

The Evolving Workforce

Report #3: The Business Perspective and Research Summary

Part 1: **People**



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%).

"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.

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%).



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.

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.

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Part 1: People

While there are some key differences among generations of workers, there is no correlation between age and technology competence. Rather, polarization simply occurs among those with technology skills and those without. In fact, a majority of workers around the world – 6 in 10 – agree that it's necessary to keep up with the latest technology to be effective at work.

"The divide occurs among the tech savvy versus the non-tech savvy; those that are not afraid of technology and that have embraced it. Those are the people who are getting to be more demanding around wanting their employers to provide great technology options."

Adriana Karaboutis, Chief Information Officer, Dell

More importantly, findings from the global workforce survey of this research indicate that workers, particularly 18-24 year olds, place greater emphasis on devices and IT systems provided by employers and are more willing to join personal technology with work. This suggests that IT provision is already playing a significant role in defining the perceived appeal of differing employers, and is going to be intrinsic to recruiting and retaining talent.

How is technology impacting the modern workforce?

User Experience

An employee's position within the company is often a determiner for the level of technology available. Older or more senior members of the workforce are often afforded more technology choice and flexibility according to their stature and experience within a company. Younger or more junior workers, when sometimes faced with these exclusions, find ways to work around this through an entrepreneurial use of personal devices. Therefore IT provision should endeavor to become more inclusive where possible; otherwise organizations run the risk of alienating parts of their workforce.

"I think that the 25 and under age group expects more flexibility with the devices they use to perform their work. They find it surprising and awkward that we want to issue a BlackBerry when they have a perfectly good smartphone that they picked and that their life is on."

Jeff Young, Chief Technology Officer, FactSet Research Systems

A majority of workers around the world perceive technology and devices provided by work as a 'perk of the job.' 57% of workers perceive workplace technology as a perk with 66% believing it will be in the future.

"At Intel, we are working towards offering our employees what we would term as the 'Compute Continuum:' an idea that promotes the importance of having a seamless user experience across the devices and software available."

Ed Goldman, IT Chief Technology Officer, Intel

For technology companies as well, optimizing the user experience is now more important than ever, particularly with cloud computing and as technology becomes even more about mobility, 24/7 connectivity and accessibility.

Work-life Balance

There is, however, some concern among business leaders that blurring lines between work and play may cause a backlash in the long run with work-life balance. Business leaders see IT and Human Resources (HR) functions playing a key role in helping employers manage the risk of their workers feeling overburdened by the increased connectivity offered by new technologies.



"During meals, it's quite common to be sitting in a restaurant now, and looking round the tables. There's a conversation going on, but everyone's checking their BlackBerry or iPhone, and everybody's multitasking. I wonder if there is a risk that we're going to burn out some of our people? Is there a risk that in this 'always-on' culture, because the technology allows us to dip in and out of work all the time, that our people are going to end up working all the time?"

Stephen O'Donnell, CEO Chalet Tech Inc.

Moreover, the move to greater remote working and forging of professional relationships over 'virtual business groups' or online communities are expected to increase isolation and potentially impede traditional innovation.

"Mobile workers suffer from isolation and distractions, which means the dependency on social media for connections is also going to reduce the human interaction. Therefore, the overall trend of employees working individually is not always the panacea that people think it is."

Thomas Frey, Futurist and Executive Director, The Da Vinci Institute

One of the challenges for business leaders going forward is to proactively manage the health and well-being of their employees in and outside the workplace.

More than four in ten people around the world 'feel under pressure to work longer hours' (43%).

One in three workers feel that with more employees working from home, team spirit is being eroded.

What opportunities and challenges are employers facing?

Employee Choice

Employers are encountering a number of opportunities and challenges associated with granting more technology choice for employees. Some business leaders believe this is a great opportunity to encourage choice and that savings can be made in technology outlay to allow them to plough more resources into innovation.

"In many companies that we work with, the whole consumerization trend began with employees coming into work and showing others their new 'cool device' they bought. Then these individuals asked for these devices to be integrated with their work so that they could in essence use them for both work and play."

Ed Goldman, IT Chief Technology Officer, Intel

Furthermore, the productivity arguments from employees are rife. In fact, more than four in every ten workers today have the ability to influence the choice of device and the technology provided by their employer. This is expected to rise to 55% in the future.

Conversely, IT leaders potentially lose control, and for many sectors and enterprises, this is not feasible. Globally, 43% of the workforce believes that using personal devices for work make it difficult to protect their organization's data and intellectual property.

"There is a data management challenge, where the company has requirements and needs for protection, back-up and security. We have a lot of client data that can be sensitive in nature, so in allowing the integration of our employees' personal lives with our business, we also have the challenge of knowing which data is where and that it's protected properly."

Jeff Young, Chief Technology Officer, FactSet Research Systems

In fact, more than four in every ten workers today have the ability to influence the choice of device and the technology provided by their employer. This is expected to rise to 55% in the future.



