How the digital skills gap is killing productivity and what you can do about it

Understanding the digital skills required of today’s workforce & how to develop an action plan to address the digital skills gap in your organization
America’s productivity crisis

Labor productivity growth in the US has slowed to levels not seen since before the digital revolution (see chart).

At the macroeconomic level this decline in the growth rate in productivity is worrying economists and policymakers alike: labor productivity growth is a key ingredient in economic growth, and in raising the living standard of the population.

The issue is evident at the firm level too: during the 1990s and early 2000s, in the early years of the digital age, managers could reap the low hanging fruit that new technologies made available. But getting more from their employees today is proving more challenging even as the cloud promises the “next stage in the digital revolution.”

Productivity growth is the most important ingredient for raising living standards in rich and poor countries alike. If overall productivity growth disappears in the years ahead it will dash hopes that rich countries can improve their population’s living standards.

- The Financial Times

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Source: Bureau of Labor Statistics

*Q1 2014 vs. Q1 2013
The productivity crisis & the digital skills gap

More than 200M adults in the US are part of the digital workforce, yet only 1-in-10 rate themselves as very proficient with the digital tools they use every day at work. Training has not kept pace with technology, and workers, businesses and the entire economy are paying the price.

Digital products and topics are rapidly proliferating and evolving, and yet there is virtually no professional development focused on these 21st century skills. For instance, organizations are using Dropbox and Box for file storage and sharing, Twitter and Facebook to connect with customers, and Google Docs and Analytics to run their businesses. These tools serve essential functions but they can only improve productivity with the right training.

A recent study by Deloitte, a consultancy, states that the rapid pace of technological change in the workplace is leading to a skills half-life of only 2.5 years. Organizations are failing to adapt their training programs quickly enough.

Indeed, policymakers are waking up to the fact that digital skills are key to competitive advantage in the global knowledge economy. Governments all around the world, from Canada, to the UK and European Union, and all the way to New Zealand have recognized the challenge. Government policy, though, is only likely to be able to have an impact through the education system in the long term and it is individuals and firms that must look to fill the gap that exists today.

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To be innovative and competitive in today’s global digital economy, organizations have little choice but to invest in information and communication technologies (ICT). However, without the proper skills to put these technologies to effective use, firms are at significant risk of wasting their investments and missing key opportunities for growth and competitiveness.

- European Commission/INSEAD
The cost of the digital skills gap to the economy and firms is huge

A study by IDC⁵, a tech research company, suggests that time wasted due to inadequate digital skills adds up to 21% of total productivity for digital workers.

This implies that every year the digital skills gap drives an estimated $1.3 trillion loss in the US economy...

...And for a firm with 1,000 employees this translates to an annual loss of ~$10 million on a compensation basis alone*.

*based on average annual wage of $50K

The digital skills gap abroad: the UK

A report from Booz & Co and Go ON UK⁶ estimated the UK could be £63bn (~$105B) better off if the country were to achieve global digital leadership.

"Digital offers the chance to drive sustained economic recovery [in the UK], but this will only be realized if we become a nation of digitally confident businesses with a digitally literate workforce... businesses [need to] invest in more training programs."

- Ronan Dunne, Chief Executive of O2⁷, a UK mobile telecom provider
The 8 core digital skills essential for the 21st century workforce

A) Working with documents
B) Project collaboration & management
C) Attention management
D) Communication
E) Digital etiquette
F) Search & research
G) Platform flexibility
H) Security & privacy
A) Working with documents

Working with documents is the ability of employees to efficiently create and navigate digital documents using a business’s chosen set of programs.

Digital documents are the backbone of the modern workplace. They are the tools used to store data, conduct analysis and communicate ideas and outcomes within almost every business.

Failure to master working with documents can lead to time lost, poor communication and errors in analysis, all of which ultimately have a big impact on business profitability and outcomes.

What the research says...

Research conducted by Adobe⁸ found that "58% of workers say that they are not productive with the current set of productivity tools."

IDC⁹ estimates that "despite significant investments in personal productivity tools and collaborative applications...wasted time [from dealing with document challenges] costs organizations $20K per information worker per year in compensation costs alone."
B) Project collaboration & management

Project collaboration & management is the ability of employees to get things done as a team. In the digitized workplace this requires employees to efficiently navigate and use a business’ chosen workflow and project management tools. 

Project collaboration & management has always been an integral part of the workplace. Increasingly employees are required to collaborate on projects both across departments and with colleagues working remotely, both in other offices and working from home.

