

Cyber security: Hire ethical hackers, treat them like Special Forces, says S Ramadorai, TCS

SOURCE: THE ECONOMIC TIMES- 13th October 2013.
Reporter: Priyanka Bhide

S Ramadorai, vice-chairman of TCS and chairman of the National Skill Development Agency, says the private sector must play a crucial role in enhancing cybersecurity capabilities. The IT veteran calls for hiring and training young, talented people to handle cyber attack units. Edited excerpts from an interview with ET:

On the importance of companies like RIL sharing their learning from building cyber security capabilities with the government
Private companies have a lot to share in terms of experience and in capacity building of relevant skills. The private sector has indigenised various security-related technologies and supported in building the security infrastructure of the country.

Many private companies have considerable experience in cyber security. The offshoring model has matured significantly with several top-of-the-line security controls and processes.

On enhancing cyber security in the face of attacks from various corners,

especially from China and even from the US

The country does require a skilled cyber-security labor force. Most countries, notably China, have started grassroots campaigns to identify technically gifted youngsters and recruit them for defending the nation.

In India, too, these initiatives have been started by various agencies. However, much more needs to be done. The talent is available. We must also focus on rapid detection, containment and reaction.

One statistic shows that attackers remain undetected on a network on average for 416 days! The amount of damage that can be done in this time is huge. Offensive security testing (known as penetration testing) is a wonderful way to audit the security of networks.

Some companies such as Facebook, Twitter and so on run what are known as "bug-bounty programs" where any hacker is invited to find vulnerabilities in their systems (without causing damage). On disclosing the flaw, they can be paid to the tune of \$10,000. This is a great way to identify talent. Ultimately, it is more important to have a pool of extremely high-quality

talent rather than just large numbers. A sophisticated team of even 50 top hackers is far better than 1,000 average/semi-skilled professionals. We must treat these teams like Special Forces.

On how crucial cyber security is in a war scenario
Offensive cyber-security capabilities are of great importance, as they will be the fourth branch of the defense forces. No war will be fought without taking recourse to these capabilities for intelligence and disruption prior to putting boots on the ground, ships to sea or planes in the air.

The power of an offensive cyber capability cannot be underestimated,

as shown by the Stuxnet virus used against Iran, and various other cyberweapons that have recently been seen such as Flame, Gauss, Wiper, Duqu, etc.

Defensive capabilities in India need to be bolstered significantly. Most government IT infrastructure is vulnerable to attacks. Besides, most government officials are in no position to handle threats such as spear-phishing (e-mail spoofing fraud) or social-engineering attacks, which target them as a means of entry into the government networks.

Sony hacking treated as serious national security matter: US

SOURCE: TIMES OF INDIA- 19th
December 2014.

Reporter: Priyanka Bhinde.

The US today said that it is treating the Sony cyber-security breach as a "serious national security matter" and is considering appropriate response to this intrusion into the network of the major American movie studio.

Senior members of Obama's national security team are meeting at the White House to overview the investigation and consider appropriate response, the White House Press Secretary, Josh Earnest, said.

"Consistent with the (US) President's previous statements about how we will protect against, monitor and respond to cyber incidents, this is something that's being treated as a serious national security matter," he said.

"There is evidence to indicate that we have seen destructive activity with malicious intent that was initiated by a sophisticated actor," said Earnest.

On November 24, emails between employees of Sony Pictures Entertainment, information about executive salaries at the company, copies of unreleased Sony films, and other information were obtained and released by hackers.

The breach is being investigated by the FBI and the Department of Justice.

As a result of the security breach, the company has cancelled the release of its movie "The Interview."

"It is being treated by those investigative agencies, both at the FBI and the Department of Justice, as seriously as you would expect. It has also been the subject of a number of daily meetings that have been convened here at the White House led by both the president's homeland security adviser and occasionally by his cyber coordinator," he said.

"This includes senior members of our intelligence community and homeland

security officials, military, diplomatic and law enforcement officials," Earnest said.

He, however, refrained from commenting on the nature of American response.

"Before we start publicly speculating about a response, it's appropriate that we allow the investigation to move forward. I do understand that the investigation is progressing. And that as the members of the national security team meet to discuss this matter, they are considering a range of options," he said.

"As they do so, though, they're mindful of the need for a couple of things. They're first of all, as we

would be in any scenario, strategic scenario like this, they would be mindful of the fact that we need a proportional response.