"There's a desire to have more options. I get a lot of reinforcement that these demands come with complications and challenges for people that run businesses of any size. 'How do I control where the data is managed and goes? How do I keep track of all of these devices? How do I fix them if something happens to them? Who is responsible for that? How do I make sure that the software I have works on these devices?'"

Steve Felice, President and Chief Commercial Officer, Dell

Worker Differences

It is evident that young workers in particular demand more from their workplace technology. And while older generations of workers have similar demands, they've seen change occur within the workplace and how technology has forever transformed the nature of work over a longer period of time. As a result, we're seeing more patience with IT from older worker generations.

"With the younger members of staff, we're seeing that they're usually using Android devices and smartphones with much more immediate, much more instant communications. They don't understand why they cannot have the same user experience at home as they have in the workplace. They completely refuse to accept that we can't have constant connectivity."

Stephen O'Donnell, CEO Chalet Tech Inc.

Although mass differences between generations of workers were not prominent, another issue that has arisen from senior business leaders is that tensions are sometimes experienced between managers and employees who do not share the same technology outlook or 'enthusiasm.' Colleagues that do not embrace the same ways of working are likely to clash.

"I think that where we get into the most difficult situations is when we have a more traditional manager needing to manage a large group of Gen X or early Gen Y. There's some tension around, 'I expect to see you here, to put in the same hours I'm putting in.' A successful enterprise will match teams and people with likeminded mindsets."

Darren Dworkin, Chief Information Officer, Cedars-Sinai Health System

Attracting Talent

Even though the traditional IT department is likely to evolve, it will not necessarily transform, rather perform a supportive role in working together with employees towards a common goal versus acting as the traditional gatekeeper. IT provision will have a large influence on an employee's ability to perform their job to the greatest extent and therefore affect their fulfilment. It is, perhaps, a step too far to link a HR function to the IT department, although technology provision has the potential to become more of a differentiating factor in choosing where to work.

In thinking more about individual career advancement, for example, if an employee moves from one company where they had efficient IT systems to one where their experience is frustration and constant barriers, then the inability to achieve work goals will impact heavily on their morale and perceptions of the new organization.

59% of the global workforce state that they would enjoy work more if they had a say in the technologies they used.

60% of employees globally feel they could be more productive if they had better IT resources.



Trust

Productivity is pervasive in its impact, particularly on the levels of monitoring required from employers. Today, 36% of the global workforce believes their employer monitors how they are spending their time during their day and 84% of employees feel they are trusted to use their company's resources responsibly. Some business leaders believe the 'mobile' workforce is actually more transparent than those located on-site, because the tools are there for them to be visible wherever they are working.

"We have a lot of people who are considered 'road warriors' who are flying and cabbings and training all over the world with our devices. By allowing them access to equipment and applications, we place a certain level of trust in these workers but perhaps in the future the better tools you have to log and report on what people are doing, the less you need to implicitly trust them."

Jeff Young, Chief Technology Officer, FactSet Research Systems

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Collaboration

However, the traditional shared dynamics of a working environment will still need to be preserved, because employees respond well to a sense of structure and belonging, however fluid this may be. With new technologies that allow greater mobility, such as telepresence, there is an evident unease that these added benefits might be hampered.

"You need to keep some sense of formality for both individual and collaborative team working. A virtual presence is no match for physical participation in the granularity of discussion that contributes to important decision-making."

Stephen O'Donnell, CEO Chalet Tech Inc.

In this environment, providing work spaces for collaboration between workers of different skills set is going to be important. Moreover, new skills need to be developed by both managers and employees to cope with this evolution, developing training programs and educational institutes in order to keep up with the pace of change.

"After questioning the importance and value of our traditional standards, we now have an online performance management system that individual employees can access to both understand how their performance is measured and track in near real-time."

Darren Dworkin, Chief Information Officer, Cedars-Sinai Health System

"We lack adequate systems for rapidly retraining our workforce. All of the old systems, the colleges, universities, and training centers are way too time-consuming and not cost effective. Contending with this rapid skills transition is going to be a massive future issue and we are already seeing the Skypes and Groupons of this world taking on people and training them on the job."

Thomas Frey, Futurist and Executive Director, The Da Vinci Institute

"I absolutely believe HR functions will continue to evolve...as IT functionality becomes more prevalent at the workplace, HR departments will adopt a more holistic view of their workers' needs that will go beyond holding individual employee information and performance records towards understanding the total employee experience."

Ed Goldman, IT Chief Technology Officer, Intel



Summary

There is an emerging link between those with technology skills and those without. The onus will be on employers to make sure they can accommodate the talent of their entire workforce in the workplace environment - whether it's an office or a coffee shop - that is increasingly being shaped by technology.

Managers will need to be sensitive in nurturing a work environment and culture that recognizes and rewards productivity, but also accounts for the physical and emotional wellbeing of employees and their overall experience. In this bid, the blurring of the lines between work and play - due to 24/7 connectivity - will need to be addressed.

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.

