The Evolving Workforce

Report #3: The Business Perspective and Research Summary

Part 3: **Progress**

Introduction

Dell and Intel commissioned TNS to undertake a global project to identify and explore future trends pertaining to the workplace and workforce, and to also understand the role technology is playing in its evolution. The project is called **The Evolving Workforce**, spanning eleven countries and comprising several stages that, combined, form an iterative journey of learning and discovery.

This final report outlines the views of senior business leaders – CIOs, CTOs and other experts – on the key themes and hypotheses uncovered in the previous stages of the research. Engagement with this audience reveals an array of implications (or the 'so what') for IT consumerization as well as the changing workforce and workplace of the future.

The selection of interviewees was designed to cover a mix of organizational role, variety of industries and enterprise size. We spoke with three groups of experts: global futurists; senior Dell and Intel leaders; and senior business leaders from a range of organizations including healthcare, financial services and more.

- **Global futurists**: this final stage saw the reconvening of experts who contributed to the first report of the series, with the objective of ascertaining a futurist perspective on results from the global workforce survey as well as their predictions for the long-term effects of the trends under discussion.
- **Dell and Intel**: the inclusion of Dell and Intel's own business leaders gives insight into the strategies driving their businesses and how they are poised to help customers face IT challenges and opportunities associated with consumerization.
- **Third-party business leaders**: additional third-party senior business leaders' viewpoints provide a valuable perspective on how the trends are manifesting themselves within various types of organizations and industry sectors.

This report has been compiled and divided into three parts according to key themes - People, Productivity and Progress. Each theme encapsulates a number of insights ascertained from the previous stages of the project.

- **People**: highlights the segments within the global workforce that are shaping and driving change.
- **Productivity**: explores the role technology can play in helping employers and employees achieve productivity gains.
- **Progress**: outlines the factors that are making progress most apparent in certain geographies and sectors.

Additional information about the project, including 'Report 1: Expert Insights' and 'Report 2: The Workforce Perspective' can be accessed at the Evolving Workforce website: **www.dell.com/evolvingworkforce**.

Methodology

This final phase was conducted using the outputs of the previous stages of research packaged into a three part report. Dell and Intel's own senior leaders were joined by technology leaders from various enterprises across a number of industries as well as experts who provided additional commentary. A mix of 12 face-to-face and telephone interviews were conducted to develop a rich picture of the issues discussed. The list of interviewees and biographies can be found **here**.

Note that the statistics referenced throughout this report were derived from the second report (The Workforce Perspective) and can be referenced **here**.

Executive Summary

Senior business leaders not only recognize the consumerization of IT phenomenon, but are actively grappling with the opportunities and challenges it is generating. The perceived speed of change from the last five years, and its impact on workplace evolution, means that many are monitoring the trend closely to determine how best to capitalize on it to nurture productivity, efficiency and workforce morale.

Around the world, the typical work schedule is being eroded by technology and connectivity. Less than two-thirds of global employees feel they 'can get their work done in a traditional 9-5 schedule' (60%). The private sector is more likely than the public sector to offer flexible hours (58% versus 51% globally), while SMBs outpace large enterprises (60% versus 55%).

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"The way we work and live around the world is changing rapidly. For most knowledge workers, there is no such thing as 9 to 5 anymore, and time zone differences matter less than ever before. We are living in a time of 24/7 connectivity, where boundaries between work and play are less marked."

Stephen O'Donnell, CEO Chalet Tech Inc.

While some companies, particularly from the technology sector, have been at the forefront of embracing IT consumerization, others have chosen to adopt a more 'wait and see' approach. These tend to be larger and more established entities (in both the public and private sectors) operating in relatively more regulated industries such as financial services.

Recent economic conditions and inherent legacy issues with existing IT infrastructure (brought about by continued reliance on specific devices or a preference for buying in bulk) has impeded the ability for many companies to invest in new technologies. However, there are employers benefitting from their employees' penchant for IT to deploy new technologies that can be easily customized for collaborative and productive use in the workplace as well as for personal use. Nearly half of the workforce around the world expresses a desire to be able to use their computer and other devices for both work and personal use (46%), although this desire is stronger in growth economies such as Mexico (73%), China (67%) and India (64%).

"The line has blurred between an enterprise computer and a consumer electronic device. Value is no longer just in the ROI but is emotional and social. True consumerization is epitomized by the smartphone experience: iPhone and Android users are not thinking of their devices in terms of a computer but as a part of their life like air and water. In reality there's more compute power and capability instantly available to them than NASA used in a decade to put a man on the moon."

Jim Stikeleather, Chief Innovation Officer, Dell

Although, this new era does come with risks; by allowing increased choice and mobility, business leaders are now contending with greater (and more complex) potential for loss and theft of highly sensitive information. It seems that Chief Information and Chief Technology Officers (CIOs and CTOs) are more concerned with the way information is being accessed and shared virtually rather than the specific devices or software being used by their employees.