In today’s workplace team members are required to exercise traditional business competencies alongside technical skills to achieve the desired outcomes.

Technology can be a big aid to effective collaboration but skills shortfalls can lead to delays, higher costs and inferior business outcomes.

What the research says...

Based on a survey conducted on 895 Canadian businesses, ESI reports that "two-thirds of businesses interviewed say project performance and outcomes would improve if teams worked better together..."

"[And] 82% recognize the importance of both business and technical skills to achieve better collaboration."
C) Attention management

Attention management skills are the soft skills employees need to focus on the highest priority tasks, thereby avoiding distractions.

The Internet and the range of technological developments that characterize the information age have brought a new set of challenges. Today we are bombarded with stimuli from all directions with multiple devices, apps and information services all demanding our attention.

Managing our time and attention has therefore become an essential skill. Failure to do so essentially risks affecting our ability to get things done as distractions take their toll on productivity. Equally important is the ability to identify which tasks should take priority. A lack of the necessary professional skills to assess the importance and urgency of tasks leads to suboptimal outcomes and delays from bottlenecks.

There are a range of programs to assist with attention management but without the right training these programs themselves become part of the problem rather than part of the solution.

What the research says...

In 2008, the average person had an estimated attention span of only 5 minutes, down from 12 minutes in 1998.¹¹

"We're moving into a new era. The "Information Age" is being replaced by the Attention Age, where attention is becoming the most valuable commodity, and focus the most valuable skill."

- RegainYourTime.com¹²

Herbert Simon, Nobel-winning economist warned that information consumes "the attention of its recipients. Hence a wealth of information creates a poverty of attention."
D) Communication

Communication skills are required to time-efficiently manage inbound and outbound communication, and to be able to clearly and effectively relay the desired information.

Email and other forms of digital communication are now the primary mediums for interaction both between employees and with customers.

According to a new report from the McKinsey Global Institute\textsuperscript{13}, which uses proprietary data from McKinsey as well as from the International Data Corporation, we spend 28% of our workweeks reading, writing or responding to email. Even modest efficiency gains would free up substantial resources for other tasks.

Timely and effective digital communication with customers is now an essential part of quality customer experience. Firms placing insufficient emphasis on providing the necessary skills in this area risk driving away repeat business.

What the research says...

"We spend more time answering and responding to emails than we do communicating and collaborating with our co-workers or searching and gathering information. The only thing that takes more time is “role-specific tasks,” otherwise known as “doing our actual job.”

- McKinsey Global Institute & IDC\textsuperscript{14}
E) Digital etiquette

Digital etiquette, sometimes referred to as ‘netiquette’, is the dos and don’ts of online communication. Netiquette covers both common courtesy online and the informal "rules of the road" of cyberspace.

An ever increasing proportion of workplace and customer communication is conducted online. Moreover, as social media continues to grow it has become essential that organizations of all types maintain multiple social media platforms. The potential benefits of digital communication are huge but so are the risks.

It is integral that organizations understand these risks and train their staff appropriately. For example, alongside the basics of digital communication training, employees need to have at least a basic understanding of digital copyright laws and their organization’s compliance policies in order to avoid needless litigation.

At the most basic level, employees and businesses that fail to recognize that digital etiquette is on an equal footing with face-to-face communication risk damaging the productivity of their teams and creating disgruntled customers. But mistakes and inadequate control can also quickly have a much more damaging impact as social media has dramatically raised the stakes and given individual employees the power to do great harm.

3 social media blunders...

1. Apr 2014: US Airways posts pornographic image to its twitter account in response to a customer complaint about its service

1. Nov 2013: Home Depot tweets image with racist overtones in a botched bit to promote its sponsorship of a college football team

1. Nov 2013: JP Morgan’s poorly conceived twitter Q&A with VP Jimmy Lee results in hundreds of questions highlighting the unpopularity and controversial practices of the bank
F) Search & research

Search & research skills are those required to effectively harness the wealth of digital information available both online and via a company’s internal databases.

The growth the Internet and the digitization of archives has transformed the way in which individuals, students, academics and businesses conduct research.

The increase in the volume of information available, accessible anywhere, has the potential to greatly improve the quality of outcomes but only when properly harnessed.

Today we face both the challenge of information overload and the challenge of quickly retrieving information from digital filing systems. Without the skills to effectively and efficiently tap into the relevant information the quality of outcomes will actually deteriorate.