Also mindful of the fact that sophisticated actors when they carry out actions like this are oftentimes, not always, but often seeking to provoke a response from the United States of America," he said.

"They may believe that a response from us in one fashion or another would be advantageous to them. So we want to be mindful of that, too. And the president's national security team is mindful of those two important strategic considerations as they consider a range of available responses," Earnest said

IT Story may have a Beginning & an End, But no Middle Soon



Economics Times – 20/01/2015.

Reporter: Kritika Bang.

Bengaluru: Among the normally strait-laced board members of software services companies, the word “bloody” is seldom the adjective of choice. But of late, this word that conjures up gory images has been employed by three doyens of information technology to describe what lies ahead as far as the jobs scenario for mid-managers is concerned.

To speak their minds frankly about what is clearly a touchy subject these three, and other senior industry figures, spoke on condition their identities should not be disclosed. The consensus is clear: those who don't shape up in double quick time will have no option but to ship out.

“When we were growing at over 40%, even ordinary talent could flourish,” said the member of the board at one of the top three software exporters referring to the thousands of mid-managers among the 3 million IT workers. “Now there is no place for alsorans,” said the board member at a top IT company. Such managers account for 10-15% of the payroll at companies including Tata Consultancy Services, Infosys and Wipro, according to HR executives. Many of these mid-managers have 6-12 years of experience, and have grown into roles involving allocating engineers for projects, managing software quality and training fresh hires. Most of such managerial roles are no more required; these functions are now getting automated and even eliminated in a world where software training has moved out of physical classrooms and is being rendered online on platforms such as Coursera.

Mid-life crisis

Over the past year, and especially during past few months, mid-managers whose work is not billed to customers and software engineers who cannot code have been given pink slips across companies including IBM, Infosys, Wipro and TCS. Wipro CEO TK Kurien, who is trying to help India's third-largest software company regain double-digit revenue growth rates by investing in futuristic technologies and cutting flab, said the industry needs to get back to its roots. "One of the biggest things that we have suffered from is that we have forgotten the art of coding. Now we have to get these coding skills back," said Kurien, a chartered accountant.

Indeed, over the past few decades, India's biggest software companies have hired hundreds of thousands of computer science graduates, trained them in latest coding skills and pampered them by building fancy campuses with facilities including gyms, cafeterias and even day-care centres for infants.

Now, many of them have grown to become managers monitoring armies of coders. In this journey, most of them have forgotten basic technical skills and have even not refreshed

their understanding of the latest in technology.

They now face a double whammy of their employers' scrutiny, and an onslaught of software robots taking over many of their monitoring tasks. Veteran human resource executives such as Ajoy Mukherjee, who heads the function at India's largest software exporter TCS, say rebooting and reskilling in the sector is critical.

"Technology becomes obsolete every three years," Mukherjee said.

"There will be some in their comfort zones who don't realise the need to continuously learn; they become excess." An executive at a software company based in India cited a recent example that highlighted the crisis in the ranks.

"We found one of our project managers was pushing to get re-assigned to a role that involved managing a team of software testers.

He seemed unaware that testing is the first function to get automated," he said.

The pyramid model

As these companies continue to hire and train armies of fresh engineering graduates who can be billed to

customers within months, they are realising that the pyramid model has problems.

“There's fat in the pyramid,” said the HR head at one of the top Indian software companies.

Already, companies have started getting rid of the flab. As reported by ET in October last year, from around 1.65 lakh employees on its payroll by 2011, IBM's India headcount has now fallen to around 1.13 lakh and set to slide to 1 lakh by March 2015. Wipro too is aiming to reach a size of 1 lakh employees. And recently, some mid-managers were sacked by TCS, which denied any mass layoffs were underway. The company emphasised that ‘involuntary attrition’ was less than 1% of its total workforce, but the alarm bells have started ringing.

“If you don't res kill, you're gone. What got you here will not take you forward,” said Saurabh Govil, head of HR at Wipro. For now, though, the mid-life crisis for software managers in the industry looms large. The problem is that many of such managers have priced themselves out on skills that are no longer being sought by potential employers.

Saurav, a 41-year-old IT professional who worked at a Bangalore based IT company until recently, has been hunting for “a suitable job” over past several months. “I just got an offer from a public sector bank. The salary is almost half of what I was making, and the job is similar to what I did few years ago,” he said, requesting that his second name be withheld.