"If you are a small e-commerce outfit and you lose customer credit card data, then you are putting your business at risk. If you are a large multinational and lose millions of customer records, then you put the economy at risk. Safety of data is paramount as more transactions take place online and the risks are compounded by the tsunami wave of new devices offering connectivity over public networks that are more susceptible to hacking."

Stephen O'Donnell, CEO Chalet Tech Inc.

There is a consensus that companies like Dell and Intel need to focus on tailoring end-to-end solutions that mitigate these concerns without detracting from the user experience, which is equally paramount.

"Customers are looking for a complete, integrated, secure, holistic, easily managed, easy to understand and affordable service. I think that's critical, and vendors who deliver these full, integrated services are likely to be very successful."

Stephen O'Donnell, CEO Chalet Tech Inc.

"At Dell, we're engaging with customers to understand what the end user needs are. As a solution provider, we have expanded our vision beyond what device the end user has to having consultative conversations with our customers about how data is being accessed, used and secured to find the right solution to help their employees be more productive and drive results."

Steve Felice, President and Chief Commercial Officer, Dell

"Technology is critical – you're not delivering any value to customers or workers unless you have a great technology platform."

Christian Anschuetz, Chief Information Officer, Underwriters Laboratories

There is also a desire for greater interoperability across generations of devices and systems, so that the more progressive adopters can continue to work with clients and stakeholders using older platforms. In fact, interoperability is becoming the norm. 59% of employees around the world are able to share data between all of their devices, and 74% believe this will be the case in the future.

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Last, but not least, while business leaders are excited about the role IT consumerization can play in achieving growth and empowering the global workforce, they are eager that the fundamentals of sound management practices – environment, culture, trust and motivation – are not forgotten.

"This is not just about replacing the old with a new up to date tool that'll help the 9 to 5 worker get things done quicker and better. It is about building the foundation to help release the innovative juices in workers: Employers have to provide the environment alongside all these great tools."

Adriana Karaboutis, Chief Information Officer, Dell

So, IT consumerization is real: employees and employers are seeing the benefits of technology in enabling more flexible working, finding new ways of doing things and improving productivity. The speed of change accompanying these developments is perceived to be getting faster. But, alongside benefits, threats of IT consumerization are evident. In many cases, these benefits and concerns overlap and differ in equal measure moving across the spectrums of geography, sectors, organizational type and stakeholders. The fast-paced evolution of the IT landscape means that these benefits and concerns will continue to evolve and will require considered compromises in the short to medium term.

The research also suggests that a conscious effort is underway in most companies to identify and pursue an optimum solution for all concerned. Most importantly, the findings reveal the importance of adopting a tailored approach that not only builds consensus and collaborative working between senior business leaders and their employees, but is also specific to the company's circumstances. Technology companies like Dell and Intel have a crucial role to play in not only offering customizability, but also in promoting dialogue between an ever-increasing tech-savvy workforce and outcome driven employers.

Part 3: Progress

IT consumerization is well recognized globally; many people see the ability to use technology in enabling flexible working, new ways of doing things and enhanced productivity. However, the resulting impact presents an array of challenges across geographies, sectors and organizational types.

In terms of geography, it is the growth economies where optimism and change is greatest. The aspirational value of consumer technology in countries like China and Brazil has clearly migrated to the corporate environment. Workers in these countries are more welcoming of the transformational nature of technology and are more likely to see the benefits than concerns. They are also less likely to be burdened by their employers' legacy issues or sometimes strict policies.

In terms of types of organizations, larger enterprises are lagging behind small and medium sized businesses in offering workers the freedom to develop innovative solutions, while knowledge-intensive industries are leading the way. Organizations that provide technology freedoms and fast-track employee solutions will more likely be innovative and desirable places to work.

How is the consumerization of IT going to evolve across geographies?

Many business leaders believe the pace of change is ever increasing; however, there are inherent limitations for some growth markets. Broadband access and speed can be an issue where the spectrum of change across regions is likely to play out very differently. Predictions of bigger hub cities with advanced infrastructures would be juxtaposed with more rural areas that may lag behind. These discrepancies are not likely to exist in more developed markets to the same extent.

"In places like Bangalore, employees have significant traffic to contend with on the way to and from work. Productivity and connected-workplace tools that free workers up from such daily pressures helps them perform better –this opportunity is huge for companies. These pressures in developing countries are driving the need for supporting digital infrastructure to become seamless."

Adriana Karaboutis, Chief Information Officer, Dell

"In some ways, I think developing markets have a big advantage because they don't have the legacy stuff to carry around. They get to build a new wireless network from scratch, avoiding a lot of the pitfalls and leveraging a lot of the learning that has happened everywhere else before now. In five years, they will probably be in a much better spot than some of the developed countries because they have had to babysit, maintain and pour money into the old world networks."

