### The Evolving Workforce

Report #2: The Workforce Perspective











#### Introduction

Dell and Intel have commissioned a study comprising three reports with TNS Global to unveil future workforce trends and understand the impact that technology bears on the evolution of those trends. In the first report of the 'Evolving Workforce' study entitled 'Expert Insights,' seven possible future trends or hypotheses were introduced alongside commentary from a pool of 21 global experts on the potential for these trends to become reality in the coming decade. This second report further validates these hypotheses following a global survey of approximately 8,360 workers across 11 countries spanning multiple verticals in both the public and private sectors as well as across varying organization sizes (see appendix for a full breakdown and description of respondents). Findings are presented at a global and country level and compared to each proposed hypothesis. In the third and final report from the Evolving Workforce Research series, experts will revisit and provide commentary on the survey results.





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#### **Executive Summary**

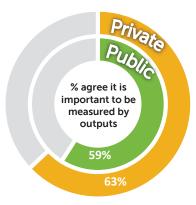
The consumerization of IT – defined as the migration of consumer technology and experiences into enterprise computing environments – is a well recognized phenomenon around the world. Across the globe, people are seeing the benefits of technology in enabling more flexible working, discovering new ways of accomplishing tasks and enhancing productivity.

It is in the fast-growth developing economies where optimism is greatest. The aspirational value of consumer technology, well established in countries like China, India, Brazil and Mexico, has clearly migrated to the corporate environment. Workers in the developing world are particularly likely to see corporate provision of technology and devices as a perk, and have greater say in their own choice of devices; they welcome the transformational nature of technology and are much more likely to see the benefits than perceive concerns.

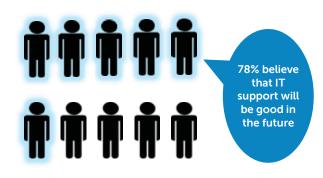
For other markets, legacy technology plays an important role in determining various aspects of workforce evolution. In developed countries with greater legacies both in the corporate and home environments, technology is more functional and less aspirational; a proportion of workers in Western European countries, Australia, the US and Canada predominantly want to keep their personal and work devices separate, whereas a large majority of people in countries like China, Brazil and Mexico are happy to merge work and personal activities on the same device. People working in developing countries are also more likely to be attracted to work for employers based on corporate technology provision.

Alongside benefits, some threats of IT consumerization are evident. There is some concern about job security – observed not only in developed countries, but also places like China and India where there is a strong belief that technology skills are required to be competitive in the working world. Will the consumerization of IT phenomenon open a divide in the working world between the technology 'haves' and 'have-nots'? So far there is little evidence that such a divide exists by age group – if anything, greater discrepancies exist across verticals and organizational size. Employers are advised to heed staff concerns and to seek opportunities to relieve constraints and deliver greater empowerment – thereby not only improving productivity, but also worker morale.

**Six in ten** employees want to be measured by the quality of the work they deliver rather than time spent in the office



Two of three workers globally give positive ratings to their employer's IT support (67%)



**43%** of employees around the world feel under pressure to work longer hours

Magnitude of threats perceived by workers globally

IT problems are a regular frustration

Outsourcing is a threat

Working remotely erodes team spirit

Under pressure to work longer hours

Work life encroaches on private life

Need to keep up with technology to be effective

#### Trend #1: Crowdsourcing and Crowdsource service





#### **Hypothesis**

The workforce of the future, for many industries, could be thousands of people working in different places. Is cloud computing and other ICT applications going to make it easier to distribute more tasks and services and to invite input from a community through crowdsourcing?

#### Top insights

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. Among verticals, technology's contribution to problem-solving is particularly evident within engineering (87%), media (87%) and education (84%). Awareness of the

possibilities of this trend is less evident in emergency services and armed forces (both 67%).

Among the more developed markets, the UK lags in terms of awareness, with 74% of British workers agreeing that 'the Internet and technology allows [them] to reach out to others much more easily to solve a problem' compared with 84% in Canada and 83% in Germany. Japan is also a notable laggard, with just 59% agreeing with this statement.

Just over one half of the global workforce expresses a wish for 'technology and the Internet to allow [it] to do business in different ways' (55%). This is more important for younger workers aged 18-24 (62%) than older ones (51% among 55-64s), as well as in the aerospace (69%) and telecommunications (69%) industries.

A stark difference is observed between developed and developing countries - 83% of Mexicans and 76% of Brazilians believe that it is a good thing for 'technology and the Internet to allow [them] to do business in different ways' compared with 43% of British workers and 46% of Americans.

Cautiousness, particularly in developed countries, reflects concern around the possible negative implications of crowdsourcing and crowdsource service. 35% of large enterprise employees and 25% in SMBs believe that outsourcing is a threat to their role (28%). Emergency services and armed forces workers and those in private healthcare are less concerned (13% and 18% respectively), whereas those in aerospace and telecoms are the most likely to perceive their roles under threat (42% and 40%).

Workers in Britain exhibit a greater fear than those in others countries that their roles will be outsourced (31% versus 22% for Americans). Interestingly, 29% of Chinese also fear that their jobs will be outsourced, perhaps reflecting the rising costs of labor in China.

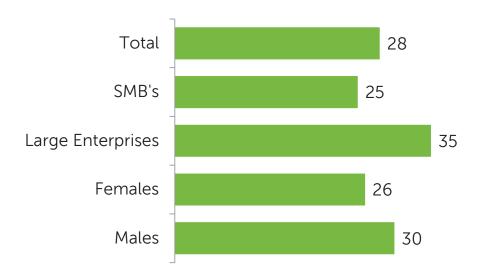
More than one third of global workers perceive remote working as 'eroding team spirit within the workplace' (36%). This is of particular concern in Germany (55%).

#### **Implications**

Most workers around the world welcome the potential for IT and technology to help realize the benefits of crowdsourcing – bringing together resources and people in new and productive ways – while the possibilities for fostering new ideas are starting to become recognized among younger people and in technology-intensive industries, but elsewhere awareness is still relatively nascent.

In the developed countries, however, concerns relating to the potential impact of increasingly distributed workforces on teamwork and morale, as well as employees' concern about job security, are also becoming evident. The imperative for employers, and a potential opportunity for the IT industry, is to assuage these concerns while promoting understanding of the benefits to workers.

### Outsourcing is a threat



#### Trend #2: Productivity measured in outputs, not hours





**Hypothesis** 

Standardized measures of productivity based on numbers of hours inputted would become less relevant in a knowledge-based economy. What are going to be the newer, softer metrics to assess productivity?

Top insights

More than six in ten employees want to be 'measured by the quality of the work they deliver' (62%) rather than 'time spent in the office' (25%). This is more important to the private sector than the public sector (63% versus 59%). The UK is a comparative laggard with 54% calling for outputs-based measurement compared with 80% in Mexico, 64% in the US and 62% in Canada.

Encouragingly, three quarters of all employees are already being measured based on the quality of their work. There may be a correlation between an outputs-based model and worker morale - 82% who are 'extremely happy' with their job are being measured based on work quality versus only 51% of those who are 'unhappy' with their job.

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%). At the same time, the number of people who would like flexible working hours (61%) exceeds those who would like regular 9-5 hours.

The private sector is more likely than the public sector to offer flexible hours (58% versus 56% globally), while SMBs surpass large enterprises (60% versus 55%).

Across the countries, 67% of Germans and 62% of French workers have the option of flexible hours, whereas the UK is some way behind at 51%. The Japanese and Chinese are less likely to enjoy flexible hours (41% and 43% respectively).

Compared with the widespread desire for flexible working hours, the ability to work remotely is less important, with 45% agreeing that remote working can boost productivity. This rises to 55% who think this will be the case in the future, indicating that remote working is set to continue as a trend.

Private sector workers are more likely than those in the public sector to be able to work remotely (47% versus 41%) while across the countries more people in Brazil and Mexico work remotely (64% and 60% respectively). Remote working is much less prevalent in Japan (22%) and in France (36%).

More than four in ten people around the world 'feel under pressure to work longer hours' (43%). This is more prevalent in large enterprises (47% compared with 41% in SMBs). Across verticals, telecoms (50%), hospitality (49%) and financial services (47%) stand out as industries where this pressure is particularly strong. Those in utilities and private education have the hardest time coping with stress, as 53% and 50% report it 'difficult to switch off from work when [they] should be relaxing' compared with 35% in the civil service and 35% in private healthcare.

Across countries, it is the British, French and Brazilians who are least likely to be able to relax after work hours (46% in each country), whereas this is less of a problem in the US (35%) and Mexico (36%).

**Implications** 

The hypothesis is bearing true as findings indicated that the outputs-based model is already established in many parts of the world. Flexible hours are also common, and while remote working is not quite as widely established, it is set to grow. Around the world workers are largely ready and willing to accept the potential tradeoffs in terms of work-life balance, although the downsides of heavier workloads and stress are already

visible across large swathes of the workforce. While technology is often considered to be a root cause of this trend, is there an opportunity for the IT industry to challenge this perception, by promoting how technology could help improve work-life balance rather than aggravate it.

# Can get work done in a traditional 9-5 schedule



#### Trend #3: Changes in the adoption of devices





#### Hypothesis

The number and types of devices are proliferating and changing. Choice of device would become more about the situation, location and occasion. Are employers and the current systems and processes going to allow for increased end-user utility and choice?

#### Top insights

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

Employee choice 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) to those who work in large enterprises (36%).

Interestingly, it is the growth economies of China (59%), Brazil (50%) and Mexico (57%) which lead the way in offering employee choice in devices. More developed markets such as the UK (27%), France (28%) and the US (29%) are behind.

Interoperability is becoming the norm, with 59% of employees around the world able to share all data between all of their devices, and 74% believing this will be the case in the future. Not surprisingly, interoperability is particularly well entrenched in specialized, technology-intensive industries such as media (72%) and engineering (70%).

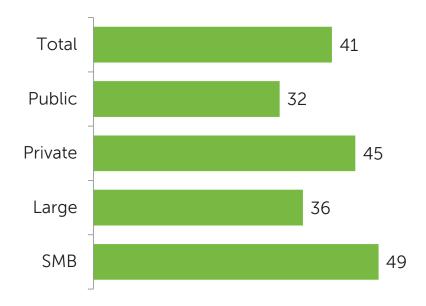
Nearly half of the workforce around the world expresses a desire to be able to use their computer and other devices for both work and personal use (46%). This is particularly important to people who work in entertainment (57%), engineering (56%), telecoms (56%) and private education (56%). Demand for shared personal and work devices is strong in emerging economies such as Mexico (73%), China (67%) and Brazil (63%), whereas the British and the French are far more reticent (29% and 34% respectively).

#### **Implications**

With the proliferation of choice and options in both the consumer and corporate IT markets, changes in adoption of devices are clearly evident. Perhaps due to the relative lack of legacy infrastructures and less stringent data-protection requirements, the rapid-growth emerging markets are far exceeding developed economies in bringing more choice to employees. Workers in the emerging markets are also far more open

to the idea of shared work and personal devices compared to more mature economies, suggesting that the absence or presence of a technology legacy in both consumer and corporate environments is a strong influence on attitudes toward this trend. The IT industry should take into consideration the varying characteristics of different markets, and the impact on legacy and individual aspiration, and localize strategy accordingly.

# Ability to influence choice of technology



#### Trend #4: Intergenerational kiss and punch





#### **Hypothesis**

There will be more intergenerational knowledge transfer between younger 'digital natives' and the older generation. However, is there an increased risk of conflict and tension between workers of different ages, backgrounds, knowledge and skills?

#### Top insights

The likelihood of being monitored, or at least the perception of being monitored, is more prevalent among younger workers. 46% of 18–24s and 39% of 25-34s believe they are monitored daily, compared with 31% for those aged 35+. This could perhaps be a function of more senior and experienced staff requiring less supervision; it could also be due to a higher awareness of employer monitoring among younger, more

digitally-savvy employees.

Possibly reflecting their relative newness to the world of work, or perhaps hinting at a more mercenary outlook on work, younger workers are less likely to be motivated by company values - 68% of 18-24s and 70% of 25-34s compared with 73% of 35-44s and 75% of 55-64s.

18–24s are more likely to see productivity measured by the amount of hours spent in the office (45% versus 29% among 55+), which could be attributed to the junior nature of this age group's job description.

Younger workers aged 18-34 are less able to 'switch off from work' (48% versus 33% for those aged 55+), reflecting the demands of the steep end of the career-progression curve, and also perhaps the greater influence of pervasive work technology.

Younger people are more likely to 'enjoy work more if able to choose their own technologies' (65% among 18-24s compared with 50% amongst 55-64s). Similarly, 18-24s are significantly more likely than older people to see their employer-provided PC or other device as 'a perk,' and as a result are more likely than others to use devices for both work and personal use (55% versus 43% of 45-54s and 39% of 55-64s).

Younger people are under greater pressure to work longer hours (55% of 18-24s versus 28% of 55-64s).

Perhaps due to their greater dependency on and familiarity with technology, younger people are more prone to feel that 'IT problems are a regular frustration' – 48% within both the 18-24 and 25-34 age groups, compared with 41% of 45-54s and 35% of 55-64s.

Looking across countries, while the differences between 18-24s and the rest of the working population are broadly visible in most geographies, there are some noteworthy local differences. In China and France, older people are much more likely to embrace IT - those aged over 35 have the clearest view of the benefits of the Internet and other technological advancements. 84% of over 55s in France believe 'technology is enabling better reach to solve problems' compared to 61% among 18-24 year old French workers.

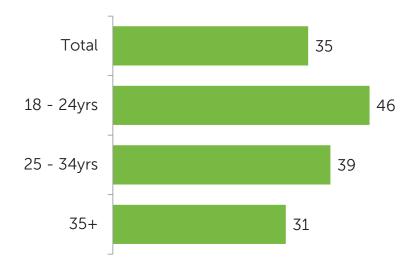
In China, enthusiasm for new technologies and the opportunities presented by the Internet peaks among older workers - 76% of 45-54 year olds see a PC or other device provided by an employer as a perk, compared to 62% of under 25s. Equally, 67% of Chinese over 55 would be attracted to a new job at a firm that offered a good technology infrastructure, while only 51% of under 25s would be swayed by this consideration.

#### **Implications**

Across the world, age is a powerful determinant of one's perspective on work. The youngest age group (18-24s) display particularly distinctive characteristics which appear to be a combination of their relative lack of experience in the workplace, interspersed with a technology-centric orientation: these include greater emphasis on the devices provided by the employer, a greater willingness to converge personal with work

technology, but also less patience and a larger degree of frustration with the IT department. Rather than tensions emerging between young and old employees as originally hypothesized, this latest research indicates that younger people are more likely to have increased expectations of their employers and feel disconnected from their corporate IT departments. The need to engage with this group is paramount, otherwise these characteristics are likely to be carried forward as the younger generation becomes more experienced and occupies positions of greater responsibility.

## Employee's time is monitored



#### Trend #5: Values versus rules





**Hypothesis** 

It would become easier to tell what employees are doing, but harder to tell them what to do. In this scenario, would employers use pervasive technology to oversee their workforces at any given time? And if so, would distrust accelerate?

Top insights

Trust between employers and employees is almost universal in the global workplace, with nine out of every ten workers around the world agreeing their 'employer trusts [them] to use company resources responsibly'. Japan is a notable exception where only 74% agree with this statement.

Globally, 28% are subjected to email monitoring by their employers and 35% experience some other form of monitoring of work activities. This is more prevalent among large enterprise workers where 38% of employees have monitored email compared with 24% in SMBs. Looking across verticals, monitored email is most prevalent in emergency services and armed forces (44%) and financial services (43%) compared with only 19% of public educators.

Across countries, workers in the UK and US are more likely than those elsewhere to have monitored email (the UK at 41% and the US at 34%). Only 18% of French workers and 16% of German ones experience email monitoring.

Seven in ten workers worldwide report that they are 'motivated by their company's values.' This is higher in the private sector than the public sector (73% versus 68%), and higher for SMB than large enterprise (74% versus 70%).

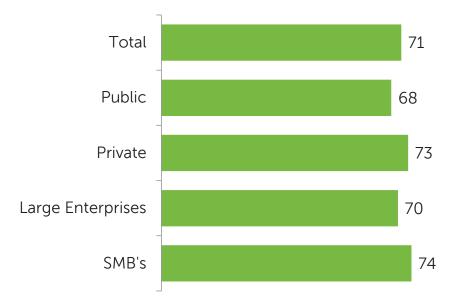
Across verticals, private education (80%) and private healthcare (79%) lead the way in terms of motivating values, while a comparatively lower proportion of those working in the media and in government are motivated by their employer's values (67% and 65% respectively). The British are comparatively less likely to be motivated by their employer's values (65% versus 73% in France and 72% in Australia).

**Implications** 

The importance of values is universally agreed and by and large workers and employers around the world enjoy a relationship of trust. Imposing rules on workers is not yet widespread - there are significant differences between verticals and also between countries in terms of employee monitoring. Fortunately, there appears to be little correlation between monitoring and levels of trust, with comparatively higher levels of monitoring not

observed to lead to declines in trust. However, employers would be well advised to not take this for granted, and the IT industry should be mindful that some of their products and services are seen by employees as undesirable.

## Motivated by company's values



#### Trend #6: Many hats of the IT manager





#### **Hypothesis**

As employee aspirations change to a greater onus on happiness, autonomy and choice, workplace IT would be one way of recruiting and retaining staff. Would the job of the IT manager increasingly resemble that of other functions, like the HR manager?

#### Top insights

Six out of every ten, or 59%, of employees around the world would 'enjoy work more if able to choose their own technologies.' This is particularly prevalent in pharmaceuticals and biotech (71%) as well as in engineering (69%). At the country level, the Mexican and the Chinese workforces stand out as being those for whom this statement particularly applies (80% and 79% respectively). Within the developed economies, French workers

are much more likely to state that technology choice would increase their enjoyment of work – 55% in France versus 40% in Germany, 41% in the UK and 42% in the US.

Two of three workers globally give positive ratings to their employer's IT support (67%), with the entertainment vertical performing especially well (76%). Views of IT support are expected to improve - 78% believe that IT support will be good in the future. Despite this, 43% of the global workforce still reports that 'IT problems are a regular frustration' (47% among large enterprise workers). It's worth noting that regular IT problems are more prevalent in some of the more tech-savvy verticals - 56% in media and 50% in aerospace globally.

A majority of workers around the world perceive work provided technology and devices as a 'perk of the job.' This is especially pronounced in engineering and biotech (70%) and in telecoms (70%). While this notion is also strong in countries such as Mexico (80%) and China (73%), it's noteworthy that a large majority of French and Germans also consider their employer-provided technology devices to be a perk (72% and 66% respectively). By way of comparison, just 32% of British and 40% of Americans agree that technology devices are a perk.

On the other hand, only a relatively small number of French workers say their employer uses 'the latest technology.' This compares with 55% in Brazil and Germany, and 54% in Australia.

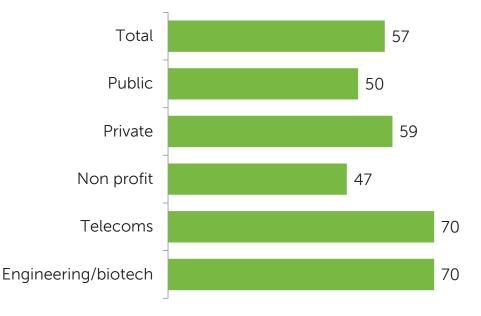
Overall, two-thirds are satisfied with the hardware and software provided by their employer (68%). The private sector outperforms the public sector (70% versus 63%), while among countries, Germany and Canada standout - 74% of the working population in both of these countries is satisfied with their employers' provision of hardware and software.