Some of the largest technology employers, including Wipro and American Express, are holding hackathons, or coding marathons, to recruit only the engineers who can write software effectively. Sekar Viswanathan, vice-president at the Vellore Institute of Technology, said many employers are not even coming to the campus and recruiting directly through hackathons.

“The TCS episode highlighted the need for even experienced IT professionals to be rooted to basic coding skills. Learning is the key,” said Viswanathan. So, what kinds of technology jobs are going to be extinct?

Future of tech jobs

Most of the jobs that involve remote monitoring, testing and quality

assurance are soon going to be completely automated.

“The typical activities that you do today at the bottom of the pyramid - watching a screen, monitoring, those will go away will be replaced by machines,” said Kurien.

And what technology jobs are going to be in demand?

Ask any employer, from Infosys, TCS, to the world's largest banks and retailers setting up their technology captives in India, and the answer will be an aggressive hunt for people with skills in analytics, open source technologies and data science.

Windows 10 revealed: Microsoft's next OS fuses Windows 7 and 8



Reporter: Tejaswini .R. Akhani

Windows 10 will officially launch in the middle of next year, but you'll have a chance to try it out before that via a new Windows Insider program, launching Wednesday. The platform's most vocal fans will have a chance to download the technical preview before it launches next year.



Microsoft's Joe Belfiore showing off Windows 10's reborn, revamped Start Menu.

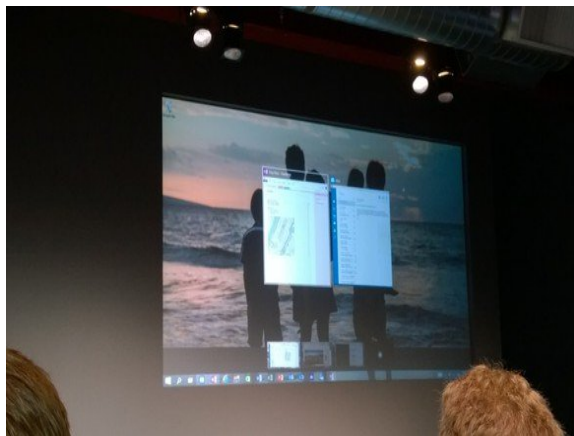
Microsoft executives unveiled the new OS at a small press event in San Francisco, where the company tried to position the Windows 10 OS as a "natural step forward" for both Windows and Windows Phone, which will also be renamed Windows 10.

Windows 10 will be designed for the enterprise, Terry Myerson executive vice president of Microsoft's OS group, said. It will have a "familiar" interface, whether it be for Windows 7 or Windows 8. "They will find all the tools they're used to finding, with all the apps and tools they're used to today," he said.

Windows 10 will be compatible with all the familiar management systems, including mobile device management. MDM tools will manage not just mobile devices, but PCs, phones, tablets, and even embedded devices in part of the Internet of Things, Myerson said. Enterprise customers will be able to manage their own app stores, so that their employees get the right apps for them. As Windows 8 did, data security will be a priority, he said.

“Windows 10 will be our greatest enterprise platform ever,” Myerson said.

Windows 10 revealed



Windows 10's 'Task View' includes multiple desktops, a feature long desired by power users.

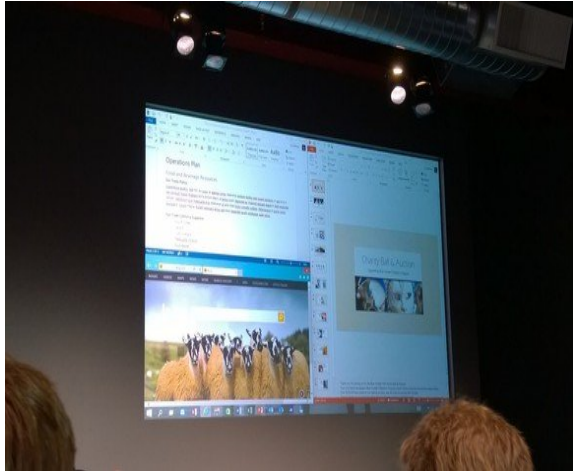
Joe Belfiore, who runs part of the OS team focused on the PC experience, showed off the new OS, which he called a “very early build.”

Yes, the new build has the Stat menu, combining the icon-driven menu from Windows 7, plus the added Live Tiles to the right.

