print control, print enhancement and innovate beyond print."

Speaking of digitization and its importance, Bhaskar mentioned that 4.82 crore pages could probably have been saved, if the digitization had progressed at the right pace in the recent fire incident at Mantralaya.



K. Bhaskar

"Document digitization saves storage space, saves cost, manages documents easily and increases information security. It enhances customer experience, disaster management and makes it easier to share information," he said.

Dealing with APTs

Right at the start of his presentation, Maheswaran S, Regional DLP/APT Specialist, Websense, had some important questions for the audience. He started the session by asking what strategy should organizations adopt against APTs?

He observed that all kinds of data theft were happening due to some or the other malware. Maheswaran went on to explain different stages of advanced malware/APTs.

He warned that attackers recon and lure the victim. "Recon is doing social engineering about the target and knowing more about him/her. Lure, which is very relevant and timely, happens over web/social web and email. Every organization has a significant web presence and should really take care here," he elaborated.

The attackers then redirect the victim

to a location where the hacker wants the target to go. He said the exploit kits are easily available in the market and are very intelligent. "These are capable of profiling the machine and finding out the vulnerabilities which exist. Based on the information, a proper file or malware gets downloaded. It is very customized," he explained.

Talking of solutions to deal with such threats, Maheswaran said there is no technology that can do anything about the recon part. A lot of awareness needs to be spread across employees as end-users that are becoming a key part of the security landscape.

"Websense launched a campaign to educate customers about phishing called 'phish me'. For lure and redirect, there should be unified threat intelligence of what is happening on web and email," Maheswaran said.



Maheswaran S

According to him, modern malware today, are zero day threats and that is why sandboxing is very important. "The solution simulates the user environments to see what will happen if the file was downloaded in the user environment. For data theft, there have to be pre-defined data identifiers, careful data inspection is a must to handle low and slow data leaks."

Let Machines Talk

Reena Malhotra, Director (NT), Dept. of Telecommunications, Government of India, introduced the session around Machine to Machine (M2M) communication and how it can help develop an efficient service delivery framework, by stating that connected devices are transforming the industry. M2M applications, going forward, will be the norm.

Suggesting that M2M applications can support e-inclusion, she cited examples like remote water pump switch on-off, remote crop monitoring, remote equipment monitoring and diagnostics, monitoring fertilizers requirement for soil — all of which can be done effectively by applying M2M to the agriculture industry.

She said M2M applications can be used in e-health for scheduling appointments etc. These applications can also focus on personal fitness and lifestyle. In automotive industry, it can be

used for toll collection, traffic signal management, vehicle health monitoring, fleet management, anti-theft, insurance and infotainment. Better insurance packages can be offered through it.

Talking about the potential of the M2M market, she said M2M applications can be used very effectively for smart cities. "In India, a lot of smart city projects are soon to be started. For example, Maharashtra soon plans a couple of smart cities. These will have proper planning in terms of traffic and using M2M, these cities can make develop smart grids. And even make water distribution smart. They can utilize M2M for effective disaster management, e-governance, surveillance management, transport and logistics, fire and gas management. There could be central control center."

Malhotra mentioned that M2M can be utilized by police for face detection. Presently, Gujarat is conducting a pilot, wherein terrorists' faces are put in the



Reena Malhotra

system and through surveillance system they can track the movement of terrorists. The session closed with Malhotra touching upon future M2M, which will happen on extremely large scale in networks. She suggested that any network being planned should be developed on IP and around IPv6. M2M applications: and M2M customers need to be served differently. She urged DoT to ensure interoperability, guidelines bundled services, to address privacy and data protection.

Panel Discussion : Less Paper, Not Paperless

The panel on Document Management discussed the key challenges that the government departments in the country were facing in digitizing government records



Left to right: Darlington Jose Hector, S Chockalingam, Shyla Andrews and K Bhaskar

As government authorities today face the challenge of increasing the efficiency and quality while reducing the response time to citizens' requests, the departments understand that a flexible, adaptable document management system is needed for large e-government applications.

Similar to most nations, the government of India (GoI) is placing more focus on workflows and process engineering. The focus on is on securing storage and archival of government electronic documents.

The panel comprised of the moderator Darlington Jose Hector, Resident Editor, Financial Express, and panelists S Chockalingam, Inspector General of Registration, Government of Maharashtra, Shyla Andrews, IT Head, City Industrial Development Corporation (CIDCO), Maharashtra, and K Bhaskar,

Senior Director, Office Imaging Solutions Group, Canon India. The participants discussed the key challenges that government departments in the country were facing in digitizing government records.

Andrews said that even though nearly 70% of documents at CIDCO are digitized today, there is no policy to decide whether the information can be put online or not. She added that response to CIDCO's initiative to help citizens scan documents through kiosks that are connected to the intranet has been overwhelming, however, verifying the authenticity of the document remains a challenge.

Chockalingam had pertinent questions for document management systems solutions providers, including Canon, about the duration of support to the customers. He said, "Technology changes

fast; most solutions will support a particular file format for a fixed duration of time, but after that the organizations are left in a lurch, battling it out all by themselves."

Bhaskar of Canon agreed, saying that every time there is a new way of doing things, the past exercise becomes a waste. So, for instance, documents that are scanned today as PDFs should also be easy to search and retrieve in the future.

The panel believed that it was impossible to make the entire system paperless, though efforts could be made to minimize paper usage. "Besides, not everyone has a digital signature and how many of those who have, can keep it safe," Chockalingam said.

He concluded by saying that standardization in terms of format, encryption and retrieval process is a must for preserving documents.

Panel Discussion : Making CSCs profitable

The panel on Common Services Centers brought up concerns around the basic problems faced by these centers, including connectivity and lack of infrastructure support



Left to right: Darlington Jose Hector, Golok Kumar Simli and Susanta Kumar Panda

Despite missing deadlines one after the other, the Government of India has finally managed to set up over 90,000 Common Services Centers across the country. Though these centers were developed so as to form a delivery channel and the front end to implement National e-Governance Plan in the country, they have, however, been plagued by basic issues of connectivity and lack of back-end infrastructure support.

During the last session of the Express Technology Sabha, the panel, comprising Darlington Jose Hector, Resident Editor, Financial Express; Golok Kumar Simli, Principal Consultant & Head - Technology, External Affairs Ministry, GoI; and Susanta Kumar Panda, Deputy Director General & SIO, NIC, Odisha, brought up some of these concerns.

Highlighting that the digital divide has been a key factor responsible for stalling the development in the country, Simli said that before the NeGP was launched, the department had only about 37 passport offices in the country

and they lacked accountability and transparency. The department then decided to come out with a better delivery model and 77 passport seva kendras were set up in various parts of the country. "In the second phase, we are trying to make the passport services available at CSCs. Over the years, we have witnessed a notable rise in volume of requests along with raised expectations of the citizens."

Panda, however, pointed out that there are some states in the country that have adopted CSCs in a big way. "There are states that are doing over two lakh transactions per day from CSCs and these have not come. It is because these CSCs are integrated with the back-ends," he said.

Pointing that change management both with individuals and organizations is critical, Panda explained that even as some CSCs extend eServices like provisioning of birth certificates, the citizens do not have complete faith and they are doubtful of the authenticity of

the document.

Simli agreed, saying that managing change within the organizations, in many cases, is the most difficult part. He said, "The users of technology in an organization need to be involved right from the beginning else they are bound to resist change. Our projects got delayed by nearly one and a half year due to the stiffness of the employees."

Since about 90% of revenues to these CSCs today are reported to come from B2C services, a lot needs to be done to help the village level entrepreneurs (VLE). The VLEs need to sustain and for the VLE, the focus is more on services that will help him earn money.

Golok suggested that for this, the government needs to put in place, a rigorous monitoring system to track the transactions happening at the CSCs. "The best way forward is to first strengthen the back end and then build APIs to interact with the CSC. All CSCs must be integrated to a central CSC portal, so that the loop can be closed," he said.

EVENT

15th EXPRESS TECHNOLOGY SABHA

www.expresscomputeronline.com



K. Rosaiah, Governor of Tamil Nadu, lighting the inaugural lamp.



Subhomoy Bhattacharjee, National Business Editor, The Indian Express, giving the welcome address



Anant Goenka, Director & Head - New Media, The Indian Express, welcoming K. Rosaiah at Tech Sabha



Delegates at Tech Sabha



Delegates at the registration desk



Audience at one of the presentations

EVENT

15th EXPRESS TECHNOLOGY SABHA

www.expresscomputeronline.com

TECH SABHA TOUCHED UPON TOPICS SUCH AS CITIZEN CENTRIC E-GOVERNANCE, SECURING NETWORKS FOR FUTURE AND MAKING AGILE IT ALONG WITH POWER DISCUSSIONS BY CANON, SYMANTEC AND CHECKPOINT.



EVENT

15th EXPRESS TECHNOLOGY SABHA

www.expresscomputeronline.com

THE LAST DAY AT TECHSABHA WAS A MIX OF SERIOUS SESSIONS, EXCURSIONS, SHOPPING AND GAMES. THE SESSIONS CENTERED AROUND DOCUMENT MANAGEMENT, COMMON SERVICE CENTERS, DELIVERING SERVICES DURING DISASTER AND BUILDING ROBUST SECURITY FRAMEWORKS TO PROTECT AGAINST APTs.



Delegates visiting the various stalls at Tech Sabha





e-Inclusion to e-Services



EXPRESS Technology Sabha



An Express Group Initiative

CHENNAI

JANUARY 16-19, 2014

GOLD PARTNER



Check Point
SOFTWARE TECHNOLOGIES
We Secure the Internet

Canon

Delighting You Always

Innovative Format

Rich Content

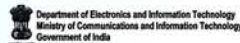


Thank you

The 15th edition of the Express Technology Sabha, held from January 16 to 19, 2014, in Chennai, brought together leaders in the e-governance arena. They shared their knowledge and experiences on how the usage of technology is evolving in the government sector, and how the implementation of IT in various government departments has resulted in transparent and effective governance.