#### **Implications**

The hypothesis is clearly validated through the findings of this latest research, which clearly establishes the connection between IT provision and employee morale. This is particularly evident in the emerging economies and in technology-intensive verticals. While the British, Americans and Germans are more pragmatic and functionally-oriented in their views, across many other parts of the world the quality of

corporate IT provision is aspirational and a source of motivation to the employee. IT provision is already playing a significant role in defining the workplace – thereby opening up all kinds of new opportunities for IT providers to influence.

## Technology provided is a perk



#### Trend #7: Employee-led innovation





#### **Hypothesis**

The business software of the future will be adopted and designed by employees rather than management or the IT department. Are we going to see more networked, de-centralized organizations to facilitate this shift in corporate hierarchy?

Having an 'employer who gives the freedom to choose how to work' is most important to Brazilian (74%), Mexican (73%) and German (72%) workers, but somewhat less so to the British (53%).

#### Top insights

Fortunately, most employees agree that they do have such freedom, with Mexico leading the way (84%) followed by Germany (83%) and France (81%). By contrast, Chinese and Japanese workers are comparatively more constrained (54% and 57%). Large enterprises trail SMBs (69% versus 77%).

57% of the world's employees are free to download their own software, with Mexico (82%), China (79%) and Brazil (74%) leading the way. Of all of the countries the UK is the most constrained in terms of software downloads, with just 37% of British workers free to download as they like.

A significant discrepancy is also observed in terms of company size. Within SMBs, 67% claim they are freely able to download software, versus 44% in large enterprises.

57% of those surveyed globally agree 'you need to keep up with the latest technology to be effective at work.' This perception is particularly prevalent among male workers (61% versus 54% among females) as well as those working in the private sector (59% versus 52% for the public sector). It's not surprising that workers in technology-intensive fields such as telecoms (70%), engineering and architecture (66%) and entertainment (65%) are especially likely to see technology skills as important to their work.

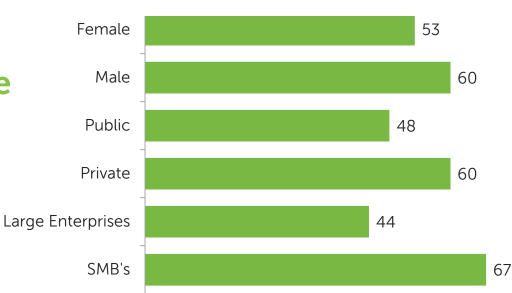
It's in these same verticals where employees are most likely to agree that 'technology and the Internet provide employees with the opportunity to make bigger contributions to their organizations.'

#### **Implications**

It is still too early to predict whether this trend will take hold across the workplace. Burdened by legacy and greater barriers to flexibility, large enterprises are lagging SMBs in offering their workers the freedom to develop innovative solutions, while knowledge-intensive industries lead the way. With technology skills widely seen as critical to career development – organizations that provide technology freedoms and flexibility will

be seen as desirable places to work. There is a clear opportunity for the IT industry to support workers in developing such skills – and to help organizations to fast-track solutions to accelerate the growth of this trend.







#### **Executive Summary**

The American worker is highly conversant with technology and also optimistic about the transformational power of technology in the workplace. Technology is widely seen as an enabler of many of the core characteristics of the workplace including: trust between employer and employee; personal freedom; and flexibility - in terms of working hours, remote working as well as seeking new ways of getting things done.

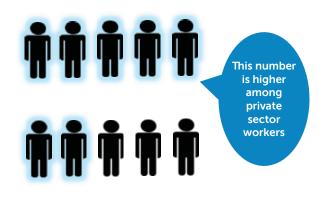
Already well established, these trends are expected to continue to increase in the future. Encouragingly, in the US, one of the most technologically-advanced societies in the world and where flexible working has perhaps been established longer than almost any other country in the world, work-life balance appears to be tilting in favor of the employee. Only a small percentage feel pressured to work longer hours. Among the younger generation of workers there is optimism that technology will actually be a help, not a hindrance to work-life balance.

However, there is substantial variation across organization types. Educators are under greater stress than those working in other verticals, while freedom of employee choice in terms of corporate technology and device is much lower in the public sector. While a majority of those working for smaller firms are free to download the software they need, those in larger organizations are inevitably still bound by greater restrictions and legacy constraints. Encouragingly, public sector and large enterprise workers foresee greater freedoms to emerge in the future both in terms of hardware and software. IT departments are advised to take heed, as not delivering against these expectations could affect worker morale as well as productivity.

Almost **four out of ten** workers in the US think that remote working increases productivity (38%) and this is expected to increase in the future (49%)



**seven out of ten** American workers are motivated by their employer's values



**39%** of American workers feel that IT problems are a regular frustration in their daily working life

Magnitude of threats perceived by American workers

IT problems are a regular frustration

Difficult switching off after work

Work life encroaches on private life

Under pressure to work longer hours

#### Trend #1: Crowdsourcing and Crowdsource service





**Hypothesis** 

The workforce of the future, for many industries, could be thousands of people working in different places. Is cloud computing and other ICT applications going to make it easier to distribute more tasks and services and to invite input from a community through crowdsourcing?

Top insights

There is widespread recognition that technology and Internet connectivity are facilitating radical changes in workplace practices and in how individuals can contribute to the organization.

More than three-quarters of all American workers agree that the Internet and technology facilitates 'reaching out to others to help solve problems' (77%) and is creating opportunities for organizations to 'do business in different ways' (78%), while 71% agree that the Internet and technology helps individual employees 'make a bigger contribution to their organizations.'

Two-thirds of all workers (64%) and eight in ten (80%) of those in private education feel that 'technological innovation allows you to focus on things you prefer to do.'

Differences are observed among different types of workers. 88% of Professional Nomads\* believe that technology helps individual employees 'make a bigger contribution to their organizations' compared with 59% of Task Workers\*.

Concerns about the potential risk to job security as it relates to outsourcing are fairly minor. Just 22% of Americans believe that 'outsourcing is a threat to [their] role,' although this is expected to rise slightly in the future (25%).

**Implications** 

Americans are optimistic about the possibilities afforded by this trend. The role of IT in empowering individuals, connecting workgroups and facilitating new ways of working is already well recognized in the US, and concerns over the potential risks are relatively muted. The door is wide open for American employers, supported by the IT industry, to boost development of both crowdsourcing and crowdsource service as a means to further enhance the competitiveness of American companies in the global economy, and their reputation for innovation.

#### Trend #2: Productivity measured in outputs, not hours

**Hypothesis** 

Standardized measures of productivity based on numbers of hours inputted would become less relevant in a knowledge-based economy. What are going to be the newer, softer metrics to assess productivity?

Top insights

This trend is already widely established in the US, where three-quarters of employees are 'measured by the quality of their work, rather than the time spent at work' (76%).

Almost four out of ten workers in the US today think that working remotely increases productivity (38%), and this is expected to increase in the future (49%).

American workers enjoy a relatively high degree of freedom in defining their own working patterns and are willing to trade-off regular working hours in exchange for that flexibility. Only 43% across the worker population and just 35% of those aged 45-54 want to be able to complete their work 'within a traditional 9-5 schedule.'

Perhaps surprisingly, a majority of American workers say they can get all of their work done in a traditional 9-5 schedule (58%); this is slightly higher in the public sector (61%), but lower for those working in large enterprises (54%). Government workers and those in the finance sector are more likely to be able to finish their work during office hours (72% and 66% respectively).

Interestingly, less than one third of those surveyed are 'under pressure to work longer hours' (32%).

Compared across all verticals, education professionals find it most 'difficult to switch off from work' (49% in private education and 43% in public education) compared with 29% in private healthcare and 28% in government.

**Implications** 

Across the US, many employers and workers have already moved to an outputs-based model. This appears to be welcomed by American employees who are by and large happy to trade off fixed working hours for more flexibility. It is somewhat of a surprise to learn that work-life balance does not appear to be an issue for the majority of workers (although more so for educators) – perhaps Americans have learned to cope effectively with the output-based model and flexible working patterns. As perhaps the most developed market in the world, the US may represent a case study in how advanced technology can help to promote work-life balance.

#### Trend #3: Changes in the adoption of devices





#### Hypothesis

The number and types of devices are proliferating and changing. Choice of device would become more about the situation, location and occasion. Are employers and the current systems and processes going to allow for increased end-user utility and choice?

#### Top insights

Currently less than three in ten employees have the 'ability to choose the type of computer they are provided' by their employer (29%), but this is projected to rise in the future (41%).

Choice of devices is much more common among SMB workers – 39% of which can choose their own device compared with only 21% of those working in large enterprises. A substantial difference is also observed between the private sector (33%) and the public sector (17%).

Just over one third of workers actually want to be able to use devices for both personal and professional purposes (37%), although 55% report already having this capability today and 63% expect to be able to do so in the future.

Just under half of all workers are able to share data between multiple devices today (48%), while this is predicted to increase to two thirds of the workforce (67%) in coming years.

**Implications** 

SMBs and private firms are leading the charge in offering employees greater choice of technology and devices in the US. But, while convergence of personal and work technology is already possible for a majority of workers, many people actually would prefer to keep things separated. By embracing proliferation and acknowledging that not everyone actually wants convergence, the IT industry will remain aligned against end users' needs.

#### Trend #4: Intergenerational kiss and punch

**Hypothesis** 

There will be more intergenerational knowledge transfer between younger 'digital natives' and the older generation. However, is there an increased risk of conflict and tension between workers of different ages, backgrounds, knowledge and skills?

Top insights

Three out of five (62%) of 18-24 year olds would 'enjoy work more if they had the choice of what technologies to use' compared with a national average of 42% and just 34% of 55-64 year olds.

The future potential for interoperability and the convergence of work and personal technology are also more salient among young people. 80% of 18-24 year olds expect that in the future their computer and other

devices could be 'used for both personal and work environments,' much higher than any other age group (national average 63%).

Two-thirds of 18-24s agree it's important to be 'motivated by company values' (64%) compared with a national average of 50%.

Perhaps reflecting their position on the career ladder, 18-24s have less freedom and ability to work flexible hours, and are most likely to be monitored. At the same time, only 43% of all American workers want to be able to 'complete their work within a traditional 9-5 schedule' - this rises to 56% among those aged 18-24, indicating perhaps that people new to the workforce are currently less willing to sacrifice their personal time for their careers.

Interestingly, while a large proportion of 18-24s are already currently able to complete their work during office hours (65%), this rises to 76% who expect this to be the case in future.

#### **Implications**

The latest generation of American workers harbor high hopes for the transformational power of technology in the workplace. While technology is seen by some to threaten work-life balance, today's young workers are hopeful that technology will actually improve their ability to finish work within a set number of hours. Although typically work-life balance becomes more of a concern with age and experience, younger workers in the US hope that this phenomenon will be reversed in the future. Rather than tensions emerging between young and old employees as originally hypothesized, there are signs that younger people can actually promote more healthy and more balanced working habits by not segregating work and play.

#### Trend #5: Values versus rules





#### Hypothesis

It would become easier to tell what employees are doing, but harder to tell them what to do. In this scenario, would employers use pervasive technology to oversee their workforces at any given time? And if so, would distrust accelerate?

#### Top insights

Three quarters of American workers believe it's important that employers 'trust [them] to use company resources responsibly' (74%).

Just over a third of American workers are currently being monitored. Across most verticals this is not expected to increase significantly in the future, but there are exceptions - public healthcare employees expect an increase in monitoring (from 52% today to 58% in the future) whereas those in private healthcare actually predict a decrease (37% being monitored today dropping to 30% in the future).

The desire for personal autonomy is clearly present - two-thirds of American workers want 'freedom to choose how [they] do [their] work' (67%) and one in two would like 'flexibility in choosing the hours [they] work' (50%). There is considerable variation across verticals in the flexibility granted to employees in terms of working hours. 72% of those working for non-profits enjoy flexible hours, compared with just 26% in public education.

While seven out of ten American workers are motivated by their employers' values, again, variation is observed across verticals. Only 56% of government workers say their employer has motivating values compared with 86% in private education.

#### **Implications**

Trust and personal freedom are core characteristics of the American workplace, and while monitoring is prevalent in some sectors, most employees do not expect monitoring activities to increase. It is likely that any monitoring activities will be met with suspicion, as would any efforts to limit individual workers' autonomy. Any plans to introduce monitoring must clearly be accompanied by thorough employee consultation and communication.

#### Trend #6: Many hats of the IT manager

#### **Hypothesis**

As employee aspirations change to a greater onus on happiness, autonomy and choice, workplace IT would be one way of recruiting and retaining staff. Would the job of the IT manager increasingly resemble that of other functions, like the HR manager?

#### Top insights

Two-thirds of American workers 'are attracted to work for an organization that offers good technology' (66%). The proportion is higher among large enterprise workers (70% versus 64% for SMB); however, large enterprise employees are much less likely to state that their 'employer listens to [their] needs when making IT decisions' (36% in large enterprises versus 55% in SMB). The private sector also receives comparatively higher ratings in

this area (48% among private sector workers versus 42% of those in the public sector).

There is an expectation among employees that they will become a more intrinsic part of the IT process - the proportion claiming their employer listens to employee needs when making IT decisions is projected to rise from 47% today to 54% in the future.

42% of employees in the US would 'enjoy work more if [they were] able to choose [their] own technologies.' This is less of an issue for Task Workers\* (38%) and women (37%), but more important for men (47%) and Professional Nomads\* (60%). It is particularly pronounced among 18-24 year olds (62%).

39% of workers in the US state that 'IT problems are a regular frustration in [their] daily working life,' but this is projected to drop to 32% in future. Similarly, just under half of American employees think that their employer uses the latest technology today (47%), but this rises to two-thirds who believe this will be the case in future (65%).

#### **Implications**

This hypothesis is clearly validated through the findings of this latest research, which shows American workers are optimistic about the future of corporate IT. They foresee that daily IT frustrations will decline, and that their employers will increasingly begin to adopt the latest technologies and take employee considerations into account when making IT decisions. The opportunity for and benefits of change are greatly anticipated among larger enterprises, where legacy has been more of a barrier so far. It is of course incumbent on IT departments and IT providers to live up to these expectations.

#### Trend #7: Employee-led innovation





#### **Hypothesis**

The business software of the future will be adopted and designed by employees rather than management or the IT department. Are we going to see more networked, de-centralized organizations to facilitate this shift in corporate hierarchy?

#### Top insights

More than three-quarters of the US workforce report that their 'employers give the freedom to choose how to work' (76%) and two-thirds state that such freedom is important to them (67%).

Just under half of American workers enjoy freedom to download software today (46%), but this is expected to rise to 54% in the future.

Substantial variation is observed by company size - 57% of those in SMBs are free to download software compared with just one third of large enterprise workers (33%). However, this gap is expected to narrow, with 49% of those in large enterprises expecting to be able to freely download software in the future, compared with 61% in SMBs.

Almost half of US employees agree '[they] need to keep up with the latest technology to be effective at work' (48%) and this rises to 55% who believe this will be the case in the future. This need is felt more urgently by those working in large enterprises (50% versus 46% for SMB) and among private educators (60%).

#### **Implications**

The building blocks for this trend are already visible in the American workplace today. Freedom to download software is expected to be the rule rather than the exception, and the pace of change is expected to be greatest for those working in large organizations. With technology skills widely seen as critical to career development, organizations that provide technology freedoms and flexibility will be seen as desirable places to work. There is a clear opportunity for the IT industry to support workers in developing such skills – and to help organizations fast-track solutions to accelerate the growth of this trend.



#### **Executive Summary**

The transformation of Brazil's economy from a 'slumbering giant' into a regional powerhouse is one of the most significant themes shaping the world economy today. This survey revealed a Brazilian workforce that is not only eager to embrace the technology that will support its next stage of growth - 92% believe technology allows them to be more productive - but is also optimistic that over the coming decade its employers will make investments.

Yet, there are some exceptions. Brazil's rapid commercial expansion does not appear to have been underpinned with investment in its public sector, and our respondents from the public sector indicated 'loud and clear' that more needs to be done by their employers to keep up with the private sector's enthusiastic adoption of new technologies and new ways of working.

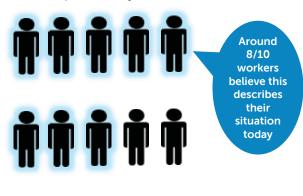
For example, it should concern Brazilian public sector employers that only 50% of public education employees believe they have access to good software and hardware. It should concern them even more that only 53% of civil servants worry about the need to keep up with the latest technologies to do effective work. The danger is, not that a two-track economy might emerge, rather an under-resourced and disengaged public sector will be unable to support the potential for growth in the private sector.

That could wind up as a missed opportunity and a waste of current progress. For example, in sectors such as private healthcare and retail, Brazilian companies are already ahead of the curve, using the internet and associated technologies to enhance the workplace and improve productivity. It is imperative that the culture and knowledge held in sectors is shared across the Brazilian economy.

55% of Brazilian workers claim to currently use the latest Technology in their workplace, but
82% expect to within the next 10 years



**78%** of Brazilians believe they have flexibility in working hours which leads to increased productivity



#### Almost 8 in 10

Brazilian workers feel threatened by constant pressure to keep up with the latest workplace technology Magnitude of threats perceived by Brazilian workers

#### IT resources slowing productivity

Pressure to work longer hours

Struggle to switch off from work

Personal devices threaten privacy policies

pressure to keep up with latest technology

#### Trend #1: Crowdsourcing and Crowdsource service





#### **Hypothesis**

The workforce of the future, for many industries, could be thousands of people working in different places. Is cloud computing and other ICT applications going to make it easier to distribute more tasks and services and to invite input from a community through crowdsourcing?

#### Top insights

Brazilian respondents were overwhelmingly positive about the impact that technology is having on their working lives. 91% believe technology creates opportunities to do business differently, and 91% recognize the role technology plays in enabling collaboration and communication. Perhaps most telling, 92% believe technology allows them to be more productive.

The private healthcare sector stood out as one in which respondents were almost universally positive about the internet and technology. A remarkable 97% of workers are more likely to agree that technology creates opportunities to do business differently, and 95% agree that it allows them to contribute more to their organizations.

There was also some interesting variation across different types of workers. Professional Nomads\* embrace technology to a greater extent than other segments, with 95% of them agreeing that technology allows them to make a greater contribution to their organizations, compared to 85% of Task Workers\*. On the other hand, Professional Nomads\* do have concerns about technology. 46% believe that as more and more people work from home, it could erode team spirit. This is a concern for just 36% of Power Users\* and 28% of Task Workers\*.

So far, only 27% of Brazilian workers consider outsourcing as a threat to their roles, but as they look to the future they predict greater problems in this area, with 35% saying that within a decade it will have become a threat.

#### **Implications**

As Brazil's economy rapidly expands and becomes a major global player, so its workers are rushing to embrace the technology that enables this transformation. The potential for IT and technology to help realize the benefits of crowdsourcing – bringing together resources and people in new and productive ways – is embraced in Brazil, and while it is still too early for the possibilities of crowd source service in fostering new ideas to have taken hold, this is a country where it could accelerate quicker than most given the outright optimism and the strong aspiration attributed to technology in the workplace. The challenge for Brazilian

employers, and the potential opportunity for the IT industry, will be to harness this enthusiasm and optimism, while also allaying fears over remote working and outsourcing.

#### Trend #2: Productivity measured in outputs, not hours

#### **Hypothesis**

Standardized measures of productivity based on numbers of hours inputted would become less relevant in a knowledge-based economy. What are going to be the newer, softer metrics to assess productivity?