Jeff Young, Chief Technology Officer, FactSet Research Systems

"Part of the reason why wireless is more prevalent in European countries is because the investment in fiber and cable made it less necessary in the US. Sunk investments, capital outlay and lots of other factors will drive capability implementations. I don't know that we'll ever be perfectly level. In Japan, you can use your phone as your credit card, but here, we're still waiting for NFC chips to show up in the phones to that capability. So I think we'll always see that movement happening first in the place where it's going to make most sense to do it, and then other places playing catch-up to get there."

Ed Goldman, IT Chief Technology Officer, Intel

If we assert that cloud computing is growing in importance and favorability, having local solutions with access is of vital importance. For example, in China, decentralizing into micro-level infrastructure is a big opportunity.

"Intel is actively involved in building wireless networks in China and Korea and other countries that are more progressive and flexible. They have the opportunity to really think about how wireless networks should run and can leverage cloud computing with a standard centralized architecture. Unfortunately, the U.S. is not quite as convinced by this deployment of networks."

Jeff Young, Chief Technical Officer, FactSet Research Systems

Business leaders also believe that contractors are increasingly coming from growth markets and these workers are successfully tendering for employment because they are more able and willing to be flexible, particularly with compliance. It is the growth economies of China (59%) and Brazil (50%), as well as Mexico (57%), which lead the way in offering employee choice in devices and technologies. More developed markets such as the UK (27%), France (28%) and the US (29%) lag some way behind.

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This has ramifications for competition on developed market supplier lists. If a new, more accommodating workforce can be found, then growth markets may be able to leapfrog with technology having a leveling effect.

"U.S. and Western Europe still see tablets as a tertiary device within their portfolio alongside a laptop and cell phone. However, in emerging markets we see demand for this as a first company issued device with affordability as a driver to purchase."

Jeff Cooper, IT Infrastructure Engineering Manager, Abbott Laboratories

There are many other positives of working more closely in collaboration around the world; time zone barriers disintegrate, and can actually benefit those involved as complete coverage can be provided if shifts are scheduled to overlap. Approximately half of workers engaged in the study viewed their working day to be restricted to the traditional 9 – 5 schedule.

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How will IT consumerization affect organizational sector and size?

This theme perhaps has the greatest impact on large enterprises, for what was once their competitive advantage, in being a robust and reliable organization, now presents some challenges. Start-ups and knowledge intensive companies have a leading edge, because they are more nimble and their leaders are typically a strong driving force for adaptation.

"I think we've seen the small, medium enterprises are much more agile. They're much more able to turn their businesses around and fundamentally change the way they operate, because they've basically got less legacy investment. They've got fewer old systems that are critical and central to running their business."

Stephen O'Donnell, CEO Chalet Tech Inc.

"I think it's easier to turn a speedboat than it is to turn a large freighter: SMBs, by definition, have the advantage of being able to embrace change, adopt and move fast. Whereas large corporations require longer adoption times and potentially more pilots and proof-of-concepts."

Adriana Karaboutis, Chief Information Officer, Dell

The leaders and employees of recent start-ups and small and medium sized businesses are expected to be at the forefront of adopting change (including the consumerization of IT). Similarly, those working in companies operating in the media, engineering and education sectors are seen to be actively placing an onus on integrating IT provision for greater innovation and growth.

This is mostly because senior leaders in such businesses have had experience working in a multitude of environments, which they have adapted to run their own business entities. They also tend to be those that have embraced social media trends and have actively integrated information from this new medium into their strategic decision making protocols.

More established companies and those operating in the public sector might be behind on the IT adoption curve, but here too take-up of IT processes is evident. For example, increasing transactions between citizens and governments – such as drivers license applications, tax returns and parking permit renewals and complaints – are being carried out online and also increasingly via mobile technology platforms.

Employee choice in the technology they use is more prevalent in the private sector (45% versus 32% in the public sector). Differences are also observed when comparing SMB workers (49% of whom can choose) and those who work in large enterprises (36%).

As well as serving the greater public interest, rather than seeking commercial growth, the public sector has held back in embracing new IT applications and systems by the reliance on undertaking a cost benefit analysis of potential technology investments. However, many of today's new corporate entrants are moving away from such limiting frameworks to one that places importance on determining the total tangible value of capital investment in IT. This holistic view is set to change the technology landscape as larger corporations lag behind the ability of their smaller counterparts to adopt new capabilities offered by technology.

"Technology is instilling more competition and boosting the smaller players. Nowadays, those in charge of larger companies can no longer think of other large entities as direct competition. Social media, cloud computing and applications are leveling the playing field. Now competition revolves around 'any geography, any market, any customer'."