We thank all our delegates and partners for their continuing support in making the event a success.

S U P P O R T E D B Y



P A R T N E R S



Eminent Speakers

Focussed Networking

Solid Track Record



CIOs IN DUAL ROLES

CIOs are often expected not just to tackle technology but also shoulder additional roles and responsibilities to drive their respective enterprises. How do they manage?

BY PANKAJ MARU

Given today's business dynamics and economic environment, the role of CIOs is getting redefined, even transformed. Gone are the days when CIOs were just asked to take care of IT as a back-end or support function.

With IT being looked upon as a tool to "enable business," CIOs are expected to do much more. Their role can now involve being in-charge of a business unit, human resource management and training, finance procurement, administration, and what have you.

And even as the wide spectrum of roles and

functions requires in-depth knowledge, along with hands-on experience to deliver the expected results, for an increasing number of enterprises, CIOs seem to be the "first" and "best choice" for these roles.

Not that such dual roles or additional responsibilities are without challenges. To understand and explore those challenges and changing roles and responsibilities, Express Computer takes a closer look at some of the Indian CIOs that are successfully performing "dual roles" in their respective organizations.



The CIO is now looked upon as an amalgamation of a technologist and a change agent.

Rajat Sharma,
President – IT, Atul Ltd, and Director,
Atul Infotech



The President role is quite different; one had to fully come out of the CIO hat and get into the President hat.

Satish Pendse,
Group CIO – HCC, and President –
Highbar Technologies

For instance, Valsad, Gujarat-based Rajat Sharma, who as President of IT has been the global CIO at Atul Limited for over four years, also heads the company's IT arm, Atul Infotech Limited, as a Director (for about two years or so). On the CIO's role change or additional responsibilities, Sharma says, "The role of CIO has evolved over the recent past wherein the expectations from the CIO have moved from being just a technology enabler to a business efficiency leader."

"The CIO is now looked upon as an amalgamation of a technologist and a change agent — one who is expected to be the hub of the full circle of change management, right from the stage of initiating a change and catalyzing the change to delivering efficiencies through the same. This is in addition to the conventional responsibilities of ICT strategy and information security, along with IT governance and compliance," explains Sharma.

Earlier, Sharma, along with his IT unit, was solely responsible for meeting internal technology needs of India's first private sector chemical manufacturing enterprise. But two years ago, the IT unit was spun off and shaped into a full-fledged IT services subsidiary, Atul Infotech Limited, that caters IT services to other customers and businesses in the market.

From a business strategy perspective, carving out a separate IT services company seems a wise decision for the board members and investors. But how challenging is it for the CIO to take on the additional responsibility for the P&L and revenue streams of the new entity?

Sharma feels that performing those dual roles is not a problem. "As the business sustenance of Atul Infotech is met with the delivery of value-for-money solutions to our customers while providing multiple levels of exposure to Atul Infotech's team, I did not find any issue in catering to the dual role of a Group CIO and a company Director."

Another case in point is Mumbai-based Hindustan Construction Company (HCC), which hived off its IT arm three years ago into an IT services firm, Highbar Technologies Limited. Here, Satish Pendse is in-charge of Highbar

Technologies as President; in addition, he continues to be the Group CIO at HCC. However, unlike Sharma, Pendse considers the two roles very different from each other and says that they throw up contrasting challenges.

"The President role is quite different and, to begin with, one had to fully come out of the CIO hat and get into the President hat," says Pendse. "The President role's KPIs are order-book, cash-flow, turnover, PBT, etc. Given the economic uncertainty in the market, there is high pressure in terms of getting customers, managing expenses and cash-outflow; addressing gaps, if any, remains a big challenge all the time, especially at month-ends."

While decisions are to be taken by both CIOs and CEOs or business heads, Pendse emphasizes that making decisions as a President or a business head is quite different and has a substantial impact on the organization. This is particularly true in the areas of business deals, accepting or rejecting orders depending on the customers' past payment records, and from a profitability stand point.

On the business side, Pendse feels that "expansion and growth" is another big challenge, considering the investments, P&L and income flows for the organization. "If some of these business decisions backfire, then servicing the debt taken to nurture the said plans puts a pressure on running the business."

Though the two roles are quite different in nature, for Pendse the role of a business head is far too challenging in relative terms; yet, it's extremely interesting due its non-monotonous nature.

"Every day brings up a different challenge; someday it's about acquiring a customer, someday it's about customer delivery, whereas on other occasions, it's about collection. At times, you suddenly get a big order but a couple of critical team-members have just resigned! The role always keeps you on your toes, which makes it interesting. The expansion challenge always takes you into a thinking mode," Pendse elaborates.

Sanjeev Kumar, Group CIO and Group President – Business Excellence at



Adhunik Group of Industries (which is into energy and mining) shares another perspective on the CIO's multiple roles today. "These roles today are in quite a confused state, which means, depending on the organization, the role of the CIO is different. For example, when we talk of a full-fledged CIO, he is a part of the top management and board with very wide roles and responsibilities in terms of business functions and solutions, formulation of business strategy, and participation in M&As and business expansion — both organic and inorganic. Overall, he drives transformation and business excellence through technology."

Kumar adds that while the CIO has a strong background in IT and brings clear market insights to the table, his role would vary, depending on the nature of business of the organization.

For Kumar, playing the role as President – Business Excellence at Adhunik successfully has its roots and

links with being a CIO. "Business Excellence has various aspects, including finance, processes, resource management and operations. For example, if I have to deal with financial excellence, then I need to have in-depth understanding of various data — including sales, customers, income, advances, profits, deals, etc. So, I need to analyze and integrate it with other business areas and make decisions."

Some CIOs also hold the responsibility of administration. Take, for instance, Boman Nakra of Mumbai-based Credit Agricole Corporate and Investment Bank (formally known as Calyon Bank). With over 24 years of experience in the IT field, Nakra is equally up to the task when it comes to donning the hat of an Administrative Head.

However, Nakra says that such dual roles come with additional expectations and challenges. "Dual roles always come with additional responsibilities and



Dual roles always come with additional responsibilities and higher expectations.

Boman Nakra,
CIO and Admin Head, Credit Agricole
Corporate and Investment Bank



The CIO role would vary, depending on the nature of business of the organization.

Sanjeev Kumar,
Group CIO and Group President –
Business Excellence, Adhunik Group



higher expectations. In a job profile which is always user facing, meeting the expectations of the user is the biggest challenge. Picking up where your predecessor has left and building up on it is a big activity. Prioritization and time management is key here.”

Thankfully, says Nakra, many of the functions and responsibilities are likely to be same or overlapping, which in a way is good for a single person to handle. When such an overlap happens, he says, the approach to planning and execution becomes more holistic.

How they got the second hat

While there may be some differences in their viewpoints or approaches to dual roles, most CIOs we spoke to, have broken the mold and taken the additional responsibilities in their stride. But how did they end up where they are? Did the organizations push them for dual roles or were the CIOs proactive in embracing additional functions?

According to Sharma, his role of Director with Atul Infotech was a natural move through his experience as the CIO. “I have experienced that the role of a business head is much more exciting and

enjoyable — as it adds another perspective to my knowledge and exposure while nurturing my entrepreneurship acumen.”

For Nakra of Credit Agricole, it was his performance as a CIO that was valued by the top management and he was entrusted with additional responsibility. “Based on the performance as CIO, the top management asked me to take on this additional responsibility as Head of Administration to standardize and streamline processes in this area,” he says.

“Both IT and Administration have their pros and cons and striking the right balance between the two excites me the most. It is constantly challenging,” Nakra adds.

When asked how such roles are taken or given, Pendse of Highbar Technologies had this to say, “When one works at a “C” level in a large organization for a considerable period and also builds credibility in the current role, he is no longer viewed only as a CIO/CFO/CHRO, etc., but is viewed as a “C” level executive who can contribute to the strategic objectives of the organization.”

According to Pendse, when the new IT venture (Highbar) was being

conceptualized, the top management of HCC possibly gave specific importance to the entrepreneurial spirit demonstrated by the senior members of the IT team during those discussions.

Moreover, for Pendse, the new role has been a kind of fresh experience after being a CIO for over two decades. He says, “I have performed the CIO role for more than two decades in different industries such as FMCG, airlines, shipping, construction, travel, etc. I consider myself fortunate to have got the opportunities to lead very large IT initiatives, with large IT set-ups and diverse IT teams. After such an experience, I needed a “newness” which was provided by the new role to head the business.”

A similar situation arose in the case of Kumar of Adhunik Industries. Given his performance as CIO with the organization, the top management decided to hand over additional responsibilities of President - Business Excellence.

Truly speaking, these CIOs have successfully proved their caliber and skills not only in IT but in several other functions beyond IT.

pankaj.maru@expressindia.com

ALAN TREFLER
PEGASYSTEMS INC

Alan Trefler, Founder and CEO, Pegasystems Inc, in conversation with Pankaj Maru, talks about the company's technology, its business plans and competition in the BPM space. Excerpts...

“Our core strength is to link business and technology”

Can you brief us about Pegasystems' technology vision?

Our direction of technology is very well aligned with our market strategy. Despite the global slow down in major markets and economies, in the first 6 months of this year, we already have grown by 25% year-on-year. We address major issues of businesses and try to be closer to customers and their business processes. Given the challenges in economy as well geographical changes, there's a lot of pressure on IT in organizations as they are trying to reduce the spend on IT and ripping out many back-end processes. However, our systems actually help them improve their business processes without having to rip out their old IT architecture and processes. Actually, our models are built for changes and challenges. Compared to our competitors like IBM or Oracle who are also present in the BPM space, we are clearly the leaders in BPM as per Gartner's and Forrester's studies.