#### Top insights

Brazilians have moved away from traditional measures of productivity, with 78% claiming their productivity is measured by quality of outputs rather than time. This trend is particularly noticeable among Professional Nomads\* (84%) as well as among SMB workers (81%) and those in the private sector (80%).

Respondents also reported that greater flexibility in working hours is helping them become more productive. While 78% of all Brazilian workers say this is the case, an impressive 89% of those in private healthcare and 86% of those in retail agree.

A healthy 72% of workers report that they can get their work done within a traditional 9-5 schedule, with 78% of them confidently predicted this will increase in the future. Though, there is significant divergence between sectors on this issue. Only 56% of those working in private education and manufacturing can complete their work in normal working hours, while life seems easier for the public sector with 74% of civil servants and 75% of government employees leaving work at 5p.m.

Brazilian workers find it relatively difficult to switch off after work. 46% reported that this is a problem for them, and the issue is more pronounced in larger organizations (50%) than in SMBs (40%).

#### **Implications**

This trend is already well established in Brazil, where an outputs-based model is in place and flexible working appears to be contributing significantly to improved productivity. Brazilian employers may wish to consider extending this further, and even learning from the private healthcare and retail sectors where this has been especially successful. At the same time, employers, particularly in the private education and manufacturing sectors, need to see what they can do to rationalize workloads. Also, increased levels of stress are already apparent across large swathes of the workforce.

But, while technology is often considered to be a root cause of this trend – is there an opportunity for the IT industry to challenge this perception by promoting how technology could help improve work-life balance rather than aggravate it?

#### Trend #3: Changes in the adoption of devices





#### **Hypothesis**

The number and types of devices are proliferating and changing. Choice of device would become more about the situation, location and occasion. Are employers and the current systems and processes going to allow for increased end-user utility and choice?

#### Top insights

While only 50% of Brazilian workers are currently able to choose the devices they use at work, they are confident this will improve with 75% expecting this choice in the future. They can look to the engineering and retail sectors where 64% and 59% of workers already enjoy this type of choice.

Freedom to choose devices at work is driven by private sector and SMB organizations (55% and 59% compared to 50% overall). There is a fairly high level of personal use of work devices, with 74% saying it is allowed at their place of work. It is particularly common among SMB workers (79%) and Professional Nomads\* (80%).

This is causing some concerns over security of data and intellectual property. This is a worry for 43% of Brazilian workers, and this rises to 61% among finance workers.

Our respondents revealed that Brazil is ahead of the curve on the issue of interoperability. 72% report that they are able to share data between all devices, and an overwhelming 85% expect to be able to do so in the future.

#### **Implications**

Brazilian workers clearly want choice over the devices they use for work, and they expect their employers to deliver on this expectation in coming years. Those employers can look to the engineering and retail sectors for examples of how to do this well.

Although, employers will be keen to avoid the data security issues that can be caused by workers using those devices for personal reasons, and so need to develop proper policies and procedures to address these important concerns. The IT industry can capitalize on the high demand from workers, to advise employers on how to provide more choice without compromising corporate needs.

#### Trend #4: Intergenerational kiss and punch

#### **Hypothesis**

There will be more intergenerational knowledge transfer between younger 'digital natives' and the older generation. However, is there an increased risk of conflict and tension between workers of different ages, backgrounds, knowledge and skills?

#### Top insights

Younger Brazilian workers - the 'digital natives' aged 18-24 – differ markedly from their older colleagues in their attitude to technology in the workplace. The overriding message seems to be that they do not see it as a beneficial addition to their lives, but rather an integral part of their lives.

Only 85% of 18-24 year olds say that the Internet and other technological developments allow them to reach out to others more easily to solve a problem, compared to 97% of 55-64 year olds. Only 68% of them say that a choice of devices at work helps them to enjoy their work, compared to a market average of 74%.

In fact, it is older workers who are most likely to work remotely, and are most relaxed about the threats that working from home may involve. For example, only 30% of 45-54 year olds believe that having more people working from home erodes team spirit, compared to a market average of 39%.

Finally, those aged under 34 are less likely to be motivated by company values than their older colleagues - 71% of 25-34 year olds compared to 82% of 55-64 year olds.

#### **Implications**

Brazilian employers, like many around the world, must not only see technology as a way to add value to their businesses, but as integral to the way they do business. It is the message their younger employees are sending them, and it is one they cannot afford to ignore. Rather than tensions emerging between young and old employees as originally hypothesized, this latest research indicates a need for employers to engage with younger workers, as their expectations are likely to be carried forward as they become more experienced and begin to occupy positions of greater responsibility. There is a clear opportunity for the IT industry to assist.

#### Trend #5: Values versus rules





#### **Hypothesis**

It would become easier to tell what employees are doing, but harder to tell them what to do. In this scenario, would employers use pervasive technology to oversee their workforces at any given time? And if so, would distrust accelerate?

#### Top insights

On the whole, Brazilian workers have an easy relationship with their employers, characterized by high levels of trust on both sides.

91% of them feel their employers trust them to use company resources responsibly, and 89% expect this to remain the case in the future. In line with high employee trust, 74% of them say they feel motivated by their company values and this is especially high in the engineering (85%) and retail industries (80%).

While a fairly high proportion of Brazilians already enjoy flexible working hours (56%), there is a widespread expectation that in the years ahead this will become even more the norm. However, public sector workers are on the whole not privy to flexible working - only 44% of them have it compared to 59% of private sector workers. It is most prevalent among engineering (66%) and telecom workers (64%).

Finally, only 26% of Brazilian workers say their employers monitor emails and 27% expect this to be true in the future.

#### **Implications**

Trust between an employer and its workforce can be a key component of productivity and success. It is also notoriously difficult to achieve, and so Brazilian employers should recognize and seek to enhance the positive and trusting relationships they enjoy with their workforces. This will involve developing and implementing proper policies on e-mail monitoring, and extending flexible working arrangements where appropriate – the latter in particular for the Brazilian public sector. For IT providers, there is an opportunity to help create

awareness among their corporate clients of how technology can facilitate these important needs.

#### Trend #6: Many hats of the IT manager

#### **Hypothesis**

As employee aspirations change to a greater onus on happiness, autonomy and choice, workplace IT would be one way of recruiting and retaining staff. Would the job of the IT manager increasingly resemble that of other functions, like the HR manager?

#### Top insights

Brazilian workers want better technology from their employers, and they believe it would help them be more productive. The good news is that in the coming decade they fully expect their employers to invest in the necessary technologies.

84% of respondents indicated that they are attracted to organizations with good technology. 74% said they could be more productive if they had access to better IT resources. This rose to 84% among private educators and 80% among telecom workers.

Yet, despite this, only 55% of people believe their organizations are using the latest technology. Large organizations fare better than SMBs, scoring 66% versus 57%. Workers in the private sector seem more likely to have good hardware and software than those in the public sector (75% versus 61%).

Those in private healthcare (84%) and retail (82%) are most complimentary about employer-provided technology, while those in public education (50%), financial (63%) and government (63%) sectors are the most critical.

Looking ahead, Brazilian workers expect to experience a significant increase in access to the latest technology. 82% said that they expect their employer to be providing it within a decade.

#### **Implications**

Brazilian employers have an opportunity to improve the morale and productivity of their workers by investing in better technology. Those in the public sector – notably public education – have the most to gain. They are enjoying the confidence and optimism that comes with being a fast-growing economy; they need to ensure that in the years ahead they invest the fruits of this growth in the technologies that their workers demand and deem necessary. The door is wide-open for the IT industry to help drive Brazil's long-term future.

#### Trend #7: Employee-led innovation





#### **Hypothesis**

The business software of the future will be adopted and designed by employees rather than management or the IT department. Are we going to see more networked, de-centralized organizations to facilitate this shift in corporate hierarchy?

Across the board, Brazilian workers tend to enjoy relatively high levels of freedom to download software and organize their workloads, with around three quarters claiming it is already the case.

#### Top insights

However, there are marked differences between the private and public sectors. Those in the public sector have less autonomy over how they organize their time at work - 75% of public sector workers report this type of freedom compared to an average of 79% for all workers. Furthermore, only 64% of public sector workers are free to download whatever they want, compared to 76% of private sector workers.

Despite these issues in the public sector, our Brazilian respondents displayed a positive attitude towards the involvement they have in the IT decision-making process - a healthy 67% feel that employers listen to their needs when making IT decisions. Participation in IT decision making is highest in telecoms, retail and private healthcare industries (77%, 74% and 74% respectively).

Interestingly, there is also a clear divide between Brazil's public sector and parts of its private sector when it comes to employees striving to keep up with the latest technologies. Only 53% of civil service employees reported that they worry about the need to keep up with latest technologies to do effective work. The figures for engineering and telecoms workers were 77% and 75% respectively.

#### **Implications**

While the building blocks for this trend are already becoming quickly established – the apparent ease of downloading software and IT departments being open to employees' needs - the Brazilian public sector lags the private sector in offering employees the freedom to innovate. Support for Brazilian employers, particularly in the public sector, to release constraints without compromising corporate policy is likely to ignite rapid progress.



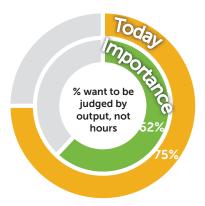
#### **Executive Summary**

Shifts in technology are changing the way Canadians of all ages work, making problem solving easier and increasing productivity. This is true across all types of workers and sectors, whether public or private, within SMBs or large enterprises. There is less evidence of differences or conflicts between generations than might be assumed, although older generations are more aware of the benefits that changes have brought than generations who have only known modern ways of working.

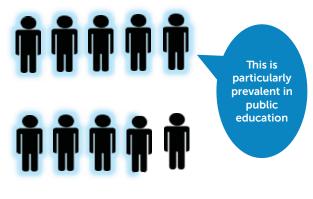
Canadians increasingly want to be judged on what they produce, not the hours that they work - the concept of the 9-5 job is decreasing in relevance. A range of different devices are likely to continue to be required for work and a majority of Canadians would prefer this to one device that would meet all their needs. There is also an understanding of increasing blurring of professional and personal lives.

These changes bring challenges with them. As it becomes easier to distribute tasks, so job insecurity is expected to increase. Canadians will find it harder to switch off when they are not working and more people are reporting they have more to do in a day than they are able to manage. Monitoring of employees is expected to increase and this could erode employees trust, also posing potential problems.

**62%** of Canadian workers want to be judged on output, not hours in the office and this is already happening for **75%** of workers today



**84%** of Canadians agree that the internet and technology is creating opportunities for organizations to do business in different ways



**41%** of Canadian workers highlight IT problems as a frustration of their daily working life

Magnitude of threats perceived by Canadian workers

Working life encroaches on private life
Under pressure to work longer hours

Difficult switching off after work

IT frustrations

#### Trend #1: Crowdsourcing and Crowdsource service





**Hypothesis** 

The workforce of the future, for many industries, could be thousands of people working in different places. Is cloud computing and other ICT applications going to make it easier to distribute more tasks and services and to invite input from a community through crowdsourcing?

Top insights

84% of Canadians agree that the Internet and technology is creating opportunities for organizations to do business in different ways. This figure is remarkably consistent across sectors, although it is particularly prevalent in public education (95%). Awareness is higher (90%) among older employees (55-64) who have experienced a working world pre Internet, compared with a younger age group (70% of 18-24s) who have

known very little else.

83% of employees today also believe that technological advances are allowing them to get things done more productively. This is especially true of the financial sector where 94% believe this describes their situation today and 92% expect it to hold true 10 years from now.

Three quarters of Canadian employees feel that Internet and technological advances are providing them with the opportunity to make bigger contributions to their organization.

The potential downside to the advances that technological developments bring is a sense of insecurity. Around a quarter of employees (23%) perceive outsourcing to be a threat to their role - increasing to 28% ten years from now. The concern is much greater for those working in large enterprises (29%) than SMB workers (16%).

**Implications** 

The potential for IT and technology to help realize the benefits of crowdsourcing – bringing together resources and people in new and productive ways – is already well recognized in Canada. It is interesting to note that it is among older workers where excitement is strongest, whereas younger ones are more likely to take it for granted. The imperative for employers, and a potential opportunity for the IT industry, is to leverage this excitement while assuaging any concerns about job security.

#### Trend #2: Productivity measured in outputs, not hours

**Hypothesis** 

Standardized measures of productivity based on numbers of hours inputted would become less relevant in a knowledge-based economy. What are going to be the newer, softer metrics to assess productivity?

Top insights

Approximately two thirds (62%) of Canadians agree that they want their productivity to be measured by the quality of their outputs rather than the time spent at work, something that is already happening for around three quarters of workers. Measurement on quality of output is particularly high in the financial sector (86%). In contrast, only 21% of the Canadian workforce believes it is important that productivity is measured by time in

the office, while 39% believe their productivity is currently measured in this way.

Although flexibility is desired and prevalent within the Canadian workplace, it does come at a price. 43% of Canadian workers find it difficult to switch off from work when they should be relaxing. The industries where this is most prevalent are public education (55%) and healthcare (57%). Moreover, new working methods may be placing increased strain on the workforce as 48% of employees believe they have too much work to complete in one day.

**Implications** 

Moves to 'softer' measures of productivity and away from monitoring input are well underway and welcomed by most Canadians. However, flexibility in working practices may be placing a strain on employees. While technology is often considered to be a root cause of this trend – is there an opportunity for the IT industry to challenge this perception, by promoting how technology could help improve work-life balance rather than aggravate it?

#### Trend #3: Changes in the adoption of devices





**Hypothesis** 

The number and types of devices are proliferating and changing. Choice of device would become more about the situation, location and occasion. Are employers and the current systems and processes going to allow for increased end-user utility and choice?

Top insights

Currently, less than one in three (31%) Canadian employees have the option to choose the type of computer and / or technology their employer provides. In the future, however, this is expected to increase to 43% of all employees. Presently, the chance to choose the type of technology is much more common in the private (36%) than public sector (20%) and with SMB workers (40%) than those in large enterprises (27%).

46% of private sector workers desire a computer and / or other devices which can be used for both personal and work use, although 59% of all employees believe this already describes their situation today. More than two thirds of Canadians believe this will describe their situation in ten years time, but it is a view held more by those at the start of their careers (70% of 18-34s) than those with substantial experience (57% of 45 - 64s).

Interestingly, interoperability between devices is more important (40%) than having a single technology device to meet all work needs (36%). This is unsurprising when set alongside the fact that over half (56%) of Canadian employees already have different devices available for work and 71% believe this will represent their situation in ten years.

**Implications** 

The lines between personal and professional are likely to become increasingly blurred, with workers using the same devices for both aspects of their life. However, with Canadian workers already accustomed to managing multiple devices in their work and personal lives, the number of different devices is expected to proliferate and IT departments and vendors need to address an increasing need for interoperability.

#### Trend #4: Intergenerational kiss and punch

**Hypothesis** 

There will be more intergenerational knowledge transfer between younger 'digital natives' and the older generation. However, is there an increased risk of conflict and tension between workers of different ages, backgrounds, knowledge and skills?

Top insights

The pressure of needing to keep up with technology at work is felt nearly equally among all age groups. 18-24 year olds (43%) are nearly as likely to believe that this is prevalent as those aged 55-64 (49%). This age group is, however, more likely to believe that those who are comfortable with the latest technology are at an advantage in the workplace than those aged 18-24-82% versus 60% respectively.

However, this is not necessarily indicative of a generational conflict when it comes to technology in the workplace, this does suggest that older people who will remember a less technologically-dominated working world are more aware of the transformational power of technology in the workplace. By contrast, younger 'digital natives' are more likely to take technology for granted.

Organizations which offer good technology appeal to all age groups. 35-44 year olds (75%) are most attracted to companies with good IT, though 18-24 and 45-54 year olds are not far behind at 70% each.

**Implications** 

There are no real signs of any tensions emerging between workers of different ages in Canada. Rather than worry about the risk of conflict or tension among workers of different ages or technical abilities, companies who wish to attract the best talent must make sure that they are able to offer good technology to help Canadians do their jobs.

#### Trend #5: Values versus rules





**Hypothesis** 

It would become easier to tell what employees are doing, but harder to tell them what to do. In this scenario, would employers use pervasive technology to oversee their workforces at any given time? And if so, would distrust accelerate?

Top insights

Trust is highly valued by the Canadian workforce. 70% of workers want to be trusted to use company resources responsibly, something that is particularly apparent in large enterprises (79%) when compared with SMBs (65%). Nine in ten employees say that this describes their situation today, similar for both SMBs (90%) and those working in large enterprises (87%).

While large numbers of those surveyed do feel trusted, a significant proportion already believes they are having their work monitored. Around a third of Canadian employees (30%) believe their email is monitored and around four out of ten (39%) believe their employer monitors their time during the day. This perception is more prevalent among Large Enterprise than SMB workers – 38% believe e-mail is being monitored versus 22%, and 47% believe their employer monitors their time versus 35% in SMB.

Half of the Canadian workforce claims it is important to be motivated by their company's values and 72% of employees believe this is true today. Particularly for those in the public sector, describing 80% of those in healthcare and 79% in public sector education aligning with company values.

**Implications** 

The importance of values is universally agreed and by and large workers and employers in Canada enjoy a relationship of trust. While employee monitoring is not uncommon, fortunately, there appears to be little correlation between monitoring and levels of trust. However, employers would be well advised to not take this for granted, and the IT industry is advised to be mindful that some of their products and services are seen by employees to be undesirable or not quite able to support their jobs.

#### Trend #6: Many hats of the IT manager

**Hypothesis** 

As employee aspirations change to a greater onus on happiness, autonomy and choice, workplace IT would be one way of recruiting and retaining staff. Would the job of the IT manager increasingly resemble that of other functions, like the HR manager?

Top insights

Corporate technology provision is clearly an influencing factor in choosing an employer in Canada, as 70% of employees admit they are attracted to work for an organization that offers the latest technology. This is more of an influencing factor for men (78%) than women (63%), but not something that varies significantly over different age groups. This importance will increase over time, with over three quarters of employees (76%)

saying this will describe their situation in ten years.

Encouragingly for Canadian employers, three out of four employees (74%) believe that their employer provides them with good hardware and software. This is particularly true in the financial sector with 81% in agreement.

Despite this broadly positive outlook, 41% of Canadian workers highlight IT problems as a frustration of their daily working life. Encouragingly, IT problems are expected to become somewhat less of an issue moving forward, with 35% believing they will continue to experience problems in the future.

**Implications** 

This hypothesis is clearly validated through the findings of this latest research, which clearly establishes the connection between IT provision and employee morale. Canadians are generally happy with how their employers meet their IT needs and expect this to remain the case. Continuing to meet expectations and provide good hardware and software will help IT managers play an integral role in their organizations and assist in maintaining positive morale.

#### Trend #7: Employee-led innovation





**Hypothesis** 

The business software of the future will be adopted and designed by employees rather than management or the IT department. Are we going to see more networked, de-centralized organizations to facilitate this shift in corporate hierarchy?

Two thirds of the Canadian workforce want the freedom to choose how best to complete their work – something which is particularly important for those in public education (79%) and the finance industry (78%). Over three quarters of employees (76%) feel that they have this privilege in their current working situation. Along the same lines, 60% feel the ability to access the Internet how and when workers want at work is important.

Top insights

The need to keep up with the latest technology is an issue in the Canadian workplace today as 47% believe that this is required to be effective at work. Interestingly, this seems to be more of an issue for males (53%) than it is for females (42%) and particularly among those in large enterprises (60%). Moreover, this is expected to be of even greater relevance in the future with 57% of Canadians feeling this will be the case in 10 years.