Belfiore used the analogy of a Tesla to describe how Windows 7 users would feel when they upgraded—something that Microsoft desperately wants them to do: a supercharged OS, but one that will feel familiar.

One of the things that Microsoft wants to ensure is that Windows 10 is personalized results, including search results, Belfiore said.

Windows 8 had a universal app platform, with a common Windows Store that handle updates independently. Belfiore said that Microsoft wanted all those Windows 7 uses to get all the benefits of Windows 8 apps. Apps will be shown in the Live Tiles, with no real indication whether they are “classic” apps or modern, Windows 8 apps. Apps can be “snapped,” like Windows 8. Users will also not have to leave the Windows desktop to use modern apps, as expected.



Snap multitasking in Windows 10.

Multitasking will also be a priority, with a stated goal being able to “empower” novice users, Belfiore said. On the taskbar there will be a “task view” where users can switch back and forth between different environments—whether it be 32-bit Windows 7 apps or modern apps. And yes, they will include virtual desktops, with the ability to switch back and forth between virtual environments. A “snap assist” feature will allow users to select similar windows to snap alongside other apps. And up to four apps or windows can be snapped to the four corners of the desktop, Belfiore said.

Even more advanced uses will be able to take advantage of new keyboard shortcuts, with the ability to ALT-TAB between desktops. “It’s a nice forward enhancement to

make those people more productive,” Belfiore said.

Microsoft even improved the command line interface, with an improved keyboard interface. (You can use Ctrl+V to paste now!)

Touch when you need it

Belfiore wrapped up by talking about touch: “We’re not giving up on touch,” he said. But he did say that that massive numbers of users were familiar with the touchless Windows 7 interface, while supporting those who have jumped to Windows 8.

So that means that the Charms experience will be revamped. When you swipe right on Windows 10, the Charms bar is still there. But Belfiore said that the Charms experience would change. When people swipe in from the left, Windows 10, you’ll get a task view. “I’m using touch in a way that accelerates my use of a PC,” Belfiore said.



The Start screen gets an overhaul in Windows 10 and will only appear when you're actively using a touchscreen.

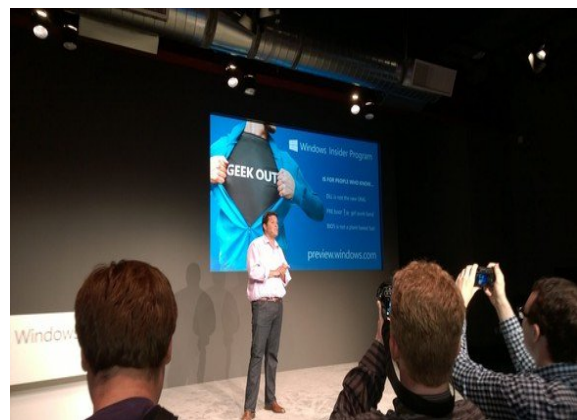
Microsoft is also working on a revamped UI that isn't in Windows 10, yet. For two-in-one devices, a "Continuum" mode will adjust the UI depending on whether or not the mouse and keyboard is present. When a keyboard is disconnected, the Windows 8-style Start menu appears and a back button is available so that users can easily back out to a prior command. Menus grow larger. But when a mouse and keyboard is connected, the desktop mode reappears, Windows apps return to desktop windows, and the Start page disappears.

Now, Microsoft needs to take the next step: pitching enterprise customers, Myerson said. And that's critical for

Windows' future, analysts said. Expect more details on the consumer flavors of Windows 10 early next year, more application details at BUILD, and then a launch of Windows 10 near the middle of next year.

"For businesses, I think there are some businesses who have picked it up and they are really early adopters, but in general, the sense—when we engage with customers, we're not hearing a lot of reception out there," Wes Miller, an analyst with Directions on Microsoft, said in advance of the briefing. "We're hearing a lot of businesses even before whatever that thing comes out tomorrow, before that came out, businesses were saying, we're going to hang out on Windows 7, it's stable, it does what we need to do."

Windows Insider



Starting Wednesday, Microsoft will launch a Windows Insider program, distributing the technical preview of Windows 10, Myerson said. Through Window Insiders we're inviting our more vocal Windows fans" to help refine the Windows experience, executives said. Users will be able to sign up at preview.windows.com, he said, where they will be able to hold private discussions with Windows engineers and give feedback.

"Windows 10 will be our most open, collaborative OS project ever," Myerson said.