Like other players are you looking at acquisitions in the BPM space?

We are more focused on business process management (BPM) and customer case management and services, unlike our competitors that are offering BPM solutions through their acquisitions of other product companies. In the past 30 years, we have acquired very few companies whose technology can co-exist with our core technology, unlike our competitors.

For instance, we had acquired a company Chordiant that is into predictive analytics but we not buy a company unless it co-aligns with our core-technology. We built software products based on one model or architecture, while our competitors like IBM, Oracle or SAP have multiple platforms, which creates difficulties and confuses customers. We need to have a common architecture and technology. Our core strength is to link business and technology and make them collaborate on processes and drive business models. We are the only company in the BPM and CRM space



We built software products based on one model or architecture, while our competitors like IBM, Oracle or SAP have multiple platforms, which creates difficulties and confuses customers. We need to have a common architecture and technology. Our core strength is to link business and technology and make them collaborate on processes and drive business models. We are the only company in the BPM and CRM space that makes Java based models that drive efficiency.

that makes Java based models that drive efficiency. Recently, we bought Antenna – a 250 people company to improve our mobile technology with our core platform.

Don't you think Pegasystems has been a late entrant into the Indian market?

We look at India to build our additional capabilities through the local talent. India is a terrific place for talent and we believe strong engineering foundation is central to our business. Hence our focus is to build the engineering foundation in India. Here we see a lot adoption of enterprise technology and architecture as people understand technology and know how to use it. We are not actively looking at sales in India as of now but will consider may be it in next one or two years. Right now, we look at India more from a talent and technology development point of view. From inception to now, our focus has been to develop a strong team in India which can in turn develop excellent software. Within India as a market, the sectors which will be of our interest are BFSI and manufacturing. Traditionally, we started with the financial sector, when it used to be 100% earlier, but now we look at other sector like manufacturing and government. Manufacturing sector revenue wise contributes close to 40%.

Recently, Pegasystems launched version 7 of your software platform. How different is it from Pega 6.3?

Millions of man hours have been spent in the development of Pega 7. It's been built to work for large or big systems and by far is bigger than other companies' products (IBM or Oracle). These companies have similar BPM and CRM products but they need 12 different products to match our product. Also, we have tremendous competitive advantage against those companies as we work on a single architecture rather than multiple ones and our product comes with the ability to be built and grow further.

pankaj.maru@expressindia.com



BI: WHAT COUNTS

Are you looking to roll out a business intelligence project for your organization? Take a look at the scenario unfolding at ABC Corporation before you take the plunge

BY SANJAY SHAH

ABC Corporation is a conglomerate of several types of businesses operating under one single legal entity. Growth in the past couple of years has been good. The MD firmly believes the continued growth and profitability will depend on taking the right decisions at the right time and based on data rather than on gut feelings. For this he feels that time has come to invest in BI technologies and

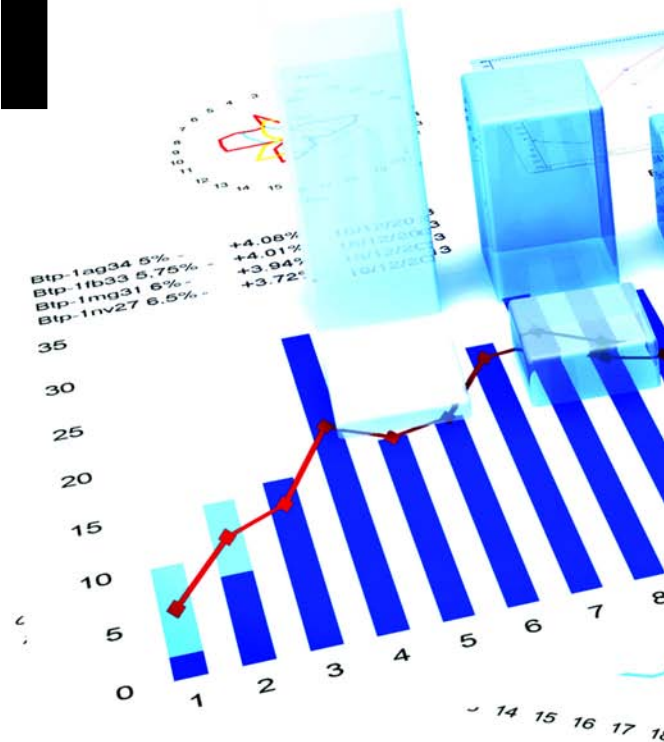
applications. He has engaged Mr. Waghmare, who is a BI strategist, for guidance. Internally, the initiative is driven by the MD himself and Mr. Basu, the IT head of BI in the company.

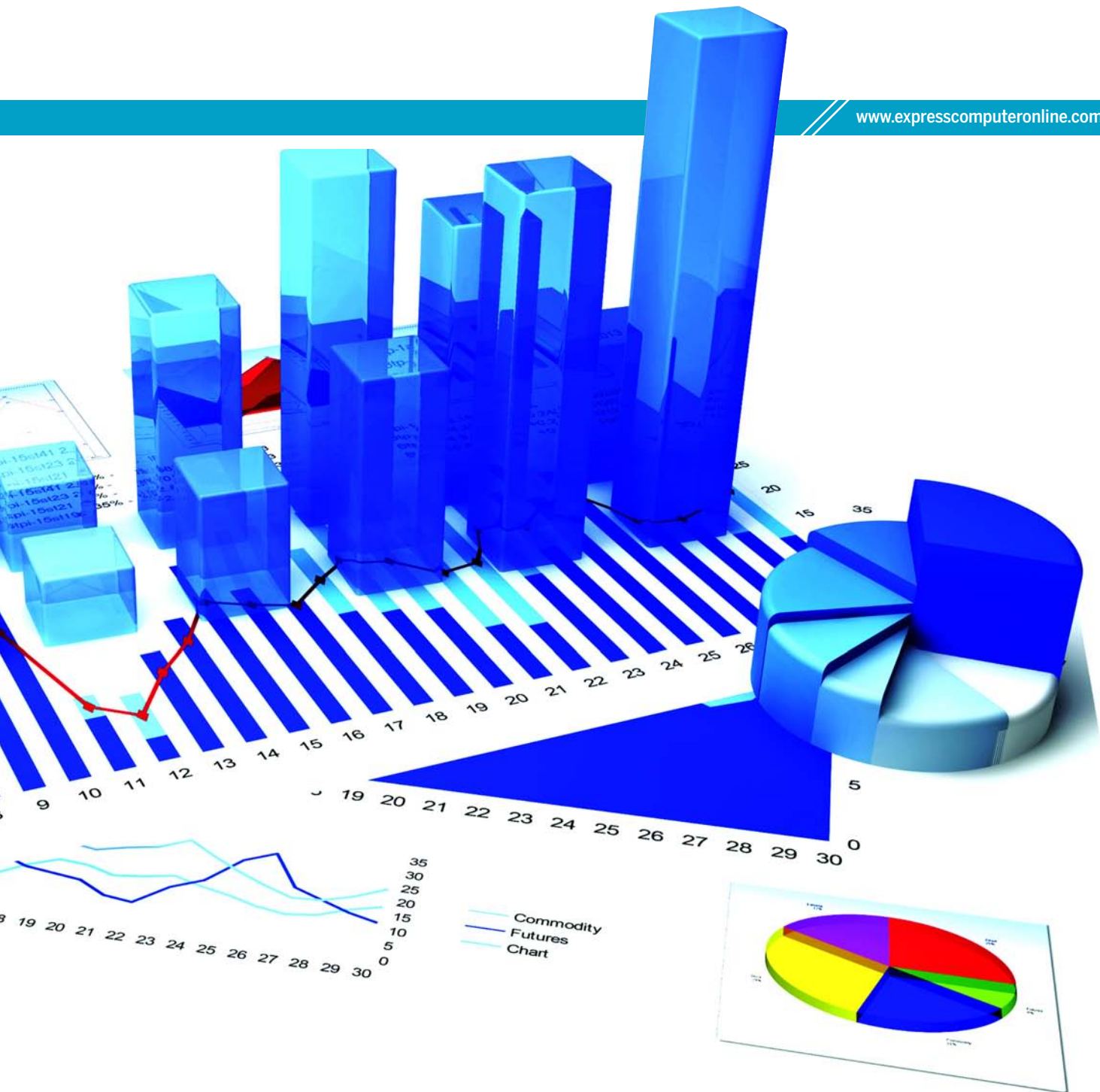
Mr. Basu has worked out a BI strategy and is keen to discuss this with the MD. The MD usually has such meetings late in the evening, after the regular work of the company is done.

MD's Secretary: Good evening,

Mr. Basu. MD and Mr. Waghmare are waiting for you. Both of them seem to be in a good mood after their Diwali break. They are exchanging stories about how they spent their holidays.

The MD's secretary always mentions the MD's mood to Mr. Basu, so that he can go in well prepared. This time Basu is relieved. Generally meetings with the MD are quite stressful. Recently, Basu was promoted from his post of an SBU





head to the post of an Executive Assistant to the MD with specific responsibility for the BI initiative. The MD is very serious about BI, as he feels that if this is well developed, it has the potential of becoming as important as the central nervous system of the human body.

Basu: Good evening, Sir. Good evening, Mr. Waghmare.

MD: Good evening, Basu. I am glad you have started work on BI. Can you give us a brief update please?

The MD's secretary rolls in a tray of tea and digestive biscuits.

Basu: Sir, I have divided the task of BI strategy into two parts. One is selection of the BI technology and second is the selection of the solution partner.