**Implications** 

Employees want the freedom to choose how to best complete their work and keeping up with the latest technology will be increasingly important. Companies will need to adapt to make sure they can meet these needs, but Canada does not appear to be facing an overwhelming shift in corporate hierarchies.



#### **Executive Summary**

Technology presents Mexican employers with a significant opportunity and a significant challenge. Get it right and they will be able to leverage the strong bonds of trust they have with their employees - 84% of the Mexican workforce said that feeling trusted is important and 97% said they feel trusted to use company resources well. Get it wrong and they risk alienating a large proportion of younger workers, many of whom already seem disengaged from their employers and suspicious about how those employers are using technology to monitor performance.

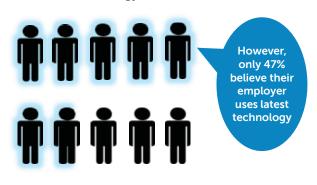
There are several areas of concern that younger Mexicans have around the Internet and evolving technologies. They are skeptical about remote working and fearful of the impending threat of outsourcing. They are also more likely to believe that their employer monitors their emails. When it comes to work more generally, many of them feel there is too much to complete in one day, and that they are under pressure to work longer hours.

It is not only younger workers who feel overworked. 41% of the Mexican workforce feels under pressure to work longer hours, while 36% 'find it difficult to switch off when they should be relaxing.' In the medium to long term, this could have damaging consequences for the emerging Mexican economy.

85% of Mexican workers believe their productivity is measured in hours while only 24% believe their productivity is measured by time in the office



**63%** of Mexican employees believe it's important to work for an employer that uses the latest technology



77% of Mexican workers believe they would be more productive if they had better IT resources

Magnitude of threats perceived by Mexican workers

IT problems are a regular frustration

IT resources slowing productivity

Outsourcing is a threat to role

Too much work for one day

#### Trend #1: Crowdsourcing and Crowdsource service





**Hypothesis** 

The workforce of the future, for many industries, could be thousands of people working in different places. Is cloud computing and other ICT applications going to make it easier to distribute more tasks and services and to invite input from a community through crowdsourcing?

Top insights

The Mexican workforce is unequivocal about its enthusiasm for the Internet and technology. 96% agree that it allows them to be more productive and 95% said that they think it enables organizations to do business differently.

Employees see the Internet and technology as something they can gain from, but also something they can use to add more value. 89% agree that 'technological innovation will allow [them] to focus on things [they] prefer to do,' while 94% also believe that technology helps individual employees 'make a bigger contribution to their organizations.'

On the other hand, one in four believes outsourcing is a threat to their roles and this fear is particularly prevalent among younger workers - only 17% of the over 45s are concerned compared to 35% of their younger colleagues.

**Implications** 

With almost universal enthusiasm and optimism toward the benefits offered by technology, there is tremendous future potential in Mexico for both crowdsourcing and crowdsource service. Mexican employers will need to harness this enthusiasm their employees show for technology while also allaying fears of outsourcing, particularly for younger workers who may be more aware of the potential threat that technology brings.

#### Trend #2: Productivity measured in outputs, not hours

**Hypothesis** 

Standardized measures of productivity based on numbers of hours inputted would become less relevant in a knowledge-based economy. What are going to be the newer, softer metrics to assess productivity?

Top insights

Only 24% of the Mexican workforce agrees that their productivity is measured by the time spent in the office. The majority believe their employers focus on output quality. Time monitoring is less pronounced among workers at SMBs, only 21% of whom think their employers concern themselves with the number of hours worked, and in the private sector, where 87% think quality of outputs are the key measure.

69% of Mexican employees report that they 'can complete their workloads within a traditional 9-5 schedule' and this is more of an issue for men (65%) than it is for women (73%). Unsurprisingly, 41% of the Mexican workforce feels under pressure to work longer hours, while 36% 'find it difficult to switch off when they should be relaxing.'

Employees demonstrated a clear appetite for flexible working - 86% believe it improves productivity. Yet it is notable that only 60% have that flexibility today.

64% believe working remotely improves productivity, although men are more positive about it than women (68% versus 60%). 28% believe that remote working 'is eroding team spirit and similar numbers believe this will still be the case ten years from now.

**Implications** 

Our hypothesis appears to be in line with the outputs-based model already well established in Mexico. On the other hand, the potential negative implications in terms of difficulty of managing work-life balance are also visible. Potential ways for employers to help include offering greater flexibility of hours and providing assistance on coping with the stress of work. There is a clear role for the IT industry to also assist by delivering technology which enables more work to be done in less time and empowering workers to take greater control over working practices.

#### Trend #3: Changes in the adoption of devices





#### **Hypothesis**

The number and types of devices are proliferating and changing. Choice of device would become more about the situation, location and occasion. Are employers and the current systems and processes going to allow for increased end-user utility and choice?

#### Top insights

(80%) than SMBs (72%).

Mexican workers already are experiencing device proliferation, as 71% say they use a number of devices to do their jobs.

Not surprisingly, many Mexicans are keen on interoperability. 78% are able to share data between devices today, and this interoperability is likely to increase over time, with 88% expecting they will be able to share data between devices in ten years. Interoperability is a little more important to men (84%) than women (73%), and in larger organizations

A large proportion (87%) of Mexican workers are able to use their computer and other devices for both personal and work purposes, and this is more important to SMB workers than those at larger organizations.

Data security is also an issue for the Mexican workforce. 37% agree that 'using personal devices for work makes it difficult to protect an organization's data and intellectual property."

#### **Implications**

With the proliferation of choice and options in both the consumer and corporate IT markets, the 'changes in adoption of devices trend' is clearly evident in Mexico. The IT department should prioritize allowing employees to make the several devices they do use interoperable with each other, and capitalize on widespread enthusiasm to use personal devices for work and vice-versa. Overcoming concerns about breaching corporate policy will be critical.

#### Trend #4: Intergenerational kiss and punch

#### **Hypothesis**

There will be more intergenerational knowledge transfer between younger 'digital natives' and the older generation. However, is there an increased risk of conflict and tension between workers of different ages, backgrounds, knowledge and skills?

#### Top insights

In some countries, older workers struggle to keep up with younger colleagues when it comes to technology, and in others, younger workers can take workplace technology for granted and so lack the enthusiasm of their older colleagues. In Mexico, there are few differences between the generations in terms of keeping up with the latest technology at work - it averages 56% among the entire workforce.

Though, there are some notable differences between the generations. While 48% of those aged 18-24 struggle to switch off after work only 21% of the over 55s cope with the same struggle. This could perhaps be explained by the fact that the younger generation strongly agrees that there is too much work to complete in one day (53% among 18-24s versus 36% among 55-64s.

Perhaps reflecting their demanding roles, younger workers have less flexibility to work the hours they want (53% for 18-24s and 51% of 25-34s versus 79% of 55-64s).

They are more likely to believe their email to be monitored (30% of 18-24s versus 10% of 45-54s), which may either reflect reality, or a higher awareness among the tech-savvy younger worker.

It is perhaps little surprise then that older Mexicans are more likely to be motivated by company values (93% among 45–54 year olds) than colleagues aged 18-24 (70%).

#### **Implications**

Young Mexican workers exhibit a marked level of disengagement in certain aspects of their job, and they are more suspicious about how employers are using technology. As a result, it is recommended that employers should communicate openly and transparently on these issues.

#### Trend #5: Values versus rules





**Hypothesis** 

It would become easier to tell what employees are doing, but harder to tell them what to do. In this scenario, would employers use pervasive technology to oversee their workforces at any given time? And if so, would distrust accelerate?

Top insights

Mexican workers put more emphasis on how much their employers trust them than do workers in any of the other ten countries surveyed. 84% told us that feeling trusted is important, compared to an average of 69% elsewhere in the world.

The good news is that Mexican workers do indeed feel that their employers trust them. 97% feel trusted to use company resources responsibly and this is consistent across age, gender, and size of company.

Only 19% of employees believe their email is monitored, while one in four believes they are monitored on how they spend their time. The feeling of having email and time monitored is highest among younger workers, as well as among government and civil service workers.

A comparatively low proportion (60%) of Mexicans are allowed to choose the hours they work, and those aged over 55 (79%) seem to have greater leeway in this area than those aged 18-24 (53%). Interestingly, 86% of Mexican workers feel that having flexibility allows you to work more productively and this outlook is unlikely to change ten years from now.

Eight in ten say they are motivated by their company's values, and at 85%, this is particularly high among private sector workers compared to 77% for the public sector. This is also the case for organizations with between 2-24 employees where 89% are motivated by these values.

**Implications** 

It appears that trust is a crucial element in the Mexican world of work, and Mexican employers will need to put in the effort to maintain the enviably high levels of trust they have achieved. This will be especially challenging as a new, more skeptical generation emerges.

#### Trend #6: Many hats of the IT manager

**Hypothesis** 

As employee aspirations change to a greater onus on happiness, autonomy and choice, workplace IT would be one way of recruiting and retaining staff. Would the job of the IT manager increasingly resemble that of other functions, like the HR manager?

Top insights

The quality of IT resources available to them, and the degree to which they can choose them, is important to Mexican workers.

Almost eight in ten workers agree that 'the PC and other technology products an employer provides is a big perk of their job.' This view is significantly more prevalent among private sector workers where 81% agree versus 71% among public sector workers.

Furthermore, 63% feel it is important to work for an organization that uses the latest technology and a staggering 80% claim they 'would enjoy work more if they had a choice of the technologies used.'

Our survey indicated that Mexican employers are not entirely living up to these high expectations. While three in four feel that their employer provides them with good hardware and software, this figure decreases to 69% for public sector workers, and only 47% of respondents say they work at an organization that uses the latest technology. On a more positive note, 71% agree that their employer does provide good IT support. However, only 59% of workers in the public education sector agree.

**Implications** 

Mexican workers are demanding of their employers when it comes to technology. By taking the step from providing merely acceptable hardware and software to providing the very latest tools and technologies, employers could improve worker morale, make it easier to recruit the best talent and enhance productivity.

#### Trend #7: Employee-led innovation





**Hypothesis** 

The business software of the future will be adopted and designed by employees rather than management or the IT department. Are we going to see more networked, de-centralized organizations to facilitate this shift in corporate hierarchy?

The Mexican workforce expects freedom in its use of technology - 77% would like the 'freedom to download software to help do their work' and feel this is important - and it expects its employers to involve them in IT decisions - 68% of Mexican workers believe it is important that employers take into consideration their IT needs. Employers are succeeding in this area - 78% feel their employers listen to their needs when making IT decisions. Nine in ten are 'able to access sites on the Internet when working,' and this is consistent across sector and company size.

Top insights

Encouragingly, only 26% agree that 'IT problems are a frustration in their daily working life,' a number significantly lower than seen in China (39%) and Brazil (38%) for example.

**Implications** 

Mexican employers seem to have responded positively to the challenges of openness and freedom that technology can present. It is also successfully involving its workforce in IT decisions.



#### **Executive Summary**

The British workplace is already comparatively highly evolved, yet exhibits strong potential for further development. A high degree of trust is commonplace, while personal freedoms and flexibility are the norm. Employers and workers have largely already moved away from the 9-5 routine and work is increasingly being defined in terms of output, not time spent.

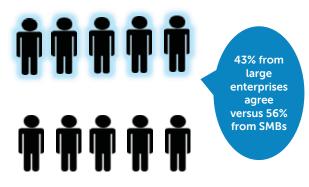
The benefits of technology as a means of facilitating new, more flexible and more productive ways of working, are well recognized in the UK, although awareness of the possibilities of employee-led innovation is still low and represents a potential opportunity for future focus.

Inevitably, employees are faced with greater challenges in managing work-life balance as a result of technological advancement. Alongside growing awareness of the importance of technology skills as a means of productivity and progression, is increasing recognition of the personal sacrifices that workers must make in order to gain advantage. An example of this is concern about the convergence of professional and personal life. Large enterprises and the public sector are lagging behind SMBs and the private sector across many indicators, but concerns about the downsides of advancement may hinder their progression.

**41%** of British workers agree their employer uses the latest technology, increasing to **59%** who expect this to be the case in future



Only **One in two** British workers can complete their workloads within a traditional 9-5 schedule



**57%** of workers report that IT problems are a regular frustration

Magnitude of threats perceived by British workers

IT problems are a regular frustration

Under pressure to work longer hours

Need to keep up with technology to be effective

Work life encroaches on private life

#### Trend #1: Crowdsourcing and Crowdsource service





**Hypothesis** 

The workforce of the future, for many industries, could be thousands of people working in different places. Is cloud computing and other ICT applications going to make it easier to distribute more tasks and services and to invite input from a community through crowdsourcing?

Top insights

There is widespread recognition that technology and Internet connectivity are facilitating radical changes in workplace practices and in how individuals can contribute to the organization.

Almost three-quarters of all British workers agree that the Internet and technology facilitates 'reaching out to others to help solve problems' (74%) and is creating opportunities for organizations to 'do business in different ways' (74%).

People in the financial sector are particularly likely to agree that 'technology enables reaching out to others to help solve problems' (86%).

Two-thirds of British workers (66%) and 81% of those in engineering agree that the Internet and technology helps individual employees 'make a bigger contribution to their organization.'

Differences are observed among certain types of workers. 85% of Professional Nomads\* agree that 'technological innovation allows [them] to focus on things [they] prefer to do' compared with 57% overall. Although, one-third (33%) of British workers (51% of Professional Nomads\*) believe that remote working 'is eroding team spirit'...and almost four in every ten workers believe this will be true in the future.

**Implications** 

The role of IT in empowering individuals, connecting workgroups and facilitating new ways of working is already well recognized in the UK today, forming a solid foundation for both crowdsourcing and crowdsource service to take hold. However, employers and the IT industry are advised to carefully consider the potential impact of increasingly distributed workforces on morale, and to pre-empt concerns when promoting solutions.

#### Trend #2: Productivity measured in outputs, not hours

**Hypothesis** 

Standardized measures of productivity based on numbers of hours inputted would become less relevant in a knowledge-based economy. What are going to be the newer, softer metrics to assess productivity?

Top insights

A majority of British employees (54%) want to be measured by the quality of their work, not the amount of time spent in the workplace. This rises to 65% for Power Users\* and 64% for Professional Nomads\*.

Overall, two-thirds of all employees report that they are already being measured today based on output.

Only one in two British workers (50%) report that they can complete their workloads within a traditional 9-5 schedule and remote working is expected to increase (40% today versus 53% in the future). Large enterprise employees have more difficulty completing their work in office hours (43% versus 56% in SMBs).

Six out of ten civil servants accomplish their work within a 9-5 schedule (61%), while telecoms workers are least likely to be able to finish their work within office hours (42%).

Across all verticals, those working in public education find it most 'difficult to switch off from work' (56%) compared with 32% in the civil service and 26% in hospitality.

**Implications** 

There is evidence that this trend is becoming widely established in the UK. Inevitably, while advanced technology skills are becoming increasingly recognized as a means of personal productivity and career advancement, employees will be faced with greater challenges in managing work-life balance. While technology is often considered to be a root cause of declining work-life balance, is there an opportunity for the IT industry to challenge this perception by promoting how technology could help improve work-life balance rather than aggravate it?

#### Trend #3: Changes in the adoption of devices





#### Hypothesis

The number and types of devices are proliferating and changing. Choice of device would become more about the situation, location and occasion. Are employers and the current systems and processes going to allow for increased end-user utility and choice?

#### Top insights

As yet, only a minority of British employees (27%) are able to choose their own technology devices for work. However, this is expected to become more prevalent with 40% of employees expecting to be able to select their work devices in the future.

Marked differences are observed between SMB workers, who are much more likely than large enterprise employees to be able to choose their own devices today (40% versus 20%), as well as private sector workers (32%) compared with 17% of those in the public sector. Manufacturing and engineering workers are more likely to be able to choose their own device, as are Professional Nomads\* (69%), compared with 14% of Task Workers\* and 16% of Institutional Collaborators\*.

Interoperability is expected to increase, with 48% reporting they can already share data between devices, rising to two thirds (66%) who expect to be able to do so in the future. Yet less than one in three workers actually want to be able to use devices for both personal and work purposes (29%).

#### **Implications**

The education vertical is leading the way with 56% of private sector educators and 45% of public sector ones wanting interoperability, compared with just 27% in healthcare and retail. Educators are also especially likely to use the same device for work as well as personal purposes, while seven in every ten educators (71%) can choose from multiple devices for work purposes as well as share data between devices (68%).

Small companies are driving this trend with larger organizations and the public sector some way behind. While this trend is expected to increase in coming years, the pace of change could potentially be accelerated as interoperability (facilitated by the cloud) is no longer a major concern. Another argument for providing greater choice is the fact that most British workers actually keep their personal and work devices separate. By embracing proliferation and acknowledging that not everyone actually wants convergence, the IT industry will remain aligned against end users' expectations and needs.

#### Trend #4: Intergenerational kiss and punch

#### Hypothesis

There will be more intergenerational knowledge transfer between younger 'digital natives' and the older generation. However, is there an increased risk of conflict and tension between workers of different ages, backgrounds, knowledge and skills?

#### Top insights

While broadly speaking there are more similarities than differences between age groups, and relatively small differentiation is observed between older (35 and above) age groups, the 25-34 group does exhibit marked differences and, from the evidence of this study, may be the group that represents the leading edge of workplace evolution, more so than 18-24 year olds.

25-34s stand out as the age group that would 'enjoy their work more if given more technology choice' (50% of those aged 25-34 versus 35% of 18-24s, and just 32% of those aged 55+).

25-34 year olds are the most likely to believe the Internet and other technological advancements 'are an aid to productivity' (81%), and are 'attracted to work for an employer that provides good technology' (63% versus 45% of 45-54s).

At the same time, more people in this age group believe they can 'choose their own workplace technology' (34% versus 25% of 35-44s and 21% of 45-54s).

Both 18-24s and 25-34 year olds are significantly more likely than older people to see an employer-provided PC or other device as 'a perk.'

#### **Implications**

If there is a generation that is driving change, it is the late 20s and early 30s age group. Those in their teens or early 20s are still relatively new to the workforce and not yet fully aware of the productivity potential that technology offers. Employers and IT companies should focus attention on the 25-34s who are on the steep end of their progression curves and at the forefront of driving the consumerization of IT phenomenon in the workplace.

#### Trend #5: Values versus rules





**Hypothesis** 

It would become easier to tell what employees are doing, but harder to tell them what to do. In this scenario, would employers use pervasive technology to oversee their workforces at any given time? And if so, would distrust accelerate?

Top insights

67% of British workers agree it's important that 'employers trust [them] to use company resources responsibly.'

While nine out of ten feel their employer trusts them, a slightly smaller number (84%) say this will be true in ten years.

Government and civil service jobs score highly in terms of flexible working hours (69% and 68% respectively versus 51% overall).

E-mail monitoring is expected to increase (48% expect their inboxes to be monitored in future versus 41% whose are today). This is more prevalent in the public sector (45% of public sector workers versus 39% of private sector ones believe their e-mail is monitored) and in Large enterprises (49% versus 31% in SMBs).

SMB employees are more likely than those in large enterprises to consider their employer to have motivating values (70% versus 57%). Perhaps in a sign of the times, financial workers are less likely than average to see their employer as having motivating values (48%) compared with more than three-quarters of those in private healthcare (76%).

**Implications** 

While a high degree of trust exists in the British workplace, employers and employees must guard against this degrading as result of increased monitoring activities. Implementation of monitoring technologies must be accompanied by consultation and communication between parties.