Productivity is affected from two angles: (1) too much of a resource is devoted to research because of a lack of understanding on how to use the research tools; (2) employees fail to find and recognize the most relevant data, decreasing the quality of any subsequent analysis. Both have a substantial impact on the quality of business outcomes.

What the research says...

A McKinsey Global Institute\textsuperscript{15} study found that high-skill knowledge workers spend 19% of their average workweek searching for and gathering information.

An Illinois Wesleyan\textsuperscript{16} academic study found that students are consistently "challenged, confused, and frustrated by the research process despite the convenience, relative ease, or ubiquity of the Internet... Frustrations included the effects of information overload...[and] finding the materials they desired, knew existed, and needed on a “just in time” basis."
G) Platform flexibility

Platform flexibility skills are the skills required to be comfortable using the growing range of devices, operating systems and platforms integral to modern business.

*The variety of both hardware and software used by business has never been greater.*

Microsoft is no longer the dominant player in business software with growing presence from both Apple and Google operating systems, and a plethora of cloud based platforms offering solutions that rival Microsoft Office. *Smartphones and tablets have in tandem transformed the hardware landscape.*

Failure of employees to adapt to this new landscape can lead to time lost from compatibility issues and the inability to navigate and leverage the tools available - tools that if properly mastered should add to productivity, not act as drag as is commonly the case today.
Security threats to business are increasingly sophisticated and the impact from breaches are increasingly severe. However, a majority of breaches continue to happen as a result of human error.

A lack of training in security and privacy awareness is costing businesses worldwide from a wide variety of sources. For example, time is lost repairing computers affected by viruses, proprietary data is leaked to competitors and, in severe cases, reputational damage results in lost customers.

In Q1 2014 ~93,000 records per hour were compromised, a 233% increase over the same quarter in 2013.

SafeNet's "Breach Level Index" 17
What you can do about it:
Developing an action plan to address the digital skills gap in your business

Step 1: Define goals
Define the goals of the different departments in your business

Step 2: Define skills
Within the framework of the 8 core digital skills, define the professional skills and technologies required for each department to achieve its goals

Step 3: Assess skills
Test competency against the identified professional and technical skills integral to your business; identify priority areas to address

Step 4: Design training
Design and invest in training programs to close the skills gap

Step 5: Setup to repeat
Establish a repeatable model to keep workforce skills up to date

Understand the business needs and related skill requirements
Assess the skills gap today
Setting up your business for success with best-in-class, repeatable training
Recap one-pager: the digital skills gap and what you can do about it

A lack of digital skills in the workforce is harming productivity, costing the US economy an estimated $1.3 trillion each year

Digital skills consist of 8 core competencies essential for the 21st century workforce

- Working with documents
- Project collaboration & management
- Attention management
- Communication
- Digital etiquette
- Search & research
- Platform flexibility
- Security & privacy

Develop an action plan to address the digital skills gap in your business

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Step 2: Define skills
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What we do...

Grovo teaches Internet and modern professional skills with 60-second videos. The videos follow Grovo’s proprietary microlearning methodology and are delivered in its beautiful and effective training platform. With more than 4,500 video lessons and assessments covering 150 Internet tools, cloud services, and professional topics – all produced at its NYC headquarters – Grovo makes it easy for people and organizations to learn the critical digital skills needed to succeed in today’s always-connected world.

Learn more at:
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References

4. IDC, empirica & INSEAD for the European Commission: *e-Leadership: Skills for competitiveness and innovation*
5. IDC: *Bridging the information worker productivity gap: New challenges and opportunities for IT*
6. Booz & Company: “This is for everyone”: *The case for Universal Digitisation*
7. Digital Marketing Institute Blog: *Digital skills gap could cost UK economy £2bn* (Sep 4, 2013)
9. IDC: *Bridging the information worker productivity gap: new challenges and opportunities for IT*
10. ESI International: *Tearing down the walls: blocking collaboration and better business performance*
11. Social Times: *Attention spans have dropped from 12 minutes to 5 minutes* (Dec 14, 2011)
12. RegainYourTime.com: *Attention management*
13. McKinsey Global Institute: *The social economy: unlocking value and productivity through social technologies*
14. *ibid*
15. Ibid
16. American Library Association: *Libraries and student culture: what we now know*
17. Safenet’s BreachLevelIndex.com: *Breach Level Index*
18. EMA Research: *Security awareness training: keys to improved organizational and Internet security*