Waghmare: Mr. Basu, that is the right approach. Please go on.

Basu: For the first part, i.e., the BI technology, I carried out a study of various BI tools in the market. Each one seems to be better than the other. So I think we can just take the most popular tool in the market.

Waghmare: Mr. Basu, how do you

determine which is the best tool for us?

Basu (a little surprised at the question): That's easy...I have asked each vendor to provide me the total number of licenses sold by them. The one who has sold the most is obviously the best.

Waghmare: Mr. Basu, in my opinion, in this high technology market, what you should see is not the overall market share of a vendor, but what is the market share in the last few months. If there is a smaller vendor but his market share is growing, you should pay particular attention to them. It is likely that they have developed some leading technology in BI, but don't not have too many licenses at present as they are still in the early marketing phase.

MD: That's a good observation, Mr. Waghmare. After all, if all customers always went to the biggest vendor, then there be only one vendor for each product in the world!

Waghmare: Another important point is that don't get enamored merely by technology. What we need are simple, easy to use reports which will get us business benefits. We don't want show and glamor in the BI reports. However, the reports should be automated so that we get consistent results in the least possible time.

MD: True. For a hungry man, the finest of crockery does not matter if the food is not tasty; and if the food is tasty, the crockery does not really matter.

Waghmare: So, Mr. Basu, I would suggest you look at some other technologies also. All said and done, the technology vendors must provide us existing references where we could see it in live action.

Basu: Yes, Sir, I shall do the needful.

Waghmare: OK, then, Mr. Basu, what will be your strategy in selecting the solution partner?

Basu: Sir, I talked to several solution

partners. Many partners are such that they provide solutions on different technologies. They are aware of the pros and cons of each technology and are able to give alternatives in areas where some technologies have shortcomings.

MD: Yes, that's the right approach. Some technologies may be good at data visualization, but may be poor in creating the data warehouse and so on.

Basu (a little taken aback at MD's knowledge on the subject): Thank you, Sir. As discussed last time, I asked two solution partners to make a BI report on our Account Receivables (AR) using the technology which they favor. I thought that apart from the benefits the technology brings, we should also identify what the solution partner brings to the table.

MD: That's right. Buying a technology is like buying a hammer and a chisel. But only a few can carve out good statues!

Waghmare: Exactly my thoughts.

Basu: Both the solution partners are in the waiting room with their presentations.

MD: OK, call the first person in.

The MD's secretary ushers in the the first solution partner. He is well dressed in a suit and an attractive tie, and sports a very pleasant personality. He connects his laptop to the projector and launches the presentation.

The presentation is a very attractive looking AR report with lots of drill-downs and attractive looking graphs and charts. The entire AR of the company has been shown at a summary level and then it can be drilled down to lower and lower levels, even up to the document level if required. The reports show the AR by division, by SBU, by product line. The top 10 customers can be identified. Basu is extremely pleased with the partner.

The MD takes a hands-on approach to the report. He does the navigation of the report himself and is able to do so very easily. He is also able to make attractive looking graphs in a matter of seconds. He is highly impressed with the results.

They thank the partner and ask him to wait outside.

MD: That was really impressive. The ease with which I was able to navigate the report and create my own reports was phenomenal.

Waghmare: Good to know that you liked it.

Basu: The numbers tallied exactly with the ERP report on AR as of yesterday, so the arithmetic accuracy was also very good.

MD: Yes, that's right. I am so happy that I could give the order to this partner immediately. Don't feel like wasting time on seeing the other presentation.

Waghmare: That won't be fair. Let's see what the other partner has to offer.

MD: OK, please call the other partner also.

The other solution partner comes in. He is in folded shirt sleeves and looks like he has not slept the whole night.

Partner 2: Sorry, gentlemen, but I have been working most of the night making this report for you.

He connects his PC and an Excel file comes on the screen. Basu is aghast. Partner 1 gave such an attractive demo, while Partner 2 is talking in terms of plain old Excel, the thought echoes in his mind.

Partner 2 (addressing the MD): Sir, this Excel screen identifies five of your current customers with whom you should personally have an immediate chat.

The five customers shown are not the top 10 customers shown in Partner 1's list. However, the balances are quite substantial.

MD (obviously irritated): I asked you to show me an AR report based on BI technology. I didn't ask you to tell me what to do and how to run my business. These five are my important customers.

Partner 2: Sir, these five customers have

delayed payments to you in the last five months, their offtakes are reducing and their order booking is also not very good at present. The market for your products is good at present, and yet these customers have delayed your payments and not booked more orders. There seems to be something wrong.

MD: What nonsense! If there was something wrong, I would definitely know about it.

Partner 2 (clicking on a sheet): This is the receipt history of these customers, and this is the product-wise order booking trend of these customers.

Waghmare: How did you manage to find all this?

Partner 2: I took more data from Mr. Basu. I took the data of receipts, orders, invoices and AR. This gave me a 360-degree view of the customer. Then I applied 'intelligent' dimensions so that I was able to spot the exceptions. By studying only the AR data it is possible to reach wrong conclusions.

The MD looks intently at the partner. Basu's jaw drops. The MD asks Partner 2 to step out for some time. Good riddance, thinks Mr. Basu.

The MD lifts his phone and dials a number and is in an animated conversation with someone on the other side. The names of all the five customers are taken. Then he listens intently and finally keeps down the phone. Then he individually calls all the five customers and personally apologizes for the issues, thanks each one of them and puts the phone down.

MD: Good god! I talked to my credit control and production teams. The production team has candidly told me that there have been many quality problems and delays on our side related to all these five customers. That is the reason why these customers have reduced their offtake. Even the products supplied have had some problems and our repairs and warranty section is working with them. No doubt there are delays in payments. I have immediately



It is extremely important to design actionable reports. The reports must identify exceptions and bring them up. The design should be such that all connected data can be seen together

ordered an inquiry and asked my team to give high priority and resolve all these issues fast. These are my old customers, and thankfully, each one has given me some time to resolve all the issues.

Waghmare: So this report, though very simple in appearance, immediately got your attention and made you take action.

MD (the penny drops): That's so true. I got carried away with the glamor of the first report. While this report is much more actionable.

Waghmare: Yes, it's the man behind the weapon which counts. This second partner did not just do what we asked him to do. But he did what we really needed, i.e., identify actionable points!

MD: Mr. Basu, let's go ahead with the second partner. You can call him and discuss the way forward.

Basu: Y..yes..Sir.

The MD's secretary smiled as she saw Basu walk away from the MD's cabin, dabbing his forehead with his

handkerchief. Checkmated, once again!

Observations

It is extremely important to design actionable reports. The reports must identify exceptions and bring them up. The design should be such that all connected data can be seen together and decisions are not taken on the basis of just one domain area.

Design principles

- Each report should have an executive summary identifying major issues.
- This should be linked to a detailed report which can be drilled down to the root cause.
- The report should be designed in such a way that the management is prompted to take quick action. They should not have to search through a huge amount of data to find out areas for which action is to be taken.

The scenario in the article has been imagined by Sanjay Shah, who also happens to be the CEO of Prosys Infotech Private Limited, a Pune-based company specializing in developing BI solutions on the Microsoft BI platform.



GEARING UP FOR NETWORKING

With the launch of a new range of switches, Dell is aiming to play a bigger role in the enterprise networking segment

BY PANKAJ MARU

Dell recently launched a new range of switches in W, N and C series. Like its existing networking switches such as the Z (core networking switches), E (virtualized chassis switches) and S (managed switches) series, Dell's new series continue to focus on specific areas and needs of enterprises like mobility and BYOD.

For instance, the W-series, as the name suggests, offers wireless networking at high data rates to enterprises. The N-series includes energy-efficient and cost-effective 1GbE and 10GbE switches for scalability. And the C-series comprises of robust high-performance switches for enterprises that want end-user mobility and reduced congestion.

It's quite interesting to note how Dell has been steadily building and expanding its networking, storage, computing,

security and services capabilities largely inorganically via key acquisitions over the years. Specifically, the Scalent and Force10 acquisitions have helped Dell aim for a bigger share in the enterprise networking segment against more established vendors like Cisco, Brocade, Juniper and others.

A look at Dell's revenue mix reveals the better performing product segments for the company. The company reported over 8% yearly growth in its Enterprise Solutions Group business with \$3.3 billion revenue in Q2, FY14 — up from over \$3 billion it reported in Q2, FY13. The servers, networking and peripherals business contributed 87% to the group's total revenue while storage added just 13%. While storage was down 7% for the reported quarter, the networking business unit grew over 19% and has shown steady growth over the past 10 straight quarters.

Building on Force10 acquisition

According to S Sridhar, Director, Enterprise Solutions Group – Dell India, post the Force10 buyout in 2011, the company has ramped up its engineering team from 150-odd people (at the time of Force10 buyout) to 600-plus in the past few years. The additions include the design engineers at Dell's facility in Chennai.

“We have carved out a smaller component of this team which is capable of working on India projects, so we are able to design customers' products and projects using our research and design capabilities,” Sridhar told Express Computer in an exclusive interaction in Bangalore recently.

With those buy-outs in the networking space, Dell is trying to bring in some changes in the traditional enterprise networking architecture.

“Traditionally we are used to a 3-tier networking architecture, which includes the client layer, application layer and the storage layer — all linked through networking and switches,” explained Sridhar.

Moving from 3-tier to 2-tier networking architecture

Dell, however, is trying to change this



Dell is capable of providing more cost-effective and energy-efficient networking switches compared to what the competitors are offering.

S Sridhar,
Director,
Enterprise Solutions Group –
Dell India

traditional 3-tier networking architecture approach into a new framework across its infrastructure solutions — with the objective of enabling enterprises with direct server-to-server and point-to-point communication.