#### Trend #6: Many hats of the IT manager

**Hypothesis** 

As employee aspirations change to a greater onus on happiness, autonomy and choice, workplace IT would be one way of recruiting and retaining staff. Would the job of the IT manager increasingly resemble that of other functions, like the HR manager?

Top insights

41% of UK employees would 'enjoy work more if able to choose [their] own technologies.' Civil servants express the strongest need (58%), while this trend is expected to be more prevalent overall in future (41% rising to 46%).

Two-thirds of British workers rate their employer positively in terms of IT support (70%) and hardware/software provision (65%).

Ratings are comparatively less positive in the hospitality and healthcare industries (both at 60%). The highest ratings are observed in the engineering sector (78%), and it is among both engineers and financial professionals where the desire for good hardware, software and support is greatest, clearly reflecting the mission-critical nature of IT in these verticals.

41% say their 'employer uses the latest technology' increasing to 59% who expect this to be the case in future. Civil servants and healthcare workers are the least likely to have corporate access to the latest technology (21% and 31% compared with 41% overall). Conversely, those in the telecoms and finance industries are more likely to have the latest technology at work (55% and 50%).

Three-quarters (73%) of SMB workers report having good hardware and software, compared with 58% of large enterprise workers.

Educators and hospitality workers are more likely to see corporate provision of PCs and other devices as 'a perk' – suggesting an opportunity particularly in these sectors to motivate workers accordingly.

Despite the generally positive views of the majority, 57% of workers report that 'IT problems are a regular frustration,' indicating that there is much room for progress to eradicate pain points. Encouragingly, this is expected to be less of a concern in the future as workers are increasingly empowered to seek their own solutions.

**Implications** 

British workers overall are fairly happy with their IT, although day to day issues still exist for a majority of people. Opportunity exists for the IT department to play a wider role in the organization and, through greater flexibility of policy, improve employee morale.

#### Trend #7: Employee-led innovation





#### **Hypothesis**

The business software of the future will be adopted and designed by employees rather than management or the IT department. Are we going to see more networked, de-centralized organizations to facilitate this shift in corporate hierarchy?

Almost three-quarters of the UK workforce report that their 'employers give the freedom to choose how to work' (73%), although a smaller proportion feel that such freedom is important (53%). Private educators index particularly highly (91%) as do government workers (82%). Conversely, those working in telecoms are lower than average (61%) as are workers in hospitality (63%) and finance (64%).

#### Top insights

sector (25%).

Currently less than a third of British workers would like to have the freedom to download software (28%), although almost half would like the ability to freely access the internet (48%).

Only 5% of civil servants feel a need to be able to freely download software, compared with 47% of private educators. Major differences are observed between large enterprise employees, among which only just over a quarter want download freedom (27%) versus 56% of SMB employees, as well as private sector workers (44%) compared with public

Interestingly, the proportion of people who actually have the freedom to download software (37%) currently outstrips those who see a need for it (28%). Such freedom is expected to increase, with almost half of British workers expecting that they will be free to download their own software in the future (47%).

Almost half of Brits agree 'you need to keep up with the latest technology to be effective at work' (48%) and this rises to 58% who believe this will be case in the future.

**Implications** 

Awareness of this trend among UK workers is still fairly nascent. In many cases employees already have the freedom and the tools required to be innovative, but awareness of the need and the benefits is limited. An opportunity exists for the IT industry to help fast-track this through education.



#### **Executive Summary**

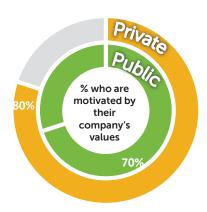
French workers have enthusiastically embraced the Internet and associated technology. They are using it to collaborate on projects and solve problems at work. It is notable that French workers see the Internet as a tool enabling them to make more of their lives in both professional as well as personal situations.

However, the notion of remote working is yet to take hold in France, with those aged over 55 and female workers especially resistant. Their work is measured by output not hours, but they remain happy for that work to take place in the more social environment of a traditional workplace than in the isolation of the home.

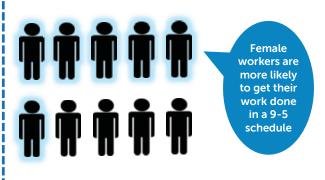
It was clear that when it comes to IT and Internet issues, large enterprises and public sector organizations have much to learn from smaller private sector businesses. SMBs tend to have reassured staff about the threat of outsourcing to their jobs; they encourage staff to use devices for work outside of the office and they give staff greater choice in devices. Those are all popular decisions that impact positively on morale and productivity.

Our survey highlighted significant challenges and opportunities for French employers in the years to come. If they can rise to the challenge of providing a choice of the latest devices, enabling interoperability between them, and encourage collaborative, anytime, anywhere working, then they have a once in a generation opportunity to build on the already positive attitude that their workers have toward technology.

73% of French workers are motivated by their company's values. Those in the private sector are more likely to agree



Only **59%** can complete their workloads within a traditional 9-5 schedule



## One in four

French employees have difficulty switching off and relaxing after work Magnitude of threats perceived by French workers

There is too much work to complete Outsourcing is a threat

Difficult switching off after work

Work life encroaches private life

## Trend #1: Crowdsourcing and Crowdsource service





#### **Hypothesis**

The workforce of the future, for many industries, could be thousands of people working in different places. Is cloud computing and other ICT applications going to make it easier to distribute more tasks and services and to invite input from a community through crowdsourcing?

#### Top insights

79% of French workers believe that technological advances allow them to do business in different ways. This has established particularly strong roots in the private sector with 81% agreeing compared to 73% in the public sector.

80% of the French workforce feels that Internet connectivity and technology allows them to reach out to others more easily to solve a problem. Across verticals, this is particularly visible in private healthcare (88%) and finance (86%).

Despite the prevailing workplace conditions being generally favorable, awareness of the potential benefits of this trend is still low. Just 44% in France think it's important for the Internet and technology to create opportunities to do business in different ways.

57% of the workforce feels that technological innovation frees up time to do things they prefer, and this tendency is especially pronounced (76%) among those aged 55 and over. However, more than one in three French workers (36%) believe that working remotely is eroding team spirit, and this is particularly true among civil service and retail workers.

One in four French workers (26%) feel that outsourcing could threaten their role, although this rises to 35% among those working for large enterprises compared to just 23% for those employed by SMBs.

#### **Implications**

While overall the French have embraced the Internet and technology innovation at work, they are still quite functionally minded when it comes to technology and have some way to go to fully envision the transformational opportunities that technology affords – like the benefits of crowdsourcing for example.

The imperative for employers, and a potential opportunity for the IT industry, is to promote understanding of the benefits to French workers while pre-empting concerns such as job security.

## Trend #2: Productivity measured in outputs, not hours

#### **Hypothesis**

Standardized measures of productivity based on numbers of hours inputted would become less relevant in a knowledge-based economy. What are going to be the newer, softer metrics to assess productivity?

#### Top insights

A clear majority of French workers (75%) believe their productivity is measured by the quality of their outputs rather than the time spent in the workplace. This is particularly true among companies with 2–24 employees (84%) where it is perhaps easier to see the effect of individual activity on company performance.

59% of French employees reporting that they can complete their workloads within a traditional 9-5 schedule, dropping to 56% in the future, it is possible that for some French employees the 9-5 routine is becoming a thing of the past. This is further borne out by the finding that just 46% of French workers believe that it's important to complete one's work during 9-5 hours.

In return for this willingness to put in the hours, French workers look for flexibility from their employers. In fact, 55% believe it's important to have flexible working hours in order to improve productivity.

There is considerably less enthusiasm for remote working. Only 24% think it's important to work remotely to improve productivity, while 36% have the option of remote working today. Remote working is more likely to be available to French men (42%) than French women (30%).

Almost one in every two French workers (46%) has difficulty switching off and relaxing after work. 18–34 year olds find it more difficult to switch off after work (51%) than those aged 35-44 (42%).

#### **Implications**

The outputs-based model is already established in France. The stereotypical image of the French worker watching the clock is clearly being shattered as flexible hours are becoming common, although remote working less so.

The downsides of this trend are also clearly apparent – difficulty finishing work, and in managing work-life balance. While technology is often considered to be a root cause of these issues – is there an opportunity for the IT industry to promote how technology could help improve work-life balance rather than aggravate it?

## Trend #3: Changes in the adoption of devices





#### **Hypothesis**

The number and types of devices are proliferating and changing. Choice of device would become more about the situation, location and occasion. Are employers and the current systems and processes going to allow for increased end-user utility and choice?

#### Top insights

While just over half (58%) of French workers are today able to share data between devices, the expectation is that this sort of interoperability will increase and become expected in the future. Looking ahead, 69% expect to be able to share data between devices.

A fairly high proportion uses work devices for personal activities, and it is interesting that this tendency is pronounced among workers at SMBs (62%). Only 53% at large enterprises do so, perhaps reflecting the greater emphasis these organizations place on IT security and data privacy.

At the moment, only 35% think it is important to have a single technology device that meets all of their needs. As people acquire more and more devices and the cloud becomes ever more central to our work, so interoperability and compatibility between devices will become a greater issue.

In today's workplace, a small percentage of workers are able to choose their own technology devices for work (27%); however, this is expected to become more prevalent in the future with that expectation rising to 37% in ten years time.

**Implications** 

French workers are advanced users of technology, and interoperability and the convergence of work and personal usage are already well established. While personal choice in terms of corporate devices is still the exception rather than the rule, expectations are increasing. There is an opportunity for the IT industry to influence at this nascent stage and to guide corporate customers in anticipating their workers' needs.

## Trend #4: Intergenerational kiss and punch

#### **Hypothesis**

There will be more intergenerational knowledge transfer between younger 'digital natives' and the older generation. However, is there an increased risk of conflict and tension between workers of different ages, backgrounds, knowledge and skills?

#### Top insights

French workers tend to be more divided by industry, company size or sector than by age.

However, it is interesting that the over 55s seem to have the most enthusiastic approach to IT. 84% believe that being comfortable with the latest technology creates an advantage in the workplace, compared to 77% of all French workers. Only 29% of the over 55s are likely to face IT frustrations on a daily basis, compared to a market average of 42%.

However, this older group does struggle with the idea of remote working. 47% of the over 55s believe working remotely erodes team spirit. Only 25% of 18-24s agree.

Those aged over 35 have the clearest view of the benefits of the Internet and other technological advancements. 84% of them believe it is helping to 'solve problems' compared to 61% for those aged 18–24. This possibly reflects the fact that those aged under 35 are unlikely to remember a workplace without the Internet.

Finally, those aged over 35 are more likely than their younger colleagues to view PCs or other devices provided by employers as a perk. It may be that the under 35s take these devices for granted, seeing them as a normal part of working life.

#### **Implications**

Rather than tensions emerging between young and old employees as originally hypothesized, this latest research indicates that younger people are more likely to take for granted their corporate technology. Interesting it is older workers who are the most optimistic about the possibilities of IT transforming the workplace and are less likely to be frustrated with IT on a regular basis. Connecting with younger users to alleviate pain points, as well as capitalizing on the optimism of older ones, emerge as key priorities.

#### Trend #5: Values versus rules





**Hypothesis** 

It would become easier to tell what employees are doing, but harder to tell them what to do. In this scenario, would employers use pervasive technology to oversee their workforces at any given time? And if so, would distrust accelerate?

Top insights

At the moment, an encouragingly high proportion of French workers (87%) feel trusted by their employers to use company resources responsibly, but there are storm clouds on the horizon – this figure declines to 79% who believe they will be trusted in the future.

It is perhaps unsurprising that email monitoring is most prevalent amongst those workers who say they are extremely unhappy in their jobs (41%). However, what is of greater concern is that while 18% overall say their email is monitored today, 28% expect monitoring to take place in a decade. They predict this will erode trust in the workplace. This is particularly prevalent amongst financial workers where 28% already believe their email is monitored, and among males (21% versus 14% among females).

It is not only email that employers are watching. 27% of workers feel their employer observes how they spend their time. This is particularly prevalent within the retail and utilities sectors (38% and 36%).

While three quarters of French workers (73%) are motivated by their company's values, again the future is less positive - those aged 18-24 are least likely to consider company values motivating (56%), and comparatively fewer public sector workers (69%) consider their organizations' values motivating.

**Implications** 

While a high degree of trust between employers and employees exists today in the French workplace, there are warning signs of potential decline ahead. In particular, the much lower level of perceived trust among the youngest generation of workers is a concern. Organizations should take heed and reach out to their youngest employees, while ensuring that any monitoring activities are accompanied by communication and consultation.

## Trend #6: Many hats of the IT manager

**Hypothesis** 

As employee aspirations change to a greater onus on happiness, autonomy and choice, workplace IT would be one way of recruiting and retaining staff. Would the job of the IT manager increasingly resemble that of other functions, like the HR manager?

Top insights

French employers have a clear incentive to improve the IT resources they offer their staff. 51% of French respondents said that they could be more productive with better IT resources. In the retail sector, this reached 60%. Yet only 34% feel their organization uses the latest technology.

Only 58% of those working in the public sector report that they have good hardware and software, although the figure across all French respondents is a more respectable 66%.

The quality of IT equipment has a major bearing on staff motivation. 72% of French workers feel that employee provided technology and devices are a big perk of their job. This is most evident in SMBs with 2-24 employees - 80% of which attract workers with devices versus 71% of large enterprises.

55% of those surveyed would enjoy work more if they had a choice in the technologies used, but only 28% have the ability to choose their own devices. It is worth noting that choice is less of an issue for younger workers - 44% for 18-24s.

There is a positive note for employers when it comes to IT support. An impressive 70% of workers rate it favorably, and only 37% find IT problems a frustration in their working life. Differences are observed among different types of workers - it is much higher among Task Workers\* (45%) than Institutional Collaborators\* (27%).

**Implications** 

Our hypothesis is validated through the findings of this latest research, which clearly establishes the connection between IT provision and employee morale in France. By investing in the latest technologies, French employers could rapidly improve morale among their staff and significantly raise productivity. The largest companies lag behind, perhaps deterred by the cost of replacing large legacy systems, but the time

may have come to see this less as a cost and more as an investment. IT provision is already playing a significant role in defining the workplace – thereby opening up all kinds of new opportunities for IT providers to influence.

## Trend #7: Employee-led innovation





**Hypothesis** 

The business software of the future will be adopted and designed by employees rather than management or the IT department. Are we going to see more networked, de-centralized organizations to facilitate this shift in corporate hierarchy?

Top insights

Awareness of the benefits of this trend is as yet not widely established in France. Just 28% want to be able to download software freely, although 44% actually already have the ability to do so.

There is a greater salience over having a voice in broader IT decisions. 48% of respondents believe they have input into IT decisions. This is less evident in public organizations (40%) than it is in the private sector (51%).

There are also clear differences between SMBs and large enterprises in this area. 55% of SMB respondents feel their IT needs are considered compared to 44% in large enterprises. And, while 55% of SMB respondents report that they can download freely, this falls to just 29% of respondents at large enterprises.

**Implications** 

It is still too early to predict whether this trend will take hold across the French workplace. With awareness among workers still low, perhaps an opportunity exists for the IT industry to accelerate demand by promoting the benefits of employee led innovation to workers and organizations alike.



# Germany Insights

#### **Executive Summary**

The German economy has been one of the success stories during the last three years of persistently gloomy economic news. Much of this success was founded on solid financial and manufacturing bases that have highly skilled, loyal and hard-working employees and which make prudent investments for the medium and long term. Those companies and those tendencies were much in evidence among survey responses.

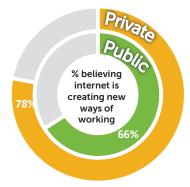
German workers exhibited high levels of enthusiasm for the Internet with 81% describing it as a way to improve workplace productivity. They also appear to have modern, trusting relationships with their employers - 87% said their employers trust them to use company resources responsibly.

There were though three areas for minor concern. Firstly, the public sector is lagging slightly behind the private sector. It would be easy to overstate this; it is not so much that the public sector is doing badly, more that the private sector – and especially financial services and manufacturing – are performing so very well. Whether it is embracing new ways of working, judging workers on outputs rather than time, interoperability of devices, or some other measure, the public sector performed acceptably, but was left trailing in the wake of the bankers and the factory bosses. There is clearly scope for one to learn from the other.

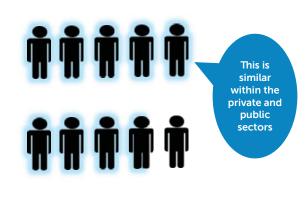
Secondly, throughout our responses it was notable that older German workers are taking technology and the Internet very seriously, worrying that they will get left behind, and doing all they can to keep up with each new wave of change. German employers could do more to allay their fears about technology rendering them obsolete.

Finally, in several areas there was a curious note of pessimism about the future. On subjects such as trust between employer and employee, monitoring of employee email, and freedom over how you work, our respondents told us they were happy with the way things are, but that there is potential for it to get worse. German employers need to understand this creeping negativity and act now to address it.

Internet and technology are creating new ways of working in Germany. 78% in the private sector and 66% in the public sector believe this is true



**87%** of German workforce believe their employers trust them with company resources



Despite embracing new methods of working **61%** of German employees state IT problems are a daily frustration at work

Magnitude of threats perceived by German workers

Pressure to keep up with the latest technology
Remote working is eroding team spirit

IT problems are a daily frustration

Too much work for one day Difficult to switch off from work

Feel under pressure to work longer hours

## Trend #1: Crowdsourcing and Crowdsource service





#### **Hypothesis**

The workforce of the future, for many industries, could be thousands of people working in different places. Is cloud computing and other ICT applications going to make it easier to distribute more tasks and services and to invite input from a community through crowdsourcing?

#### Top insights

German employees are of the belief that the Internet and other technological developments are helping transform the way they solve problems - allowing them to reach out more easily to others to solve a problem (83%) and ultimately increasing their productivity in the workplace (81%).

Furthermore, 73% of Germans believe that the Internet and technology are allowing them to make bigger contributions within their organizations. The same number expects this to be the case in the future.

There are signs that the private sector in Germany is more open to the many new ways of doing business that the Internet presents. 52% of private sector workers believe that this is important, compared to 41% of public sector workers, and 78% of those in the private sector believe it already happens versus only 66% of those in the public sector.

However, not everyone is so enamored with change. 55% of the German workforce believes that working remotely is eroding team spirit. Indeed this is even more common amongst Large Enterprises (64%) and Task Workers\* (74%). Moreover, around one in four Germans (26%) believes that outsourcing is a threat to their role.

#### **Implications**

There is strong awareness in Germany toward the potential for IT and technology to help realize the benefits of crowdsourcing – bringing together resources and people in new and productive ways – while the possibilities for crowdsource service in fostering new ideas are also recognized. Within this overall optimism there were one or two notes of concern - the public sector could learn from private sector innovation, and

employers need to allay fears over remote working and outsourcing.

## Trend #2: Productivity measured in outputs, not hours

#### Hypothesis

Standardized measures of productivity based on numbers of hours inputted would become less relevant in a knowledge-based economy. What are going to be the newer, softer metrics to assess productivity?

### Top insights

German employees would much rather have their work measured on the quality of their outputs (60%) than on the amount of time they spend in the office (21%). Encouragingly it seems as though this is what employers already do: 71% report that their employer judges them on outputs and only 29% on time. It should be noted that the private sector is a little ahead of the private sector on this: 74% of private sector companies

measure employees on outputs, compared to 64% of public sector organizations.