Steve Felice, President and Chief Commercial Officer, Dell

The way organizations are affected by IT evolution will also be influenced by shifts from a device to an access and information-centric perspective. Business leaders and technology experts believe that the ability of companies to use information, irrespective of sector and size, whether about their markets or customers, will be a key differentiator for growth and performance. Those that have easy access to relevant information can utilize this knowledge to put them ahead of the competition.

"Getting the right information, to the right person at the right time is going to be the new algorithm for successful companies."

Dr. James Canton, Futurist, CEO and Chairman, Institute for Global Futures

Currently, how companies are coping with a mobile and information rich world is manifesting itself very differently across sectors. The financial services sector and scientific research and development fields, for example, are disadvantaged by the constraints placed upon them by external regulators that make it a seemingly impossible challenge to lead the way in technology adoption.

There is widespread acceptance that 'the Internet and technology allows [workers] to reach out to others much more easily to solve a problem.' SMB employees lead the way with 83% agreeing with this statement compared with 80% of large enterprise workers.

Can sourcing and utilizing global talent bridge organizational gaps?

The space and choices provided to employees to be productive are not only confined to smaller organizations. Larger established corporations, those operating in highly regulated spaces and the public sector can still generate growth by embedding a culture of innovation. This requires offering a certain degree of freedom for their employees and external stakeholders. For example, one opportunity for all companies – irrespective of sector and size - is to utilize crowd sourcing principles by bringing the most appropriate minds together for a particular project, with technology as the enabling force.

"Firms cannot rely on an innovation team to generate all the ideas, because innovation comes from the most surprising and often least-expected areas within and outside an organization: There is no monopoly on bright ideas."

Christian Anschuetz, Chief Information Officer, Underwriter Laboratories

The potential for employee and even customer-led innovation is untapped and potentially enormous. Though, it is imperative for enterprises to allow time and space (which involves some degree of accepting risks) to foster an atmosphere of support to nurture these ideas, including preserving traditional elements of the workplace.

Summary

To summarize, it is the fast-growth developing economies where the opportunities presented by the consumerization of IT are being garnered most. Similarly, smaller sized and new social enterprise-led businesses are also benefitting. This is not to say that leaders of large companies and those working in the public sector cannot progress in a similar fashion. One such opportunity for all companies to drive growth is to use the connectivity offered by IT devices and applications to connect and empower internal and external talent.

Meet the Experts

Christian Anschuetz, Chief Information Officer, Underwriter Laboratories

Christian is a contemporary, visionary leader leveraging technology to create unified, change-ready businesses. Responsible for UL's enterprise transformation office, Christian leads the programs that will allow UL to deliver best-in-industry customer value and services while creating unprecedented efficiencies.

Dr. James Canton, CEO and Chairman, Institute for Global Futures

Dr. Canton is a renowned global futurist, social scientist, keynote presenter, author and visionary business advisor. He is a leading authority on future trends in innovation and The Economist recognizes him as one of the leading futurists worldwide.

Jeff Cooper, IT Infrastructure Engineering Manager, Abbott Laboratories

Jeff leads Abbott Laboratories Endpoint Standards and Design organization. He is responsible for developing strategies to advance the endpoint from the traditional desktop to the desired future state of devices and technologies.

Darren Dworkin, Senior Vice President of Enterprise Information Systems and Chief Information Officer, Cedars-Sinai Health System

With more than 20 years in IT and 12 years in the healthcare sector, Darren leads the implementation of comprehensive electronic medical records to help transform care through the use of advanced technology.

Steve Felice, President and Chief Commercial Officer, Dell

Steve leads the Dell sales and marketing teams that deliver innovative and practical technology solutions to consumers, small and medium businesses, public institutions and large enterprises worldwide.

Thomas Frey, Executive Director, The DaVinci Institute

Author of the 2011 book "Communicating with the Future," Futurist Speaker Thomas Frey is a visionary who specializes in thinking about the future.

Ed Goldman, IT Chief Technology Officer, Intel

Ed is responsible for driving the strategy and architecture for future IT solutions and services at Intel, including consumerization, collaboration and social computing solutions.

Adriana Karaboutis, Chief Information Officer, Dell

Andi is responsible for driving Dell's IT organizational evolution, from managing an efficient and innovative global information infrastructure, to creating innovative breakthroughs that provide technology advances for the company and its customers.

Stephen O'Donnell, CEO Chalet Tech Inc.

Author of the book "What Every CIO Wants," social media addict and investor, Steve follows the interaction between technology advances, developments in human behavior and the challenges this brings to society.

Jim Stikeleather, Chief Innovation Officer, Dell

Jim identifies, defines and solves business problems by leading, designing, developing and implementing technology and process-driven solutions.

Jeff Young, Senior Vice President and Chief Technology Officer, FactSet Research Systems

Jeff is responsible for worldwide Systems Administration, Network Engineering, Security, and Corporate IT.