According to Sridhar, what Dell is trying to do is crash one of the layers out of the traditional 3-tier model and enable a scale-out type architecture. The idea is to enable increased direct communication among servers even when the environment is virtualized so that there is less communication load on the rest of the infrastructure.

Cracking the networking nut

Over the past two years or so, Dell has been pushing its networking portfolio (especially through campus networking and data center networking projects) harder than before to establish itself as a serious contender in the networking market.

“From an enterprise point of view, Dell is capable of providing more cost-

effective and energy-efficient networking switches compared to what the competitors are offering,” Sridhar said.

Further, he added that Dell's latest switches come with augmented capabilities based on open standards, which allow these switches to function in heterogeneous environments.

Challenges for Dell

For Dell, being a non-native networking player makes it harder to convince enterprises and potential customers of its networking solutions. “In many customer opportunities, we are still not seen as a native networking player but over the last two years, gradually and slowly, we have been explaining our networking capabilities to them,” Sridhar said.

Over a period of time, Dell will slowly phase out some of its existing products and replace them with new ones. The company believes that the upgraded switches portfolio will help it better explore the market and tap into more existing as well as new customers.

“As a player who is probably in the infancy stage in the group, any market is a good market for us. If you look at our installed base, we have a large installed base of servers and an increasing base of storage solutions, which only provides us the opportunity to go and have more complete conversations with the customers,” Sridhar pointed out.

Winning large enterprises and customers looks a bit hard and is a time-consuming exercise for Dell. And that is why, according to Sridhar, the company is looking more at segments like mid-size companies, educational institutes and manufacturing outfits for sales opportunities.

In a bid to establish itself as a networking player, Dell is taking several key steps, including marketing campaigns, building a strong channel partner network, and relying on some of the existing customers to speak for its technology capabilities and solutions. The next few quarters could potentially turn a new leaf for Dell as far as networking is concerned.

pankaj.maru@expressindia.com



COLUMN

DHANYA THAKKAR

CUSTOMIZE YOUR DEFENSE AGAINST APTs

Signature-based one-size-fits-all approach to security no longer works in case of advanced persistent threats

Advanced persistent threats (APT)s and targeted attacks have clearly proven their ability to penetrate standard security defenses and remain undetected for months, while siphoning valuable data or carrying out destructive actions. It has time and again become undoubtedly evident that standard protection products' signature-based, one-size-fits-all approach cannot deal with the custom nature of targeted attacks and their dedicated perpetrators.

Studies have shown an increase in advanced, targeted computer hacking attacks aimed at Indian government bodies and corporate. Alarm bells rang earlier last year after hackers were able to breach DRDO's (Defense Research and Development Organization) defense and accesses top secret information.

A look at some of the statistics released by CERT-India provides a sense of the shaping cyber security landscape in the country. The security incidents handled by CERT-India have gone up from 552 in 2006 to 13301 in 2011, while the numbers of advisories published have shot up from 50 in 2006 to 81 in 2011. The total number of Indian websites defaced has also witnessed a quantum jump — from 5211 in 2006 to 17306 in 2011.

The APT threat is real for large and small organizations alike, because organizations of all sizes have valuable data. Despite this growing reality of APTs, the industry has left security decision makers with few choices for effective action, and no offer of a comprehensive approach to creating a better defense.

A recent survey by ISACA revealed that even though globally 94 percent of security practitioners believed APTs posed a grave threat, most had deployed ineffective solutions for protecting their enterprises.

The state of industry solutions

Standard security solutions at the network, gateway and endpoints play a

vital role in protecting any organization's data and operations. But their detection limitations, real-time execution constraints, and reliance on mass signature and reputation updates renders them unable to adequately detect and defend against a truly targeted attack. These attacks are successful because the zero-day malware used is designed to be invisible to standard security, and the human attacker activities are typically either undetected or buried deep in the undiscovered logs of IPS, SIEM and other security systems.

Targeted attackers effectively evade these technologies and the one-to-many "vaccination approach," which is the backbone of defending against known malware and attack vectors.

The established security vendors have done little to nothing to address their current product limitations or develop any new technologies. Innovation has been left to small, start-up firms, a few of whom have developed products that can detect a portion of the zero-day malware used in the initial stage of an attack. However, these products limit detection to Microsoft-based malware, do not detect attacker activities, and typically act in an isolated manner — independent and unconnected from the other security protections in place.

Finally, next-generation firewall, IPS, and some gateway vendors have attempted to join the APT bandwagon by bolting on cloud-based sandbox malware detection to their solutions. At best, this adds malware detection of unproven merit and limited scope to their list of otherwise valuable functions. Perhaps more likely, is customer confusion in evaluating solution effectiveness, and customer concern over data privacy and control.

The big question before enterprise security decision-makers, therefore, is how to reduce the risk of attack? What would an ideal solution be?



An ideal custom defense solution would weave the entire security infrastructure into a tailored and adaptable defense that is tuned to the particular environment and particular attackers



A custom defense solution

An ideal custom defense solution would weave the entire security infrastructure into a tailored and adaptable defense that is tuned to the particular environment and particular attackers.

An ideal solution would not only perform custom detection and analysis of attacks at the network level, but integrate advanced detection technology into your existing endpoint and gateway defenses. Detection at any one protection point would automatically update other protection points to defend against further attack — all working in a multi-vendor security environment. An ideal solution would leverage the global intelligence of a major security vendor to aid in

detection, and use it to provide you threat profile information relevant to your particular attack.

Finally, an ideal solution would pair this profile with network-wide event analysis to guide rapid containment and remediation. In short, an ideal solution is a custom defense employing a comprehensive Detect—Analyze—Adapt—Respond lifecycle unique to your particular organization and the threats against it.

The attributes of a custom defense strategy make it the best choice to combat targeted attacks — and security vendors are putting that belief into action by delivering a complete custom defense solution. The custom defense integrates software, global threat

intelligence, and specialized tools and services to deliver a comprehensive multi-vendor solution to discover and block targeted attacks and shut them down before real damage occurs.

Using custom sandbox analysis, custom intelligence and custom security updates, the custom defense solution allows not only to detect and analyze APTs and targeted attacks, but also to rapidly adapt protection and respond to these attacks.

It is critical for enterprise security leaders to take immediate action and to include implementation plans for a custom defense strategy in their budgets.

Dhanya Thakkar is Managing Director for India & SAARC at Trend Micro.



COLUMN

SUDHIR NARANG

BYOD: BEYOND THE DEVICE

An integrated approach across device, application and network can enable CIOs to manage the policy complexity of BYOD and deliver a more consistent experience to employees



Organizations need to think less about just the device and operating system, and more about the services delivered to that device, user experience and productivity gains

In a globalised economy populated by digital natives, a company's competitive advantage relies on the speed with which information is relayed and the time taken for decisions to be made. We are in the middle of an exciting wave of change in the way people communicate, collaborate and work. Smart devices allow people to do great things by becoming more innovative in the tools and applications they use, that can transform the way they work and give organizations a real business edge. While there will be varied business and technology trends that will play a significant role in shaping the enterprises of the future, the most far reaching effects will be of the BYOD phenomenon, which has spurred in its growth in India and across the world during the last five years.

BYOD as global phenomenon is bigger than any one geographic market or industry. At its heart is the disruptive growth of smartphones and more recently — tablet ownership. The smartphone and its app ecosystem are changing how individuals live, function and work. People across all socio-economic groups and markets are using smartphones and mobile applications in their personal and their work lives. There are soft and hard benefits of implementing the right BYOD strategy across an organization. However, the true value of a BYOD program is improved employee engagement and productivity.

A BYOD strategy enables customers to tap business advantage, reliably, securely and cost effectively. As employees continue to use their personal devices for work-related purposes, CIOs are looking for ways to centralize and simplify management and improve cost control. As security in the coming year becomes more complex than ever to manage, specific tools will be required by organisations to measure, understand and address this new security reality and to turn these challenges into

opportunities. Enterprises would also need to have a clear policy and the trust with which to deliver it to employees and the processes in the business that everyone understands and buys into.

A good BYOD experience for employees is defined by simplicity. An integrated approach to BYOD policy management across device, application and network, has the potential to enable CIOs to manage the policy complexity of BYOD and hence deliver a more consistent, simple experience to the employee. Business as a whole and employees become more mobile and agile by being able to work from anywhere and on any device meeting different work styles. According to our study on the BYOD trends, more than 3 in 5 IT decision-makers (61 percent) believe the rise of BYOD heralds the move to a new model of IT, where barriers between the individual and workplace dissolve and everything is linked together by the corporate network.

As a greater volume of personal devices hit the corporate network, creating a bandwidth and access for each of them will pose another grave challenge for network administrators. This influx of new devices creates three key challenges for the enterprise network — Wi-Fi coverage and capacity, traffic prioritization and security. Smart CIOs are also working to ensure that they have a network that has the capacity to provide a good user experience on every mobile device accessing it. Network managers are also using network access controls to ensure this is being done within the parameters of minimum network security requirements and prioritizing traffic to deliver enterprise network Quality of Service. BYOD also presents greater governance and compliance challenges to regulated industries such as financial services. However, IT managers in the financial services sector have the greatest vigilance on their corporate network. 77



percent can tell if someone is using an unauthorized device on their system and can identify the user.