The 9-5 working day is increasingly a historical curiosity in Germany. Only 59% say they still stick to it and only 48% think it is important to do so. Germans are much more interested in flexibility: 65% want the ability to work flexible hours as they believe it would help them work more productively. Three quarters of our respondents already have this flexibility in their hours. Financial services and banking lead the way on this with 85% allowing flexible working. This desire to work more flexible hours is unsurprising as half of German workers believe they have too much work to complete in one day and believe this isn't going to improve in the future.

Germans appear less enthusiastic about remote working: only 33% want to be able to do it, yet 46% expect it to become a reality within a decade.

It is especially important for Professional Nomads\*, 67% of whom told us they already work remotely, and 50% of whom said this is important to them.

## **Implications**

German employers appear to take a modern and responsible approach to managing their workers, measuring them on outputs and allowing them to do their work as and when it best suits them. While remote working may not be for everyone, some segments of the workforce are keen and German employers could benefit from exploring this avenue more fully, while the IT industry could do more to promote its benefits.

## Trend #3: Changes in the adoption of devices





**Hypothesis** 

The number and types of devices are proliferating and changing. Choice of device would become more about the situation, location and occasion. Are employers and the current systems and processes going to allow for increased end-user utility and choice?

Top insights

Having the ability to choose your own devices matters much more to employees who work for SMBs (44%) than to those who work for Large Enterprises (32%). It is perhaps then fortunate that 46% of SMB workers do have this choice, compared to 30% of Large Enterprise employees. There is some confidence among German workers that this will increase in the future: 41% expect to have a choice in the future, up from the 36% who do today.

Similarly, 59% of those working in SMBs say they use their work device for personal use, compared to just 48% of those in Large Enterprises. However, a high proportion (41%) of German employees expressed concern over the protection of their organization's data and intellectual property.

Interoperability between devices is expected to increase in the future from 60% to 69%, and this is something that is more important for the private sector (52%) than the public sector (40%).

Interestingly more German employees prefer to use multiple technological devices than a single device which meets all their work needs.



A clear division between SMB and large enterprise workers is observed with SMB employees typically more vocal and more demanding across all aspects of this trend. Similarly, demand is greater in the private sector than the public sector. Employers and IT providers need to reconcile emerging demand, fueled by IT consumerization, with the relatively high degree and responsibility shown by German workers in adhering to corporate policy.

## Trend #4: Intergenerational kiss and punch

**Hypothesis** 

There will be more intergenerational knowledge transfer between younger 'digital natives' and the older generation. However, is there an increased risk of conflict and tension between workers of different ages, backgrounds, knowledge and skills?

Top insights

German workers aged over 45 appear to be more concerned than their younger colleagues about keeping up with the latest technological developments in the workplace. 65% say they need to do this to be effective at work, compared to just 42% of the 18-24 age group. In addition 87% of those aged over 45 believe that those who are very comfortable with the latest technology are at an advantage in the workplace, and only 64% of

18-24 year olds believe this.

Older workers care more about the devices they use. Only 36% of employees aged 18-24 and 32% of employees aged 25-34 would like the ability to choose the type of technology their employer provides them with, while 43% of German workers aged 45-54 would like this, as would 40% of those aged 55-64.

Similarly, 83% of German workers aged 44-64 say they are attracted to work for an organization that offers good technology, but just 70% of those aged 18-34 say it matters.

**Implications** 

This hypothesis is turned on its head in Germany, where awareness and demand for technology as a driver of workplace productivity is greatest among older workers. This represents a massive opportunity for the IT industry to tap into their aspirations and to promote technological savvy as a route to career success.

#### Trend #5: Values versus rules





**Hypothesis** 

It would become easier to tell what employees are doing, but harder to tell them what to do. In this scenario, would employers use pervasive technology to oversee their workforces at any given time? And if so, would distrust accelerate?

Top insights

Trust in the workplace is highly valued amongst the German workforce – 69% say it matters that their employer trusts them to use company resources responsibly. 87% feel their employers do this at the moment, but worryingly 78% expect this level of trust to fall in the future.

German workers like to identify with their employers; it needs to be more than just a place to turn up and earn money. 88% of those that are 'extremely happy' with their jobs are engaged with their company's values compared to just 27% of those who are unhappy with their jobs.

This alignment with an organization's goals is more prevalent in the private sector (74%) than in the public sector (66%), and in terms of specific verticals manufacturing and retail score most highly in this area.

On the other hand, German workers do not like to have their work monitored. Of those who are unhappy in their work 45% believe their employer monitors how they spend their time during the day; only 17% of those who are extremely happy in their work believe this of their employers.

Only 16% of German workers believe employers monitor the e-mails that they send today, but a quarter believes this will be the case in 10 years.

**Implications** 

While today's German workforce enjoys high degrees of trust, there is pessimism about how this will develop in the future. Monitoring is expected to rise, and with it suspicion and erosion of trust. Employers would be well advised to be mindful, and to engage employees in careful consultation before rolling out any monitoring initiatives.

## Trend #6: Many hats of the IT manager

**Hypothesis** 

As employee aspirations change to a greater onus on happiness, autonomy and choice, workplace IT would be one way of recruiting and retaining staff. Would the job of the IT manager increasingly resemble that of other functions, like the HR manager?

**Top insights** 

40% of German workers believe they would enjoy work more if able to choose own technologies. This is more common within the private sector (43%) than the public (32%) and is especially apparent amongst financial sector employees (56%).

63% of employees think their employers should provide good hardware and software, and, encouragingly, 74% of employers do so. The private sector (79%) performs better in this area than the public sector (61%). In terms of verticals, 91% of finance workers and 73% of manufacturing sector employees say this describes their situation today – in comparison only 58% of those in public sector education, 64% in public healthcare and 57% in the civil service think the same.

62% of private sector workers think their company uses the latest technology in contrast to only 38% in the public sector, and whilst 73% of private sector employees feel they have good IT support, only 58% think this in the public sector. Ratings of IT support are particularly low in public education (49%) and civil service (57%).

Three quarters of German employees say that they are attracted to work for a company which uses the latest technology, particularly in the financial (85%) and manufacturing (84%) industries.

61% of German workers report that IT problems are a frustration in their daily working lives.

**Implications** 

This hypothesis is validated through the findings of this latest research, which establishes the connection between IT provision and employee morale. German employees made it clear that they want to work for companies that use the latest technology and provide good IT support. Most German employers succeed on all these counts, and the private sector – particularly in banking and manufacturing – is leading the way. IT provision is already playing a significant role in defining the workplace – thereby opening up new opportunities for IT providers to influence.

## Trend #7: Employee-led innovation





#### **Hypothesis**

The business software of the future will be adopted and designed by employees rather than management or the IT department. Are we going to see more networked, de-centralized organizations to facilitate this shift in corporate hierarchy?

#### Top insights

84% of German employees can access Internet sites how and when they want, and 62% consider this important to them. However, in contrast only 46% can download any software they need, while only 39% see this as important.

72% of German workers want to be given the 'freedom to choose how to do their work' and whilst 83% of them currently feel they have this privilege, only 76% expect to do so in ten years.

While 56% of Germans believe that individuals need to keep up with the latest technology to be effective at work this figure falls to just 43% for the public sector. In the financial services industry it was as high as 74%. Moreover, 83% believe that those who are comfortable with technology are at an advantage in the workplace.

#### **Implications**

Consistent with its reputation as one of the most innovative economies in the world, Germany is ahead of many countries in terms of this trend. Freedom to download and access the Internet is widely expected by German workers. However, freedoms are expected to diminish in the years ahead, and employers and the IT industry are advised to investigate more deeply the reasons why and to reverse this potentially damaging perception.

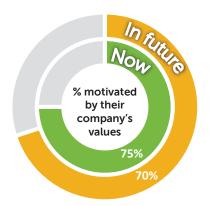
#### **Executive Summary**

Australian workers tend to be responsible with data, are trusted by their employers, and in agreement with their organizations' values.

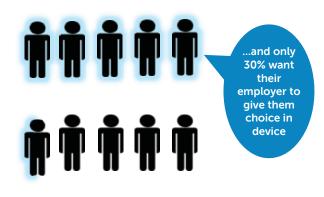
Australians are pragmatic and take a predominantly functional view of their technology. As such, technology has not yet worked its way into the fabric of the workplace in the way that it has done elsewhere in the world. Only 53% indicated a need for technology in order to work effectively. 30% feel it is important to them that their employer gives them a choice of device, and only 45% think it's important that their organization uses the latest technology. These figures tend to be noticeably higher for men than for women, but as a whole, and consistently across sectors, the Australian worker is not that excited by technology. In fact, a large number see it as a security risk and a cause of frustration and stress.

Perhaps most significantly, this coolness towards the internet and associated technologies is going to change. There is a striking division, across a wide array of indicators, between older and younger workers. The under 35s see technology as a way to improve productivity, and they care much more than their elder colleagues do about how well their employers perform on IT issues. Australian employers should take note - the rising generation in their workplaces is going to demand much, much more when it comes to technology.

**75%** of Australians are motivated by their company's values and **70%** expect this to describe their situation in 10 years



Only **53%** of Australian workers feel they need technology to work effectively



## More than 40%

of Australian workers feel their company monitors how they spend their time during the day Magnitude of threats perceived by Australian workers

work life encroaches on private life
Working remotely erodes team spirit

employer monitors daily role

erosion of team spirit

IT resources slowing productivity

## Trend #1: Crowdsourcing and Crowdsource service





#### **Hypothesis**

The workforce of the future, for many industries, could be thousands of people working in different places. Is cloud computing and other ICT applications going to make it easier to distribute more tasks and services and to invite input from a community through crowdsourcing?

## Top insights

Comparatively speaking Australian workers consider themselves less reliant on technology, compared to other countries around the world. Only 53% claim they need technology in order to work effectively, with similar numbers agreeing that technology and the Internet are important aids in problem solving (54%), and that technology helps them work more productively (57%). However – these still represent a majority of the

Australian workforce.

There are signs this could be set to change. Younger Australian workers are considerably more engaged in the technological revolution than their older colleagues. 70% of 25-34 year olds responded that they need technology in order to work effectively and 70% of under 25s believe technology is an important aid to problem solving.

Our survey also revealed some interesting differences between verticals. 70% of those in retail recognize technology's role in improving productivity, rising to 86% in central and local government.

Furthermore, our Australian respondents were quite sharply divided along gender lines. 53% of Australian men believe that technology is important in helping individual employees 'to make a bigger contribution to their organizations', but only 39% of their female colleagues agree. Looking to the future, 84% of respondents believe that the Internet and technology will 'create opportunities for organizations to do business in different ways.'

#### **Implications**

Still early days for this trend in Australia, where awareness of the potential for IT and technology to help realize the benefits of crowdsourcing – bringing together resources and people in new and productive ways – is growing, but still has some way to go before it becomes universally established. There are important pockets of engagement: those aged under 34, those working in government, and to some extent males are leading

the way. The imperative for employers and a potential opportunity for the IT industry is to fast-track awareness across groups in the working population where the benefits of this trend are less apparent.

# Trend #2: Productivity measured in outputs, not hours

#### **Hypothesis**

Standardized measures of productivity based on numbers of hours inputted would become less relevant in a knowledge-based economy. What are going to be the newer, softer metrics to assess productivity?

#### Top insights

The overwhelming majority (78%) of Australian workers do not want their productivity to be measured by the time they spend in the office. Although interestingly this fell to 68% amongst the youngest workers, perhaps an indication of a more task-driven role for those under 25 and at the beginnings of their careers.

The preference for measuring productivity by quality of outputs is most evident among government employees, with three-quarters of whom said that is how they like to be assessed.

However, 76% of Australian workers already believe that they are currently assessed mainly on quality. Only four in ten highlight concerns that the time spent at work remains a major influence, with most seeing no sign of this reducing in the future. There is a real appetite for flexible working in Australia. 72% believe that flexible hours allow them to work more productively, and this rises to 80% among the 25-34 age group.

Yet the same isn't true of remote working. Only 30% of Australian workers believe that working remotely results in productivity gains. Although men (50%), private sector workers (47%) and those in larger organizations (53%) are more likely to appreciate the positive impact that remote working has on productivity.

Unlike many of their European counterparts, Australian workers are generally able to conform to traditional working hours. 61% of them claim to complete all their work between 9 a.m. and 5 p.m. This figure is higher among women (67%), and interestingly within the private sector (63%). Unfortunately, 59% of Australian workers aged under 25 find it difficult to switch off after work – well above the 43% result for Australian employees of all ages.

## **Implications**

The outputs-based model is already established in Australia. Flexible hours are also common, although remote working is less so. Australia's geography of a fairly small population spread over an enormous land mass, adds weight to the case for remote working, but employee perception still lags. Employers must also take note of younger workers - although often highly engaged, there are concerns over their ability to switch off at the

end of the day and the potential for problems this may cause long-term. Is there an opportunity for the IT industry to promote how technology could help improve work-life balance rather than aggravate it?

## Trend #3: Changes in the adoption of devices





Hypothesis

The number and types of devices are proliferating and changing. Choice of device would become more about the situation, location and occasion. Are employers and the current systems and processes going to allow for increased end-user utility and choice?

Top insights

Compared to many other countries, workers in Australia have a more pragmatic and less aspirational attitude towards their technological devices. Only 30% overtly claim that it's important their employer gives them a choice of device.

This is mirrored by the number of workers who already have that choice, just one third across all verticals. It is worth noting, however, that the figure is somewhat higher among men (43%) and that this rises to nearly half (49%) of Australian workers who expect to have this choice in the future.

The Australian workforce appears well attuned to the issue of data security. While 60% of them are allowed to use their PCs for both work and personal reasons, 40% are concerned that using personal devices for work will make it more difficult to protect their organization's data and IP rights. This attitude is even more prevalent among those working for smaller organizations, 45% of whom share these concerns.

Interoperability is a big issue for the Australian respondents. While in some countries the emphasis is on combining functions within a single device, in Australia it's more important to be able to share data between devices and operate within cloud-based ecosystems. 45% of Australians, rising to 56% of Power Users\*, believe it's critical that in future their devices are able to share data in this way, and critically 74% believe it will be universal in the future.

**Implications** 

While in many other countries employees are highly keen to have a choice of work devices, Australian employers place less focus in this area. Instead their emphasis, and by extension that of the IT industry, should be on improving flexibility and promoting the ability to work across multiple devices without concern about breaching corporate IT policy.

## Trend #4: Intergenerational kiss and punch

**Hypothesis** 

There will be more intergenerational knowledge transfer between younger 'digital natives' and the older generation. However, is there an increased risk of conflict and tension between workers of different ages, backgrounds, knowledge and skills?

Top insights

Broadly speaking, Australian workers under 35 have a quite different view of technology and its effect on the world of work than the over 35s. 70% believe technology is an important aid to problem solving and productivity in the workplace and 66% believe they need technology to work effectively compared to just 53% of the overall Australian workforce.

52% of them believe their time at work is monitored, compared to just 32% of over 45s. 55% of under 25s feel under pressure to work longer hours compared to 40% of all Australian workers. While 59% of those aged 25-34 find it difficult to switch off after work compared to 43% of all Australian employees.

Interestingly, just over half of under 35s (53%) are also worried about remote working and its impact on team spirit compared to only 36% among all Australian employees. Half of under 35s are also concerned by the data security and IP protection issues that may be presented by the personal use of work PCs (versus only a third of all workers).

**Implications** 

There are significant differences across a wide range of indicators by age and generation in Australia. Unlike in some other developed economies, there is less difference between under 25s and 25-34 year olds, although the older employees are generally more tech savvy and attuned to implications it may have on working practices.

Rather than tensions emerging between young and old employees as originally hypothesized, this latest research indicates that younger people are more likely to have higher IT expectations of their employers. The need to engage with this group is paramount, and Australian employers will need to decide whether an issue should be addressed for younger employees or the workforce as a whole, and take note of the outlook prevalent among the youngest workers that will offer a glimpse into the attitudes of tomorrow's workplace.

#### Trend #5: Values versus rules





#### Hypothesis

It would become easier to tell what employees are doing, but harder to tell them what to do. In this scenario, would employers use pervasive technology to oversee their workforces at any given time? And if so, would distrust accelerate?

#### Top insights

Feeling trusted is very important for Australian workers. Seven in every ten declare it to be important, rising to eight in every ten among those who also believe that technology plays a big role in the workplace.

Reassuringly, the overwhelming majority (91%) of Australians do consider themselves to be trusted with company resources, rising higher still among women (94%) and SMBs (93%). However, this figure drops to 86% who expect this trust to still exist in the future, which while still a high proportion in absolute terms, indicates that there are segments of the workforce who expect an erosion of trust to ensue.

Perhaps this could be attributed to a relatively high number (42%) of Australian employees who believe that they are being monitored, with 33% believing that their email communication is specifically monitored. This practice is far more prevalent in larger businesses, 47% of which appear to monitor employee email.

Three-quarters of Australians feel motivated towards their organizations' values. Interestingly, those working in larger businesses are generally more motivated (81%), as are those working in retail (88%). Even among those workers who say they are unhappy with their current roles, an impressive 68% remain motivated to the values of the overall organization.

There is also widespread awareness of, and adherence to, IT privacy policies. 83% of Australian employees across all verticals state they are fully aware of, and adhere to, their company's policies, with 85% adding that they also recognize the importance of such policies.



In general, Australian workers are responsible with data, trusted by their employers, and in agreement with their organizations' values. This is contrasted by the fact that a relatively large number of workers in Australia are being monitored, and trust levels are projected to decrease in the years ahead. A clear dialogue between organizations and their workers is essential to ensure trust is maintained, and the IT industry is advised to be mindful when recommending monitoring solutions to corporate customers.

# Trend #6: Many hats of the IT manager

#### **Hypothesis**

As employee aspirations change to a greater onus on happiness, autonomy and choice, workplace IT would be one way of recruiting and retaining staff. Would the job of the IT manager increasingly resemble that of other functions, like the HR manager?

#### Top insights

A relatively low proportion of Australians (45%) think it's important that their organization uses the latest technology. But, this figure is higher among men (54%) and among those working in larger organizations (51%).

For Australian employees, it's also relevant that organizations provide good IT support (57%) and good hardware and software (57%), although this is comparatively lower than in many other countries, further reflecting Australians' pragmatic outlook on technology.

Similarly, Australian workers tend to be more pragmatic and less excited than workers in many other countries by the devices their employers offer them. Only 36% see PCs and other technologies that come with a role as a tangible perk of the job, although notably there's a clear gender divide with 44% of men in agreement compared to 29% of women. Although, it is also without doubt a greater issue for younger workers - 48% of under 25s and 51% of 25-34s see it as a perk versus just 20% of the over 55s.

Perhaps worryingly, a high proportion of Australian respondents said that they see technology as a cause of frustration and stress. 52% agreed that 'IT problems are a regular frustration,' rising to 61% among those under 35. However, there is still room for optimism, and only 45% expect this to remain a concern in the future.

#### **Implications**

Technology is a means to an end for Australian workers, and compared to many other countries this trend is somewhat less critical. Across all Australian employers, it is clear that motivations will vary considerably between individuals and that employees need to understand the subtleties that exist between key groups and respond accordingly. As the consumerization of IT phenomenon grows, the IT industry could potentially play a role in fast-tracking awareness of this trend and highlighting the role that technology can play in improving the quality of employees' working lives.

## Trend #7: Employee-led innovation





**Hypothesis** 

The business software of the future will be adopted and designed by employees rather than management or the IT department. Are we going to see more networked, de-centralized organizations to facilitate this shift in corporate hierarchy?

Top insights

54% of Australians, rising to 65% of those under 25, consider it important that they can freely access the Internet while working. Yet only 35% feel it is important to have freedom of choice on downloads, and only 37% want involvement in IT decisions, reflecting a general sense that responsibility for such aspects lies with their IT department.

Encouragingly most Australian employers meet these requirements. 77% of Australian employees say they already can freely access the Internet when needed. Just over half (51%) also state that they have freedom to download the software they need, although this figure is notably much lower within large organizations (35%) where stricter and more centralized IT controls tend to exist.

A higher number of Australian workers (49%) report that they are involved in IT decisions, and encouragingly this figure rises to 60% who expect to have an opportunity to input in the future.

However, it's noteworthy that Australian workers are less interested in getting involved in IT decisions than they are in having freedom of choice within the workplace. 64% of them state that 'as long as they get their work done, they think it's important their employer gives them freedom to choose how to work.' This rises further to seven in every ten employees who are under 35 years of age.

Over half (53%) of workers in Australia also agree that 'you need to keep up with the latest technology to be effective at work' and this is increased among younger generations, strikingly some 80% of 25-34 year olds believe this is key.

**Implications** 

It is still too early to predict whether this trend will take hold across the workplace. Australian employers already cater well when it comes to facilitating Internet and download freedom, and on the whole Australian employees welcome a centralized approach to IT infrastructure where ultimate accountability doesn't lie with them. However, there is an ongoing challenge to involve Australian employees in IT decision-making and create opportunities for feedback and input, while maintaining the degree of autonomy that many Australian employees have come to expect.



#### **Executive Summary**

The findings from this latest phase of the Evolving Workforce research reflect rapid transformations underway in China. This research shows a workforce that embraces technology and where there is already a great deal of freedom and trust. Four out of every five workers are now measured in terms of outputs rather than hours worked, and are free to download software. Three-quarters can freely access the Internet at work. This is most evident in civil service roles, where 86% claim to have download freedom and 79% freely able to access the internet.

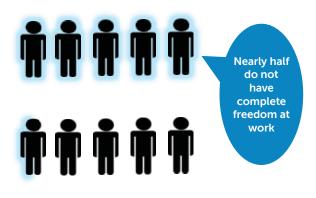
What is particularly noteworthy in China is the lack of a generation gap – in fact, older workers are particularly embracing the possibilities that the Internet and technology bring to the workplace.

Throughout this research, there was an unmistakable note of positive attitudes and optimism for the future. Chinese workers believe they are generating an economic miracle, that technology is at the heart of it, and they aspire to be part of it, to enjoy its fruits. Perhaps the greatest challenge for Chinese employers in the years ahead will be to meet these huge expectations, to continue to keep pace with the pace of IT development, and to continue to keep their employees positive and engaged.

**42%** of Chinese workers claim to currently use the latest Technology in their workplace... but a staggering **80%** expect to within the next 10 years



Only **56%** feel they are given full freedom to choose how to work



## Almost 7 in 10

Chinese workers feel threatened by constant pressure to keep up with the latest workplace technology Magnitude of threats perceived by Chinese workers

Poor Work / Life Balance

Maintaining Morale of Remote Workers

Pressure to keep up with the latest technology

Experiencing IT Frustrations

## Trend #1: Crowdsourcing and Crowdsource service





#### **Hypothesis**

The workforce of the future, for many industries, could be thousands of people working in different places. Is cloud computing and other ICT applications going to make it easier to distribute more tasks and services and to invite input from a community through crowdsourcing?

#### Top insights

In China, technology and the Internet are seen as central to growth, both for the overall economy and for the individual worker.

Almost two-thirds of respondents agree that technology can play an important role in problem solving and 68% acknowledge the role it can play in improving productivity. It is also seen as a key component in innovation. 85% of those in manufacturing believe technology is 'creating opportunities for organizations to do business in different ways' and this rises to 87% in state education and a remarkable 93% within the civil service.

They do not see technology merely as an aid to an easier life. While 91% agree that in 10 years time 'technological innovation will allow [workers] to focus on things [they] prefer to do,' 85% also believe that technology helps individual employees 'make a bigger contribution to their organizations.' This rises further to 88% among those who work for larger organizations.

While the overall atmosphere is positive about the Internet and technology, our Chinese respondents did raise a few concerns. Most notably, over half of them believe that remote working 'is eroding team spirit' and similar numbers believe this will still be the case ten years from now. 29% of Chinese also fear that their jobs will be outsourced, perhaps reflecting the rising cost of labor in China.

**Implications** 

There is universal enthusiasm for technology in China and the possibilities that technology affords workers. As such, the potential for both crowdsourcing and crowdsource service may be rapidly realized, if employers and the IT industry are able to continue delivering the time, equipment and leeway for their staff to explore the possibilities.

## Trend #2: Productivity measured in outputs, not hours

#### **Hypothesis**

Standardized measures of productivity based on numbers of hours inputted would become less relevant in a knowledge-based economy. What are going to be the newer, softer metrics to assess productivity?

### Top insights

As is the case in many parts of the world, a substantial majority of Chinese employees (66%) want to be measured by the quality of their work, not the amount of time spent in the workplace. 84% of men and 78% of women already believe that they are judged not on the number of hours they work, but on the outputs they generate.

67% of respondents said that flexible hours allow them to work more productively, and this rises even higher to 75% among those in the civil service and 77% among those working in professions related to engineering.

The downsides of this trend are also clearly apparent. Four out of ten Chinese works find it difficult to switch off and relax after work, rising to as many as 60% in private education.

The Chinese workforce is gearing up for the arrival of remote working. 53% already work remotely and 77% expect to do so in the future, although there are verticals where remote working is still an exception: for example, in public healthcare, only 33% have the option to working remotely.

## **Implications**

Urban China is rapidly becoming a knowledge-based economy, and this is reflected in the growing tendency to measure workers by outputs rather than hours. This trend will continue, although the downsides in terms of heavier workloads and stress are already clearly apparent. Employers are advised to look to adapt more flexible working schedules and challenge the still largely traditional notions of productivity within the average working week, while the IT industry can help by focusing on the benefits of technology in promoting work-life balance.

## Trend #3: Changes in the adoption of devices





#### Hypothesis

The number and types of devices are proliferating and changing. Choice of device would become more about the situation, location and occasion. Are employers and the current systems and processes going to allow for increased end-user utility and choice?

## Top insights

Chinese workers are loud and clear on this trend- their technology devices matter to them. Although a large number (59%) say they are already able to choose their own technology devices for work, 65% want more control, saying they would enjoy work more if they had 'more choice in the technologies they use.' This is even more pronounced in larger organizations where 73% want to choose their own devices

The good news is that Chinese employees are confident their employers will heed these demands - an astounding 80% believe that ten years from now they will be able to choose their own devices.

While in Western markets, SMB workers tend to have greater choice than those in large enterprises, in China there is comparatively less difference (61% versus 56%). There is a marked difference between segments: 78% of Professional Nomads\* 78% can choose, compared to only 40% of Task Workers\*.

Interoperability is also important, although currently not as important as device centricity to the Chinese. While half want devices that share data, nearly two-thirds want 'a single device to meet all work needs.' Critically though, nearly nine in ten expect to achieve both interoperability and device centricity in the next decade. It's also noteworthy that 67% of Chinese workers want to use devices for both personal and work purposes.

## Implications

With the proliferation of choice and options in both the consumer and corporate IT markets, changes in adoption of devices are clearly evident. Chinese employers will need to work hard to fully satisfy the enthusiasm for technology and to meet expectations of greater freedom of device choice. There is a clear and present opportunity for IT to support in this critical requirement.

## Trend #4: Intergenerational kiss and punch

#### **Hypothesis**

There will be more intergenerational knowledge transfer between younger 'digital natives' and the older generation. However, is there an increased risk of conflict and tension between workers of different ages, backgrounds, knowledge and skills?

### Top insights

While in many countries around the world, it is younger workers who are hungry for new technologies and the opportunities presented by the Internet, in China aspiration and enthusiasm peaks among older workers.

76% of 45-54 year olds see a PC or other device provided by an employer as a perk, compared to 62% of under 25s.

Equally, 67% of the over 55s would be attracted to a new job at an organization that offered a good technology infrastructure, while only 51% of under 25s would be swayed by this consideration.

In many markets, remote working is more popular among younger than older people, but in China only 47% of under 25s think it has a positive impact on productivity, compared to 53% of 25-34 year olds.

Perhaps due to their position at the bottom of the career ladder, younger Chinese workers are more likely to be monitored. 36% of the under 25s believe that they are being monitored, compared to 23% of 35-44 year olds. 28% of 18-24s believe that the emails they send are also monitored, compared to just 14% of 45-54 year olds.

Older Chinese workers are not only driven by unfailing positivism for technology - 82% of 35- 44 year olds also feel pressure to keep up to date with the latest technology in order to be considered effective at work.

#### **Implications**

China is perhaps unique among countries in that there is not only a lack of generation gap, but if anything it is older workers who exhibit the greater optimism toward the power of technology in transforming work. In fact, this research highlights the need for IT departments to engage with younger people, who perhaps take technology for granted more than their older colleagues, and who are more likely to be monitored. As the younger generation matures in the years to come it is important for optimism to be maintained.

#### Trend #5: Values versus rules





#### **Hypothesis**

It would become easier to tell what employees are doing, but harder to tell them what to do. In this scenario, would employers use pervasive technology to oversee their workforces at any given time? And if so, would distrust accelerate?

#### Top insights

Two thirds of Chinese employees state trust between employer and employee to be important (65%), and almost nine out of ten believe that this relationship of trust exists for them.

Just over a quarter of employees in China (27%) say they are closely monitored while at work, and just a fifth believes their emails are closely monitored. Monitoring is particularly infrequent among those working in local and central government (9%).

It is worth noting something of a gender divide on this issue. 33% of women say they are closely monitored by their employer, compared to just 22% of men, and, while less than 40% of women feel their employer offers them the flexibility to help decide the hours they work, 50% of all men do.

76% expect their employer to give them flexible working schedules within a decade, compared to only 43% who feel this is currently the case.

Retailers, manufacturers and finance companies have succeeded in motivating 70% of their employees with their values; local and national government scores lower at 59%. Chinese employees are also overwhelmingly positive about the future. An astounding 81% expect that ten years from now they will feel motivated compared to 66% currently.

#### **Implications**

The importance of values well recognized in China, and almost all workers feel that their employers trust them, while a large majority is motivated by their employers' values. Workplace monitoring is, perhaps surprisingly, still rare in China. Women in the workplace lag behind men when it comes to this trend; employers are advised to address this inequality, and to not take trust for granted, particularly if there are plans to roll out monitoring technologies in the future.

## Trend #6: Many hats of the IT manager

**Hypothesis** 

As employee aspirations change to a greater onus on happiness, autonomy and choice, workplace IT would be one way of recruiting and retaining staff. Would the job of the IT manager increasingly resemble that of other functions, like the HR manager?

Top insights

More than half of Chinese workers (54%) are 'attracted to work for an organization that offers good technology' and this rises to 67% among those aged over 55.

A remarkable 79% would 'enjoy work more if able to choose their own technologies,' rising to 88% among civil servants and 82% among those working in education.

Despite this huge appetite for technology, only 42% of employees across all verticals claim their organization currently uses the latest technology. Falling further among civil servants (38%) and education employees (31%).

The picture is slightly more positive when it comes to IT support, where 63% rated their employers positively, and only 39% of Chinese employees experience regular IT problems. The pervading sense of optimism is clearly apparent in this trend, with 82% of workers in China expecting IT support at their organization to improve.

**Implications** 

Our hypothesis is clearly validated through the findings of this latest research: IT is central to workers' expectations and the Chinese workforce expects a great deal of their employers when it comes to technology. Ultimately, there's a general sense that technology is empowering rather than constraining the Chinese worker, and organizations that promote their IT provision will undoubtedly be seen as desirable places to work.

## Trend #7: Employee-led innovation





**Hypothesis** 

The business software of the future will be adopted and designed by employees rather than management or the IT department. Are we going to see more networked, de-centralized organizations to facilitate this shift in corporate hierarchy?

Top insights

79% of workers in China reported that they are free to download software and 73% said they can freely access the Internet. This is most evident in civil service roles where 86% are free to download and 79% can freely access the Internet.

However, a smaller proportion in China (56%) feel that their 'employers give them freedom to choose how to work.' This is comparatively lower than in other countries, and is particularly noticeable in larger organizations (49%) as well as in public sector verticals like government and healthcare. The finance sector stands out as one where workers are given more freedom to control their own working lives (64%).

56% of Chinese employees feel that 'their employer listens to their needs when implementing IT decisions,' although the numbers are much higher for the more influential Professional Nomads\* (79%) and Power Users\* (66%).

Chinese workers have at least one eye on the future, 81% expecting to enjoy greater freedom at work and 69% agree that '[they] need to keep up with the latest technology to be effective at work.'

**Implications** 

While there is widespread freedom of technology in the Chinese workplace, there appears to be in many organizations some constraints to true freedom of working. Clearly, eliminating hierarchies and encouraging innovative thinking is a significant challenge in China; the good news is that in terms of technology provision the building blocks are in place to help drive this cultural shift. In fact, this research suggests that advanced technology may be the platform to help catapult China's advancement in terms of innovative, knowledge-based working practices.



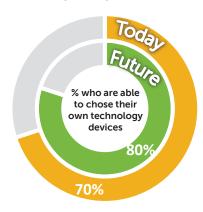
#### **Executive Summary**

Indian workers give a lot to their companies. They are hard working – while 60% of them say they have too much work to complete in one day, only 48% of Indians actually want to be able to get all of their work done in a traditional 9-5 schedule. They empathize with the values of their employers - 85% feel in tune with their company's values. And they take a commendably responsible approach to data security – 60% realize that using personal devices for work makes it difficult to protect an organization's data and intellectual property.

Yet, as the country develops, and a more confident middle class establishes itself, so these workers are starting to demand a lot in return. They want freedom - 71% of employees want to be trusted to use company resources responsibly, and Indian employers should be concerned that around half their workers suspect them of monitoring their emails and of tracking how they use their time during the day. They want technology - 80% feel technology is an important element in being effective at work, 85% of the Indian workforce is attracted to work for an organization that offers good technology, and 78% feel they could be more productive if they had better IT resources.

So, while it's clear that Indian employers have much to feel optimistic and confident about, they also have work to do, partly in making their workplaces freer, but also in providing the technology that will release the potential of the Indian worker.

70% of Indian workers are able to choose their own work technology devices and 80% expect this to be the reality in 10 years





60% of Indian workers believe they have too much work to complete

Magnitude of threats perceived by Indian workers

Work life encroaches on private life
There is too much work to complete
Under pressure to work longer hours

Difficult switching off after work

## Trend #1: Crowdsourcing and Crowdsource service





**Hypothesis** 

The workforce of the future, for many industries, could be thousands of people working in different places. Is cloud computing and other ICT applications going to make it easier to distribute more tasks and services and to invite input from a community through crowdsourcing?

Top insights

The Indian workforce is very clear about the important role that the Internet and technology plays in working life. 89% said that 'internet and other technological advances allow [them] to get things done more productively.' 87% then also go on to say that it 'provides individual employees the opportunity to make a bigger contribution to their organization.'

In the same way, these developments also facilitate knowledge sharing - 88% agree that the 'Internet and other technological developments allow [them] to reach out to others much more easily to solve a problem.' This is particularly the case among older workers - 93% of 45–64 year olds agree, while only 84% of 18–24 year olds do, perhaps reflecting the fact that they have never known a workplace without the Internet.

A similar number appreciate the role that technology plays in innovation - 87% agree it is 'creating opportunities for organizations to do business in different ways.' This score was consistent across all sectors.

As a whole, Indians appear to appreciate the contribution that technology is making to their work and to their lives more generally - 85% agree that 'technological innovation allows you to focus your work towards the things that you prefer to do.'

Yet, Indian workers do have concerns about technology. Ironically for a country which has benefited so much from outsourcing, four in ten Indians see outsourcing as a threat to their own roles, and the number rises even higher among the younger generation. This may reflect the fact that many Indian companies are moving up the value chain and much low-cost work is now outsourced elsewhere in the world.

**Implications** 

With a tremendous appetite and optimism toward the transformative role of technology in the workplace, the conditions are highly favorable for both crowdsourcing and crowdsource service to take hold in India. Indian employers and IT departments are encouraged to nurture and encourage positive sentiments and empower

# Trend #2: Productivity measured in outputs, not hours

**Hypothesis** 

Standardized measures of productivity based on numbers of hours inputted would become less relevant in a knowledge-based economy. What are going to be the newer, softer metrics to assess productivity?

Top insights

The Indian respondents appear to be under more pressure at work than those in many other countries. 60% of employees feel that they have too much work to complete in one day, something which is particularly true in private sector healthcare (72%) and most prevalent among Power Users\* (63%).

Yet this appears to bother few of them - only 48% of Indians want to be able to get all of their work done in a traditional 9-5 schedule.

Perhaps this optimism can be ascribed to the growing prevalence of flexible working. 67% of the Indian workforce wants to work flexible hours as they believe it makes them more productive. Those in large enterprises are especially keen (74%). Encouragingly, 82% of Indian workers report that they already enjoy flexible working hours, and 83% still expect to do so in a decade.

70% of workers want to be measured by outputs rather than hours worked and this is already the case for 81% of them. This is consistent across public and private sectors as well as between SMBs and large organizations. It is only the youngest workers, those aged 18-34, who still tend to be measured by inputs - six out ten said their employers look at hours worked rather than quality of work. The tendency is most prevalent within retail (63%) and telecommunications (70%).

Finally, 46% of Indians want to work remotely, an impressive 59% already can and 66% expect to be able to do so in the future.

**Implications** 

The outputs-based model is already established in India, and Indian workers appear to have a high capacity to absorb pressure. Employers might wish to consider whether in the long term this is a good idea. They could think about how flexible working and remote working – both of which are already popular among Indian workers – to help to reduce strain and improve productivity. There is a clear role for IT industry to help facilitate this.

## Trend #3: Changes in the adoption of devices





**Hypothesis** 

The number and types of devices are proliferating and changing. Choice of device would become more about the situation, location and occasion. Are employers and the current systems and processes going to allow for increased end-user utility and choice?

Top insights

Indian workers by and large believe they have control over the technology they use in the workplace. 70% of them report that they are already able to choose their own technology and devices for work. 80% expect this to be the case in the future. This picture is consistent across sectors, company size and industry.

The workforce are somewhat split on the issue of interoperability versus device centricity. 59% want devices that share data and 57% believe it is important to have different technological devices available for work purposes, but 50% still want 'a single device to meet all work needs.' This perhaps reflects a realization that the number of devices is both converging and proliferating at the same time.

Three in four Indian workers use devices for both personal and work purposes, and an encouragingly high proportion (60%) realize that using personal devices for work makes it difficult to protect an organization's data and intellectual property.

Indian employees want control over their devices, and their employers have so far succeeded in meeting this need. They must continue to do so, remaining on top of the debate over interoperability versus device centricity.

**Implications** 

Whichever way the market and demand goes, Indian employers need to anticipate it and deliver the most suitable technology to their staff. They should be encouraged by the remarkably responsible attitude employees take to data security threats, and so should use that high awareness to put in place policies and procedures that will protect company data and intellectual property in the years to come.

## Trend #4: Intergenerational kiss and punch

**Hypothesis** 

There will be more intergenerational knowledge transfer between younger 'digital natives' and the older generation. However, is there an increased risk of conflict and tension between workers of different ages, backgrounds, knowledge and skills?