The BYOD phenomenon, whether businesses like it or not, will bring in a wave of new devices onto corporate networks. According to a recent BYOD white paper by Ovum, 67.8% of full time employees who have smartphones will not only be bringing their own smartphone into the workplace but using it to access corporate data, whether or not their IT department is aware of it. Of course businesses need to ensure that BYOD happens securely, and has the ability to manage sensitive corporate data on employee owned devices, but there are a range of mobile device management and mobile application management solutions available that equip the IT department with the ability

////////////////////////////////////
 While businesses should not be looking to block access to personal web services, they should be looking to prioritize traffic for applications that are mission critical or for which latency means a reduction in quality of service

to manage BYOD at the device and/or the application level. However, while businesses should not be looking to block access to personal web services, they should be looking to prioritize traffic for applications that are mission critical or for which latency means a reduction in quality of service.

The BYOD trend is widespread across all vertical industries, and is more evenly spread than the geographic variance. We're seeing a big change with more corporations becoming network centric. Organizations looking to deploy a BYOD program should look at a comprehensive BYOD plan and need to think less about just the device and operating system, and more about the services delivered to that device, user experience and productivity gains.

Sudhir Narang is Managing Director - India, BT

E-LEARNING AND SOCIAL COMPUTING

SUMEET ANAND AND
S.M. NAFAY KUMAIL

Instead of panicking in the wake of social computing challenges, eLearning companies should evaluate where they stand with a fresh approach

That “social computing is disruptive” is no more disputed. Apart from many other aspects of life, it is already impacting and going to impact businesses across the spectrum. eLearning industry, which rose on the pillars of computers (Computer-based Training) and Internet (Web-based Training) also faces the challenge. It has responded largely in three ways:

- 1. An ostrich-like approach** where companies have retained the status quo thinking this too shall pass. It has resulted in shrinking of their business share and facing constant threat of its client moving towards more innovative solutions.
- 2. Trying to go social without much thought** — as panacea for all ills. This has brought a new beast home both for the solution providers as well as their customers.
- 3. Then there are companies** who believe having some sort of social computing based solutions as value added service is the answer.

This has resulted in uncertainty and confusion. Social computing and its surge have made eLearning industry scramble for solutions. Instead of panicking, eLearning companies should rather first answer these questions:

- What is your USP? Are you in content, technology or services side of business or have some sort of combination of these? If it is a combination, what is the mix?

And some related questions:

- Do you have a growing repository of technically correct content delivered with sound instructional design on myriad platform?
- What do you produce? WBT, ILT or content in any other format?
- Do you have an LMS and/or a LCMS (Learning Content Management System) or have alliances with LMS and CMS providers?

After evaluating where it stands and ascertaining which way the wind is blowing, it is important to understand how social computing is transforming each aspect of eLearning business: content, technology and services.

Once this change is understood, only can you take an informed business decision. In the meanwhile, keep an eye on how things are evolving on the social computing front.

Sumeet Anand is Founder CEO and S.M. Nafay Kumail is Co-Founder of Kreeo (i-nable Solutions), a technology startup in the Enterprise 2.0 and collective intelligence space.

eLearning Components	Without Social Computing	With Social Computing
Content	Build or buy WBT, ILT and training related content. Create “courses”	Crowd source and generate content from experts and practitioners within
Technology	Technology is needed at two levels: creating e-content as per instructional strategy and design (Think WBT building engines and LCMS) and building a platform with capabilities of launching structured learning content, tracking and reporting, expert access, dynamic content, knowledge base (Think LMS)	Provide a framework or create an automated framework to create courses out of collected information objects. Repurpose/update collaboratively created and tagged content objects in many forms. The emerging movement towards Massive Open Online Courses (MOOCs)
Services	Web-based services for a large user-base such as E-mail, chat, call centers, discussion forums, bulletin board, managing entire training cycle and resources, providing internal MIS to trainers, information services for pre-identified groups	Social computing driven tools completely remove this need by built-in services within the tool and through self help and search paradigm

RAJ NERAVATI
CIGNITI TECHNOLOGIES

Raj Neravati, Chief Operating Officer, Cigniti Technologies, talks to KTP Radhika about the pros and cons of automation in the software testing space and the benefits of cloud-based testing

“Absence of established ROI makes automation an expensive affair”

How important is the consolidation of services and tools in testing and quality assurance?

Quality assurance is one industry that has grown rapidly over the last decade and every organization has established dedicated test teams and implemented test tools. QA services industry has higher demand compared to the supply and continues to face challenges in terms of hiring and retaining talent, inducting technological experts and test architects with strong development skills. With more adoption of new age technologies like cloud, mobile, social media, big data, quality assurance has become the most important outcome of software testing. To sustain the current pace of changes, there is a demand for a comprehensive service portfolio, which can address a combination of generic and unique requirements with rapid assessments.

Most of the enterprises today, aim to consolidate services and tools to optimize their overall spend and gain efficiencies. Some forms of the consolidation include silo operations, acquisitions, expansion of global footprint etc. Services are being consolidated so that talent can be managed better and technology expertise can be utilized as shared service.

What are the benefits and pitfalls of automated software testing?

Automation in any industry is driven by three key business adjectives — faster, cheaper and better. Automation in software testing increases the test coverage and avoids human errors, in addition to the standard business drivers. Automation outcomes are enriched by identifying the right tool, creating a framework and defining scripts that are reusable and maintainable. Any mundane task like writing test cases, creating test data, navigation of screens etc. should be considered as good candidates for automation. However, in the absence of established ROI, automation can become an expensive affair and can turn counter productive. ROI doesn't need to translate into cost savings all the time; it can ensure increased test coverage, faster execution or reduction of test cycles.



To meet the testing requirements, enterprises will have to invest in test infrastructure and resources. But the downside is that these investments will go redundant when the testing requirements are addressed. Opting for cloud based testing would not only reduce the burden of redundant investments but also carve the roadmap for testing partnerships for the coming decades.

Cloud computing is one of the greatest influencers on the IT function now. What is your take on testing-as-a-service or cloud-based testing? How is it coming up? What are the pros and cons?

Given the cost benefits, flexibility and increasing feasibility, cloud based testing will be the next logical move as the technology will benefit enterprises that optimize their processes and IT systems. Testing as a Service (TaaS) is already a part of the service offerings by independent software testing enterprises and major corporations. Independent testing services industry is still in nascent stage and there are very few players with cloud capabilities that can address the demands of the global economy.

As an undercurrent of the transformations in the IT industry, testing requirements will multiply and grow in volume, variety and velocity. To meet the testing requirements, enterprises will have to invest in test infrastructure and resources. But the downside is that these investments will go redundant when the testing requirements are addressed. Opting for cloud based testing would not only reduce the burden of redundant investments but also carve the roadmap for testing partnerships for the coming decades. Since testing over the cloud is a critical decision, there will be a demand for impeccable pre-engagement assessments and agreements in the form of a global service delivery model that adheres to standards compliance, data privacy, and global business protocols.

What are your offerings in this space? How big is the Indian market for you?

We offer a comprehensive set of services that cover the entire gamut of software testing including enterprise mobility, cloud, big data, security, compatibility, etc. The Indian market still needs to mature and outsourcing of IT in India is still driven by staff augmentation service offering. However, the trend appears to be on the upswing since the banks and stock exchanges are mandating independent quality assurance. So far, India has not been a big market place for us and most of our customers are spread out in North America and Europe.

radhika.ktp@expressindia.com

Google sells Motorola Mobility to Lenovo for \$2.9 billion



LENOVO AND GOOGLE have entered into a definitive agreement under which Lenovo plans to acquire the Motorola Mobility smartphone business.

With a strong PC business and a fast-growing smartphone business, this agreement will strengthen Lenovo's position in the smartphone market, the company release said.

In addition, Lenovo will gain a strong market presence in North America and Latin America, as well as a foothold in Western Europe, to complement its smartphone business in emerging markets around the world.

The purchase price is approximately US\$2.91 billion (subject to certain adjustments), including US \$1.41 billion paid at close, comprising US \$660 million in cash and US \$750 million in Lenovo

ordinary shares (subject to a sharecap/floor). The remaining US \$1.5 billion will be paid in the form of a three-year promissory note.

Lenovo had, in 2005, acquired IBM's PC business and its legendary PC brand. With the new purchase, it now gets Motorola Mobility, including the MOTOROLA brand and Motorola Mobility's portfolio of smartphones, including the Moto X and Moto G and the DROID Ultra series. In addition to current products, Lenovo will take ownership of the future Motorola Mobility product roadmap.

Google will maintain ownership of the vast majority of the Motorola Mobility patent portfolio, including current patent applications and invention disclosures. As part of its ongoing relationship with

Google, Lenovo will receive a license to this rich portfolio of patents and other intellectual property. Additionally, Lenovo will receive over 2,000 patent assets, as well as the Motorola Mobility brand and trademark portfolio.

"The acquisition of such an iconic brand, innovative product portfolio and incredibly talented global team will immediately make Lenovo a strong global competitor in smartphones. We will immediately have the opportunity to become a strong global player in the fast-growing mobile space," said Yang Yuanqing, chairman and CEO of Lenovo.

"We are confident that we can bring together the best of both companies to deliver products customers will love and a strong, growing business. Lenovo has a proven track record of successfully embracing and strengthening great brands – as we did with IBM's Think brand – and smoothly and efficiently integrating companies around-the-world. I am confident we will be successful with this process, and that our companies will not only maintain our current momentum in the market, but also build a strong foundation for the future."

"Lenovo has the expertise and track record to scale Motorola Mobility into a major player within the Android ecosystem. This move will enable Google to devote our energy to driving innovation across the Android ecosystem, for the benefit of smartphone users everywhere," said Larry Page, CEO, Google.

"As part of Lenovo, Motorola Mobility will have a rapid path to achieving our goal of reaching the next 100 million people with the mobile Internet. With the recent launches of Moto X and Moto G, we have tremendous momentum right now and Lenovo's hardware expertise and global reach will only help to accelerate this," said Dennis Woodside, CEO, Motorola Mobility.