Top insights

When it comes to matters of technology, there is a high degree of consensus among the generations in India. While 81% of those aged 55-64 believe it is important to keep up with the latest technology to be effective at work, 80% of those aged 18-24 also agree.

The generations also agree that employers should listen to their needs when making IT decisions (59% of 18-34s and 57% of 45-64s agree). 57% of those aged 18-34 want to be able to choose the type of technology they get to use in the workplace, as do 59% of those aged 56-64. 66% of those aged 55-64 think it is important that their employers use the latest technology, and 68% of those aged 18-24 think the same.

The only minor difference is that older Indian workers tend to have a greater appreciation of the benefits technology brings to the workplace. Of those aged 55-64, 94% feel they can now reach out to others more easily to solve a problem – this is slightly higher than the 84% of 18-24 year-olds who say this. While 85% of those aged 18-24 feel they now do business in different ways, an overwhelming 94% of the older age group say this, and 97% of them add that these new methods are more productive.

**Implications** 

In many countries there is a schism between older and younger workers, but in India there is far greater inter-generational harmony. Employers might like to consider why this is. Is it because older workers have an unusually forward-thinking attitude towards technology? Is it because younger workers are more fulfilled and recognized than they are elsewhere? Or is it because those younger workers tend to unquestioningly adopt the attitudes of their seniors?

#### Trend #5: Values versus rules





#### Hypothesis

It would become easier to tell what employees are doing, but harder to tell them what to do. In this scenario, would employers use pervasive technology to oversee their workforces at any given time? And if so, would distrust accelerate?

#### Top insights

Trust is an important factor in the Indian workplace - 71% of employees want to be trusted to use company resources responsibly. It is encouraging that 89% of employees feel they already have this trust and is expected to be equally important in coming years. It is worth noting that of those who are extremely happy in their jobs today, 92% feel trusted to use company resources responsibly.

85% of our respondents told us they feel in tune with their company's values, and 85% said they expect that to remain the same in ten years. The workers who are most engaged with their company's values can be found in the private healthcare sector (94%), telecommunications (91%) and financial services (88%).

When it comes to flexible working, 60% want it, 65% have it, and 72% expect they will have it in a decade. It is slightly more common in the private sector (66%) than the public sector (59%) and, as we might expect, is considerably more common among Professional Nomads\* (76%) than Task Workers\* (63%) or Knowledge Workers\* (54%).

Half of all Indians believe that they have their emails monitored by their employers and this is not expected to decrease in the future (49%). This is particularly prevalent in the financial sector (55%) and in retail (61%). In addition, 57% of employees believe their employer monitors how they spend their time during the day and 53% expect to still be monitored in ten years.

## **Implications**

If Indian employers want their staff to feel happy in their jobs, then they need to trust them to use company resources responsibly. That will involve proper recruitment and careful management, as well as effective communication with employees. Fortunately, there appears to be little correlation between monitoring and levels of trust, with comparatively higher levels of monitoring not observed to lead to low trust. Indian employers would also be well advised to take note of the high expectations of their workers and to ensure that they continue to sit on the right side of the values versus rules equation.

# Trend #6: Many hats of the IT manager

**Hypothesis** 

As employee aspirations change to a greater onus on happiness, autonomy and choice, workplace IT would be one way of recruiting and retaining staff. Would the job of the IT manager increasingly resemble that of other functions, like the HR manager?

Top insights

85% of the Indian workforce is attracted to work for an organization that offers good technology. This is even higher among workers from organizations with more than 5,000 employees. However, some companies fall short of this goal - today, 74% feel their organizations use the latest technology. This number is lower in the manufacturing industry (65%).

The provision of good hardware and software is important to employees. Reassuringly, 80% of them believe this need is being met, and we see this consistently across sector and company size.

Regardless, 81% go on to say that they would enjoy work more if they had more of a choice in the technologies used. We see this to a larger degree within the engineering, architecture and government industries.

Encouragingly, eight in ten Indian workers believe that their employer provides good IT support. It would appear as though they need it - half add that IT problems are a frustration in their daily working life. This could potentially have a negative impact on productivity - 78% feel they could be more productive if they had better IT resources.

#### **Implications**

The highly aspirational value of technology in Indians' personal lives has comprehensively translated into the working environment, underscoring the connection between IT provision and employee morale.

Despite this, IT departments are getting decidedly mixed reviews. In a country where employee churn had reached chronic levels, companies that invest in their IT infrastructure and which are seen to be employee-friendly will enjoy a competitive advantage in terms of being perceived as an attractive place to work.

## Trend #7: Employee-led innovation





**Hypothesis** 

The business software of the future will be adopted and designed by employees rather than management or the IT department. Are we going to see more networked, de-centralized organizations to facilitate this shift in corporate hierarchy?

Top insights

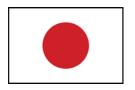
Three in four Indian workers feel that 'their employer listens to their needs when making IT decisions.' This is even more evident in SMBs (76%) than in large enterprises (69%). Perhaps in SMBs, there are fewer policies and procedures to impede clear communication between employers and employees.

A healthy 84% of our respondents told us they can access sites on the Internet when working and 74% said they have the freedom to download software if they believe it will help them do their work. Again, this sort of freedom is more widespread among smaller organizations.

Three in four feel that their 'employers give them freedom to choose how to work.' This is similar to what we found in other countries. In India, it is particularly evident in the private healthcare sector (94%).

**Implications** 

Freedom of technology matters to the Indian worker and on the whole Indian employers are able to provide this. Whether employee-led innovation is able to develop in India is likely not entirely a matter of technology, but of broader management and cultural considerations. SMBs and certain verticals such as private healthcare are leading the way and setting an example for others to follow.



# Japan Insights

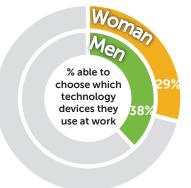
#### **Executive Summary**

Despite its crash in the 1990s, and its subsequent stagnation, Japan has managed to maintain high living standards on the back of its post-war economic miracle. In that 30 year period, the country has become synonymous with forward-thinking technological innovation, although more so in the consumer environment than in the world of corporate IT.

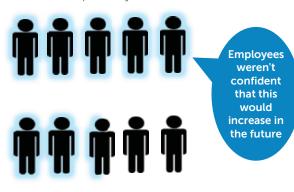
Ironically for a country whose economic success owes so much to technology, and where technology in the consumer environment is so pervasive and advanced, Japanese workers are still somewhat cautious about the possibilities afforded by technology in the workplace. However, it is fair to say that the mood is one of cautious optimism, and this research uncovers latent opportunities and benefits to workers that could be addressed via technology. For example, while this research does not contradict the popular image of the overworked Japanese employee - 44% say they have too much work to do – there is burgeoning awareness of how technology can boost productivity and engender more flexible and open ways of working.

Similarly, while the traditional image of the disillusioned and disengaged Japanese 'salary man' is also apparent in this research, with only 43% of those aged 25-44 saying that they are motivated by company values, technology offers a fast-track to more innovative working practices for employers which choose to embrace it.

Only **33%** of workers in Japan are able to choose which technology devices they use at work



Three-quarters of Japanese employees feel trusted to use company resources responsibly



44% of Japanese workers feel there is too much work to complete in one day

Magnitude of threats perceived by Japanese workers

Difficult switching off after work

Under pressure to work longer hours

IT frustrations

Work life encroaches on private life

There is too much work to complete

## Trend #1: Crowdsourcing and Crowdsource service





#### **Hypothesis**

The workforce of the future, for many industries, could be thousands of people working in different places. Is cloud computing and other ICT applications going to make it easier to distribute more tasks and services and to invite input from a community through crowdsourcing?

## Top insights

There is cautious optimism in the Japanese workforce about the benefits of technology in the workplace. A majority (59%) said that the Internet allows them to reach out more easily to solve problems, and a similar number (58%) added that technological innovation allows them to focus their work toward the things they prefer to do. This is expected to increase, with 66% expecting that technology will help them in the future to

focus their work toward the things they prefer to do.

A greater awareness of the potential underpinning of this trend exists among Japanese men – 63% of whom agree that the Internet allows them to reach out more easily to solve problems, compared with 56% of women.

Although the macro environment is conducive, the rising threat of outsourcing is on the radar of the Japanese worker. 22% already see it as a threat to their jobs (29% in Large Enterprises), and this rises to 31% who expect it to be a threat in the future.

**Implications** 

Although the conditions for crowdsourcing and crowdsource service are favorable, the question must be asked whether Japanese companies – not known for their innovative working practices – are willing to exploit the opportunity. Increasing concerns over job security must be addressed, while awareness of the benefits of this trend clearly articulated.

# Trend #2: Productivity measured in outputs, not hours

**Hypothesis** 

Standardized measures of productivity based on numbers of hours inputted would become less relevant in a knowledge-based economy. What are going to be the newer, softer metrics to assess productivity?

#### Top insights

Japanese employers seem to allow a fair degree of flexibility in the workplace with 54% of respondents saying they work flexible hours and 22% able to work remotely. What is more, this is predicted to increase - 59% expect to have flexible hours in the future and 32% to be able to work remotely.

Only around half of workers feel they are measured by the outputs they produce rather than the hours they put in, although at 59% this is a little higher for larger enterprises, and this is predicted to rise with 63% expecting it to be the case in the future.

Similarly, only around half of respondents told us their employers allow them to choose how they do their work. The private sector offers a little more latitude to staff with 59% of workers there saying they can decide how to do their own work.

37% of Japanese men and 28% of women feel pressured to work longer hours while 44% cannot complete their work in a typical day. This is especially the case in the public sector where 53% have difficulty completing their work, compared to 42% in the private sector. This issue is also more prevalent with workers at large enterprise (48%) versus SMB works (38%) and for men (50%) more than women (38%).

The impact of distributed workforces in eroding team spirit, while not a major concern today (14%), is expected to almost double in the future with 27% expressing a concern for the future.

**Implications** 

While this research does little to contradict the popular image of the overworked Japanese employee, it also reveals that the Japanese workplace is (perhaps surprisingly) flexible in terms of both flexible hours and remote working. Both are expected to increase in future, and with it the opportunity for the IT industry to highlight the contribution of technology in facilitating new and more productive ways of working.

## Trend #3: Changes in the adoption of devices





Hypothesis

The number and types of devices are proliferating and changing. Choice of device would become more about the situation, location and occasion. Are employers and the current systems and processes going to allow for increased end-user utility and choice?

Top insights

As yet, only a minority of Japanese workers can choose PCs and other devices that they use at work - only 38% of men and 29% of women enjoy this choice. Those in the private sector (36%) fare a little better than those in the public sector (25%), as do those at SMBs (39%) compared to those at large enterprises (29%).

45% of Japanese respondents said that in the future they will be able to choose their devices, indicating grounds for optimism.

While provision of employee choice is not widespread as yet, demand among the Japanese workforce is also low. Only around a quarter of workers (26%) would like to use a computer and other devices for both personal and work matters.

**Implications** 

There is inconclusive evidence that this trend is taking hold in the Japanese workplace. It is perhaps a situation where employees are not calling for choice and organizations are not providing it. There may be an opportunity for the IT industry to help accelerate development, by raising awareness of the consumerization of IT phenomenon and its benefits for both companies and staff.

## Trend #4: Intergenerational kiss and punch

**Hypothesis** 

There will be more intergenerational knowledge transfer between younger 'digital natives' and the older generation. However, is there an increased risk of conflict and tension between workers of different ages, backgrounds, knowledge and skills?

Top insights

Younger Japanese workers have a less comfortable relationship with work than do their older colleagues. Only 43% of those aged 25-44 are motivated by company values compared with 55% of 45-54 year olds and 63% of 55-64 year olds. Just 32% of 18-24s believe their employer listens to their IT needs, compared with 39% overall.

Worryingly, 18-24s are the least likely to agree that the Internet and technology helps them to solve problems at work – 47% among the younger workers compared with 59% overall.

It is interesting that, while these figures might suggest that as people get older in Japan they get more in tune with company values, 49% of 18-24 year olds said they are motivated by company values, suggesting that there may be an issue with a disaffected generation between 25 and 44 years of age.

Their other responses gave some clues as to what may be contributing to the disenchantment felt by younger workers. Only 29% of 25-34 year olds have flexibility in choosing the hours they work compared with 41% overall and 51% of 55-64 year olds. Equally, 46% of 18-24 year olds and 43% of 25-34 year olds say their productivity is measured by time spent in the office as opposed to the quality of their outputs, versus 33% among 35-54 year olds.

Yet younger workers in Japan are keen on technology and more aware of technology's benefits in the workplace. 32% of the 18-24 year olds said working remotely helps them get more work done compared to 22% overall. 62% of the 18-24 year olds agreed that those who are comfortable with the latest technology are at an advantage in the workplace compared to just 50% overall.

But technology is also a cause of stress for this group - 47% of 18-24 year olds report that IT problems are a frustration in daily working life compared to 31% overall.

**Implications** 

18-24 year olds in Japan stand out in a number of ways to their older colleagues. Perhaps due to the hierarchical nature of Japanese organizations, they are more constrained, and less likely to feel engaged with their work or their employer. On the other hand, they are more likely to embrace the benefits of technology in the workplace. It is unlikely that any tensions between age groups will surface in Japan, but employers would be well advised to pay attention to their younger staff that are more open to positive change and could

potentially represent the leading edge in helping Japanese industry to reap the benefits of IT consumerization.

#### Trend #5: Values versus rules





Hypothesis

It would become easier to tell what employees are doing, but harder to tell them what to do. In this scenario, would employers use pervasive technology to oversee their workforces at any given time? And if so, would distrust accelerate?

Top insights

Three-quarters of Japanese workers (74%) say that their employers trust them to use company resources responsibly. However, the proportion who expect to be trusted in the future is slightly lower at 71%.

Email monitoring is expected to rise, with 23% of respondents reporting that their employer monitors their email today and 34% expecting that employers will do so in the future. Email monitoring is much more prevalent at large companies (39%) than for those at SMBs (17%).

**Implications** 

While trust is widespread in the Japanese workplace, there are signs of pessimism as this is expected to decline in future alongside the rise of employee monitoring. Addressing this pessimism should be a priority for Japanese employers if they are to motivate and energize staff, and the IT industry is advised to be mindful that some of their products and services are seen by employees to be undesirable.

## Trend #6: Many hats of the IT manager

**Hypothesis** 

As employee aspirations change to a greater onus on happiness, autonomy and choice, workplace IT would be one way of recruiting and retaining staff. Would the job of the IT manager increasingly resemble that of other functions, like the HR manager?

Top insights

Comparatively few Japanese workers (39%) believe their employers listen to them when making IT decisions. Men (45%) feel somewhat more consulted than women (33%), and the situation is better at SMBs (42%) than at large enterprises (32%).

What is more, this seems to matter to Japanese workers. 66% of those in the public sector and 58% in the private sector said they would enjoy work more if they had more choice of technologies. On a positive note, 49% expect to have their opinions considered in the future, up from 39% who do today.

Japanese employees are similarly hopeful for the future when it comes to IT support. Only 36% think that their employers provide good IT support today, but 52% think they will do so in the future. It should be noted that despite the fact that large enterprise IT departments are less inclusive when it comes to employee engagement, ratings for IT support are more positive among larger organizations (47%) than among SMBs (31%).

Similarly, only 27% of workers at SMBs believe their organization uses the latest technology. This rises to 36% for large organizations, but across the board Japanese employers seem to be missing an opportunity - 54% of respondents indicated they would be attracted to work for an organization that offered good technology, and 59% of those in the public sector think they could be more productive if they had better IT resources compared to 49% of private sector workers.

**Implications** 

Our hypothesis is clearly validated through the findings of this latest research, which establishes the connection between IT provision and employee morale (real or perceived). Given the relatively low levels of employee engagement currently practiced by Japanese IT employers, there is a clear and present opportunity for organizations – supported by IT vendors – to recognize the potential of this trend, and to raise their game accordingly.

## Trend #7: Employee-led innovation





#### **Hypothesis**

The business software of the future will be adopted and designed by employees rather than management or the IT department. Are we going to see more networked, de-centralized organizations to facilitate this shift in corporate hierarchy?

#### Top insights

45% of Japanese workers are currently free to download software at work, but this is projected to increase with 53% expecting to have this right in the future.

Greater freedom to download exists in the private sector (47% compared with 38% in the public sector) and at SMBs (55%).

61% of Japanese workers agree that the Internet and other technological developments provide individual employees with an opportunity to make a bigger contribution to their organizations.

#### **Implications**

With technology widely recognized in Japan as means of empowering individuals, organizations that provide technology freedoms and flexibility, and which actively promote the development of this trend, will be seen as desirable places to work. Clearly, in a traditional culture such as Japan's, radical change is unlikely to happen overnight, but there exists an opportunity for the IT industry to accelerate adoption and in doing so help to facilitate growth and energize workers.

# Appendix

### **Guide to interpreting findings**

This quantitative phase of the research, conducted by TNS Global, comprised a 20 minute survey speaking directly to the working consumer in 11 countries. A total of 8,360 interviews were conducted in October 2011. The number of surveys conducted for each country is broken down:

• US – 1,002, UK – 1,001, France – 554, Germany – 536, Brazil – 1,024, Mexico – 566, Canada – 500, Japan – 619, Australia – 534, China – 1,003, and India – 1,021

The questionnaire comprised a series of statements which were rated by survey respondents. During the analysis stage, these statements were grouped into the seven Evolving Workforce trends which were discussed in detail in Report #1 in this series.

Ratings for each statement were collected across three dimensions:

- Whether respondents felt the statement was important (i.e. wanted it to be true)
- Whether the statement accurately described the respondent's current working situation
- Whether the respondent felt the statement would describe their working situation in the future (10 years from now)

This report contains the key insights for each trend, analyzed across the three dimensions. Where appropriate and where base size permits, findings are also analyzed across:

- Public organizations versus private companies
- SMB is defined as organizations with 2-499 employees and Large Enterprise is defined as organizations with 500+ employees
- Vertical industries: Aerospace, Civil Service, Emergency Services/Armed Forces, Education (private), Education (public), Engineering/Architecture, Entertainment, Financial Services/Banking, Government (local, regional or national), Healthcare private, Healthcare (public), Hospitality, Manufacturing and natural resources, Media, Non-profit, Pharmaceuticals/Biotech, Retail, Telecommunications, Utilities
- Worker demographics age, gender
- \*Worker types defined as Task Workers, Knowledge Workers, Power Users, Professional Nomads and Institutional Collaborators:

	Task Workers	Knowledge Workers	Power Users	Professional Nomads	Institutional Collaborators
Who are they?	Mostly desk-bound production staff, including receptionists, temporary and hourly workers, admin. staff	Finance, administrative staff, sales, marketing, other mid-level professionals	Most sophisticated computer users, such as engineers, IT staff and programmers	Highly mobile C-level, VPs, department heads, senior managers	Niche group with above average number of teachers, professors, students and others in education environments
What do they want?	Basic computing devices – fewest needs among all groups on mobility/connectivity, environmental, performance, security, style, and support factors	Greater wants/needs than Task Workers but still relatively straight- forward – i.e., solid devices capable of running standard applications with minimal support performance, security, style, and support factors	Technologically advanced devices with fast processors, graphics, and lots of memory and RAM. This group also has many niche needs – 3D visualization, advanced local storage, collaboration tools, etc. performance, security, style, and support factors	High-performing, lightweight, mobile, secure devices that allow this group to stay connected anywhere, anytime style, fit and finish are also important performance, security, style, and support factors	Greater needs than Knowledge Workers, particularly in areas of performance and mobility This group needs quiet systems, often shared with others, that boot up quickly and include comprehensive HW and SW support performance, security, style, and support factors