Tata Docomo to offer communication services at MIAL

TATA TELESERVICES MAHARASHTRA Limited (TTML), the fully owned subsidiary of Tata Teleservices Limited (TTSL), announced that it has entered into an exclusive partnership with GVK led Mumbai International Airport Ltd. (MIAL), to offer end-to-end voice and data services at the recently inaugurated T-terminal at the Chhatrapati Shivaji International Airport CSIA.

Tata Docomo will provide reliable and cost-effective fixed voice and data services for its captive use as well as for concessionaires at the airport, which will be one of the country's busiest airports serving over 40 million passengers and handling nearly 6.5 lakh tonnes of cargo annually.

The company will provide voice and data telecommunication services including internet leased line, ISDN PRI, ADSL, MPLS, broadband connection. The broad scope of collaboration will also



entail supplying, installing, commissioning, operating, managing and maintaining the related telecommunication infrastructure and equipment at the airport for a seven year period.

Vishal Rally, Regional Chief operating Officer West, Enterprise Business, Tata Teleservices Limited said, "We are pleased to partner with MIAL and deploy state-of-the-art telecom infrastructure and solutions at Chhatrapati Shivaji International Airport. Partnerships of this

size and nature, is of paramount importance and forms part of company's overall enterprise business portfolio, build on a long track record of providing high quality infrastructure that includes enterprise telecom solutions."

Vaibhav Tiwari, Head Corporate Communications, GVK MIAL said, "We are pleased to associate with Tata Docomo which is setting impeccable benchmarks in the telecom space in India. Our vision to transform CSIA into one of the world's best airports that consistently delights customers and be the pride of Mumbai. A strong telecom network thus plays a very critical role in the service offering at any airport. Partnering with Tata Docomo will enable us to ensure highest quality services and will further strengthen our position as one of the best airports in the world."

Tata Docomo has already partnered with Delhi and Hyderabad airport to provide connectivity solutions.

CeBIT, iSPIRT to promote India as a product nation

HANNOVER MILANO FAIRS India, the Indian subsidiary of the global joint venture company HMG (Hannover Milano Global) recently announced its roadmap for the entry of CeBIT, the world's largest business IT exhibition and conference to India for the first time.

As part of the roadmap, HMFMI has signed an memorandum of understanding (MoU) with iSPIRT (Indian Software Product Industry Round Table), the non-profit body promoting software development and entrepreneurship in India. Under the signed MoU, both the entities are aiming to engage with informed buyers from focused sectors to show case India's software product development capabilities to buyers and showcase India as a product nation utilizing the CeBIT

global series of events as a platform.

A focused, curated pavilion of several Indian software companies will be showcased at CeBIT Germany in 2015. These initiatives are also aimed at catalyzing venture capital and private equity funding.

"Over the next few months the HFMI team will focus on building key partnerships with government and industry bodies to build India's first CeBIT as a platform that serves the entire IT ecosystem from services to products. Historically, CeBIT has always served as a driver for opportunities bringing together the fields of knowledge, research and entrepreneurship to offer brilliant prospects for business development on a national and international level," said

Mehul Lanvers-Shah, Managing Director, Hannover Fairs India.

The CeBIT event is dedicated to boost new business in the Indian IT and ITeS market and also create a platform for generation of new national and international business opportunities, drive new ideas, profitability and growth in India with an exposure to the international markets. The first CeBIT India will take place in November 12 to 14, 2014 at Bangalore International Exhibition Center (BIEC) located on Tumkur Road, Bangalore.

With the aim of showcasing new perspective in IT business, India's first CeBIT will cover the key IT trends of cloud computing, strategic big data, enterprise mobility and social media.



Oracle expands cloud services for India

ORACLE RECENTLY INTRODUCED 10 new Oracle Cloud services for its customers and partners in India at CloudWorld New Delhi. The new services will expand Oracle's comprehensive portfolio of application, social, platform and infrastructure services.

"India is an important market for Oracle and the growth of our cloud business here has been unprecedented," said Sandeep Mathur, Managing Director, Oracle India. "Cloud adoption has gone mainstream. We are already one of the leading cloud software companies in the world, and will be investing heavily in building this business in India."

Addressing the audience through a live webcast, Mark Hurd, President, Oracle re-inforced the company's global cloud strategy which is to offer choice and flexibility to customers with a comprehensive, modern, and secure portfolio of cloud products and services.

Oracle also announced the launch of the Oracle Cloud Marketplace. It is a global marketplace where partners can publish applications and customers can browse through and discover new solutions to address their business needs. Featuring more than 100 business

applications developed by Oracle partners, the Oracle Cloud Marketplace is aimed at enabling Oracle Cloud customers to easily browse, evaluate, and buy trusted business applications.

Oracle also announced new additions and enhancements to its portfolio like new integrations between Oracle Eloqua and Oracle Social Relationship Management (SRM), as a part of Oracle Marketing Cloud, to enable modern marketers to manage their digital interactions from a single platform, helping reduce complexity and improve marketing effectiveness.

It also announced new enhancements to Oracle CX support sales, marketing, commerce and service organizations, to enable the delivery of a more interactive, social and mobile experience.

"Our vast portfolio of cloud solutions, and the flexibility we offer to customers to implement them in a private or public or hybrid environment has been a strong testimony for our growth in this business," said Sunil Jose, Vice President, Applications, Oracle India. "We are observing large enterprises embrace this new form of computing and we are excited with the business

Citrix, VMware, NComputing lead the pack in client virtualization: IDC

RESEARCH FIRM IDC recently conducted an assessment study for the desktop virtualization segment titled IDC MarketScape: Worldwide Client Virtualization 2013 Vendor Analysis.

The report highlights the various vendors active in the segment and gave an analysis of their respective strengths and market positioning.

Leading the charge are Citrix and VMware in the Leaders segment, followed closely by NComputing in the Major Players segment. Other vendors in this category include Microsoft, Dell, Unidesk, Virtual Bridges and Moka5.

According to IDC, "The client virtualization software market is maturing at a rapid pace; new approaches such as workspace as a service (WaaS) and mobile experience virtualization are beginning to emerge. The market itself is beginning to consolidate as larger vendors acquire unique smaller firms to access new capabilities and customer groups."

As per an NComputing press release, the report specifically cites that the company's "vSpace virtualization platform has matured significantly over the past two years to provide scale, performance, manageability, and software client support for PCs/laptops and Windows devices."

NComputing is also noted for its successful evolution from "a device-centric company" to a "software company with a client virtualization platform purpose built for simplicity, low cost, and minimal IT resources," quotes the release.



New! TwinPro™ Architecture

Four or Two Hot-Pluggable Nodes in 2U

FDR(56Gbps)/QDR InfiniBand · 10GBase-T · Up to 12 HDDs/Node
 Up to 1TB DDR3-1866 MHz in 16 DIMMs · Redundant Platinum Level Power Supplies · SAS 3.0 (12Gbps)



TwinPro²™
 SYS-2027PR-HT/C0/C1(T)R

TwinPro™
 SYS-2027PR-DT/C0/C1(T)R

Four or two hot-pluggable systems (nodes) in a 2U form factor.
 Each node supports the following:

- Dual Intel® Xeon® processor E5-2600 & E5-2600 v2 product families; QPI up to 8GT/s
- Up to 1TB ECC DDR3 up to 1866MHz memory in 16 sockets
- 1 PCI-E 3.0 x16 slot; 1 PCI-E 3.0 x8 slot (TwinPro)
- PCI-E SSD, dual SFP+, or GPU via "0 slot" flexible rear expansion
- LSI 3008/3108 controller for 8x 12Gbps SAS 3.0 ports
- Intel® C606 controller for 6x SATA3/2 ports
- Dual Intel® X540 10GBase-T (-T versions);
 or, Intel® i350 dual port Gigabit Ethernet
- 8x (TwinPro) or 6x (TwinPro²) hot-swap 2.5" HDD bays
- Onboard FDR/QDR InfiniBand
- 1280W / 2000W redundant Platinum Level (94%) power supplies
- IPMI 2.0 + KVM with dedicated LAN
- SATA-DOM support



www.supermicro.com/TwinPro

© Super Micro Computer, Inc. Specifications subject to change without notice.
 Intel, the Intel logo, Xeon, and Xeon Inside are trademarks or registered trademarks of Intel Corporation in the U.S. and/or other countries.
 All other brands and names are the property of their respective owners.



Netweb TECHNOLOGIES

Info@netwebindia.com
 www.netwebindia.com
 New Delhi : +91-11-43240000
 Bangalore : +91-80-40540000
 Hyderabad : +91-9989990647
 Chennai : +91 97890 70289
 Mumbai : +91-22-40158811
 Kolkata : +91 - 33 - 23232055

SMC-20121020-2

Lenovo to acquire IBM's x86 server business



LENOVO RECENTLY ANNOUNCED that it has entered into a definitive agreement with IBM, in which Lenovo plans to acquire IBM's x86 server business. This includes System x, BladeCenter and Flex System blade servers and switches, x86-based Flex integrated systems, NeXtScale and iDataPlex servers and associated software, networking and maintenance operations.

The purchase price is approximately US \$2.3 billion, approximately two billion of which will be paid in cash and the balance in Lenovo stock. According to the company release, IBM will retain its System z mainframes, Power Systems, Storage Systems, Power-based Flex servers, and PureApplication and PureData appliances.

The agreement builds upon a longstanding collaboration that began in 2005 when Lenovo acquired IBM's PC business, which included the ThinkPad line of PCs. In the period since, the companies have continued to collaborate in many areas. IBM will continue to develop and evolve its Windows and

Linux software portfolio for the x86 platform.

Lenovo and IBM also plan to enter into a strategic relationship which will include, a global OEM and reseller agreement for sales of IBM's entry and midrange Storwize disk storage systems, tape storage systems, General Parallel File System software, SmartCloud Entry offering, and elements of IBM's system software portfolio, including Systems Director and Platform Computing solutions.

Following the closing of the transaction, Lenovo will assume related customer service and maintenance operations. IBM will continue to provide maintenance delivery on Lenovo's behalf for an extended period of time, so customers should see little change in their maintenance support.

Approximately 7,500 IBM employees around the world, including those based at major locations such as Raleigh, Shanghai, Shenzhen and Taipei, are expected to be offered employment by Lenovo.

Cambium Networks opens wireless facility in Bangalore

CAMBIUM NETWORKS, A global wireless broadband solutions provider recently announced the opening of its wireless R&D center in Bangalore. This new facility will be a global hub for research and developments, innovation as well as service support for customers in India and Asia region. It will drive innovation and add values across company's entire product portfolio.

The Chicago headquartered company was previously part of Motorola Solutions and since 2011, has been independently developing cost-effective solutions delivering broadband connectivity to underserved or under connected communities using fixed wireless access technology over unlicensed spectrum.

With this center, Cambium Networks aims to further its market penetration and repeat success in the region, from powering and expanding e-government networks to providing connectivity solutions tailored to service providers' needs.

According to Atul Bhatnagar, President & CEO, Cambium Networks, the R&D center in Bangalore will act as a global development hub to drive innovation, add value and work in building new products.

"Over next 12-18 months, we will hire around 100 people to strengthen the development and research capabilities of this center. Also the center will service local customers in India and Asia region," Bhatnagar added.

In India, Cambium Networks is said to be seeing a growth of over 50% business given growing demand of high speed broadband communication.

EXIDE POWERSAFE XHD



Built for tough environments!

60
Months
Warranty*

*Conditions Apply

TÖRR
TUBULAR®



India has many power deficient areas where load-shedding is a regular feature. Yet the people's needs must be continuously met. E-governance Projects in rural areas, co-operative banks, dairy collection centres or e-choupal hubs...

Only one battery has the proven ruggedness to keep things running smoothly in India that is Bharat. Powersafe XHD, with the rugged tubular plate technology that is trusted the world over for critical applications from defence to power plants.

VRLA Convenience with Törr Tubular Toughness

EXIDE Industries Ltd., Industrial Marketing: 6A Hatibagan Road, Entally, Kolkata - 700 014, Phone: 2286 6158/6159, E-mail: indlcare@exide.co.in
www.exide4u.com



HP fights counterfeit toner cartridges in India.



Counterfeit cartridges are those cartridges which have been illegally packaged to resemble genuine HP cartridges. This usually involves packaging a reman/refill cartridge in a box that closely resembles genuine HP packaging in order to deceive customers and pass the print cartridges as original HP product. To protect its customers, HP runs a Global Supplies Anti-counterfeit program (ACF) to raise awareness among partners, customers and local authorities.

Counterfeit Seizures

HP Anti-counterfeit team boosted its drive against counterfeiting in the year 2013. Here are the key highlights of raids conducted from January 1st to November 30th, 2013:

- Over **200 actions** conducted across India by the enforcement authorities
- Counterfeit ink and toner cartridges worth approximately **USD 3 million** seized along with packages, labels, machines and equipment
- **233 people** detained by the enforcement authorities

Following table captures the details of locations where the raids were done. These raids were conducted by local authorities and based on their own assessment targeted against specific retailers in these localities. These raids were not targeted against the entire market.

Ahmedabad	Madalpur, Shreeji Complex
Alwar	Jay Complex
Amritsar	Nehru Shopping Complex, Lawrence Road, Tarantara
Aurangabad	Connaught, CIDCO, Bajarang Chowk, CIDCO, Jaisinghpura, Gulbandi, MIDC Area, Waluj, New Gulmandi Road, CIDCO, Pandaribad Road
Ahmednagar	Sub-Jail Road
Ankleshwar	GIDC, Sardar Park -2
Bengaluru	Old Madras Road, Purushottam Road, Ulsoor, Domlur Layout, Sampangirama Nagar, Old Airport Road, SPA Plaza - OTC Road, SP Road, Kamanahalli Main Road, Banaswadi Main Road
Bharuch	Indraprasth Complex, Zadeshwar Road, Station Road, Pruthvinagar
Bhopal	M.P. Nagar, Fine Complex, Bankari Kolar Road
Bhubaneshwar	Saheed Nagar
Chennai	Ammayappan Street, Royapettah, V.V. Koil Street, Vellala Teynampet, Thousand Lights, Vellalar Teynampet, Nungambakkam, Egmore, Pudupet, Royapettah, Nambi Trade Centre, Narasighapuram Road, Maruti Complex, Wallers Road, Chindaripet, Aziz Mulk 1 st Street, Thousand Lights, Woods Road, Arumugam Street, Shree Krishnapuram Street, Kiragaya Illam, Kallimanpuram, State Bank Road, Mount Road
Daman	Somnath, Centre Point, Somnath Junction
Dehradun	Rajpur Road
Delhi	Shakarpur, Bhikhaji Cama Place, Ranjeet Nagar, Nehru Place, Sadar Bazar, Nayi Sadak, Roshanpura, Barakhamba Road, Connaught Place, Daryaganj, Rao Tula Ram Marg, Delhi Cantt.
Dhanbad	Urmila Tower, Bank More
Gaya	Balaji Market, Dighi Tank, Ambedkar Market, GB Road
Ghaziabad	Shiva Tower
Goa	Panjim, Ghavase Towers, Patto Centre Building, Near KTC Bus Stand
Hyderabad	Aditya Enclave, Ameerpet, Vanasthalipuram
Indore	Silver Mall, RNT Marg, Silver Centre
Jaipur	Nehru Place
Jabalpur	Gada Road, Madan Mahal, Right Town, Near Jyoti Talkies
Jhansi	Manik Chowk
Kanpur	Somdukt Plaza
Kolhapur	Prabhakar Plaza- Station Road, Rajarampuri,
Kolkata	Chatterjee Complex, Nawab Sirajudoula Sarani, Khetra Das Lane, Pollock Street, Baretto Lane, Metcalfe Street, Bentink Street, Radha Bazar Street, Broubon Road, Biplabi Anukul Chandra Street
Lucknow	Akbar Nagar, Kukrail, Faizabad Road, Kesar Bagh, Sahara Shopping Centre, Faizabad Road, Indira Nagar

Ludhiana
Malda
Mathura
Mumbai

PAU, Chandi Suhasi Chowk
Rabindra Avenue, Subhash Pally, Ashwani Shopping Complex, Ramkrishnapally
Vikas Market

Mehsana
Nanded

Saideep Shopping Centre, Chembur (East), Renwel Centre Premises, Govandi Station Road, Govandi, Sai Pooja Chambers, C.B.D., Vindhya Commercial Complex, C.B.D., G. K. Marg, Lower Parel (W), Sunmill Cross Lane, Lower Parel (W), Keshav Vasant Building, Panvel, Municipal Complex, Old Panvel, Panvel Municipal Complex, A.P. Road, Panvel, Om Saidham CHS, Jawaahar Nagar, Malad (W), Nariman, Ghatkopar (W), Vashi, Kopar Khairane, Navi Mumbai Vimal Super Market-Apna Bazar, Modhera Circle

Nagpur
Nashik
Noida
Patna

Swami Ramanand Teerth Marathwada University Vishnupuri, Vishnu Complex - VIP Road, Lotiya Complex- Shivaji Nagar
Lokmat Bhavan, Wardha Road, Sankrutik Sankul, Sitabuldi, Sadar Bazar, Jitendra Building, Chhindwada Road
Ashok Stambh, Jadhav Market, M. G. Road
Sector 27 & Sector 18
Patna Super Market- Fraser Road, Grand Plaza- Fraser Road, Kumar Complex, Opposite Hariwansh Parwati Complex, Jamal Road, Jyoti Tower- New Dak Bungalow Road

Pathankot
Pune

Dhangu Road, Mahajan Complex-Old Shahpur Road
Sadashiv Peth & Shukrawar Peth, Hatti Ganpati Chowk, Vande Mataram Chowk, Ramanbaug Chowk

Ranchi
Rohtak
Roorkee
Secunderabad
Sirohi
Siwan

Sainik Market
Sheela Bye Pass Delhi Road, Old Session Court, Delhi Road
Mission Compound- Haridwar Road, Civil Lines
CTC Complex
Sadar Bazaar, Near Rajmata Dharamshala

Solapur
Surat
Tezpur
Thane

Babuniya More, Parbati Guest House, JK Chowk, Durbar Complex, New Micro Sun Info- Babunia More, Lalan Complex- Behind Punjab National Bank- Babunia More
Sidheswar Chowk Road, Kanna Chowk
Niva Apartment, Court Road, Nanpura, Complex, Nanpura
N.B. Road
Rajdarshan Society- Dada Patil Wadi- Naupada, B Cabin Road- Dada Patil Wadi- Near Hanuman Mandir- Naupada, Pancakuti- Powai, Keshav Vasant -Building- Opp. Tahsildar Office, Panvel, Panvel Municipal Complex- A.P. Road

Vapi
Varanasi
Vishakhapatnam

Bass Shopping Center, Amidhara Complex, GIDS
Chaukaghat, Hukulganj
Dondaparthi, Medicherla Tower

How to spot a counterfeit cartridge

Mobile Authentication
Scan the QR code with your smartphone to validate as authentic HP.

Security Seal
Tilt the security seal for the presence of a shifting image.

Online
To validate, visit hp.com/go/ok and enter the serial number from the label.

To report a counterfeit incident, log on to http://www.hp.com/sbso/product/supplies/fraud_report.html
To know more email at in.contact@hp.com or call **1800 3003 3003**