



2012–2013 Global Public Policy Agenda

Real Impact for a Better Tomorrow

As economic challenges persist in communities, nations, and regions around the world—along with issues relating to health, education, and the environment—the importance of investing in long-term economic growth and societal well-being has never been greater.

Governments worldwide recognize that innovation and information technology (IT) are crucial to unlocking new opportunities, increasing competitiveness, and advancing national priorities. IT holds enormous potential to help governments achieve their goals—from improving education and healthcare to increasing energy efficiency and achieving environmental sustainability. Cloud computing, in particular, offers the promise of new business opportunities, innovations for consumers, and increased government agility, efficiency, and inclusion.

For IT to enable a better tomorrow, it is important for the public and private sectors to work together. Microsoft welcomes the opportunity to work with policymakers and other industry leaders to help address pressing global challenges and achieve important economic and societal goals. We believe we are an effective partner because our business model puts people first—our customers, our partners, and our communities—and views economic growth as a means of improving people's lives.

This Public Policy Agenda highlights three critical areas in which governments can shape their policies to spur economic growth and advance national priorities. Each section identifies key policy priorities and recommendations.

Accelerating Economic Growth

Innovation stimulates economic growth, and technological innovation in areas such as cloud computing can help increase economic opportunity and strengthen national competitiveness.

Invest in technology. The IT sector is a major economic engine worldwide—currently employing about 43 million people across the globe and driving some US\$1.9 trillion in annual spending. By 2015, the IT industry is projected to add about 6 million new family-wage jobs and spur annual technology spending of about US\$2.3 trillion. Cloud computing alone is expected to add more than 5.5 million new jobs across all sectors of the economy, contribute to the formation of more than 540,000 new non-IT small and medium-sized businesses, and yield US\$1 trillion in net new business revenue by 2015. Governments can support this growth by enacting policies that promote greater investment in and use of IT, and by enabling and encouraging the adoption of cloud computing in the public and private sectors.

Promote a cloud-friendly regulatory framework. The growth of cloud computing offers tremendous opportunities but also presents new challenges. Governments can promote widespread adoption of cloud computing by providing clearer guidelines for vendors and by fostering user confidence, especially in the areas of privacy and security. For example, governments can develop a legal framework

that includes balanced and predictable rules governing cloud services vendors as well as clear regulations on the storage, processing, and use of customer data. To enhance innovation in the cloud, governments can also work together to build on existing international trade agreements in a way that facilitates the movement of data across borders while also maintaining legal protections for consumers.

Ensure choice in government procurement. Government investment in IT infrastructure—including cloud services—in key sectors such as healthcare, education, and energy can help improve efficiency and expand economic opportunity. When government procurement policies are neutral, objective, and merit-based, they help ensure that government departments have the widest possible choice among IT products and services and can better evaluate which products and services best meet their needs and offer the lowest total cost of ownership. Governments are best served when their IT procurement is transparent and they do not rule out—or give preference to—specific products or suppliers and do not mandate certain business, development, or licensing models.

Stimulate innovation through IP incentives. Intellectual property (IP) laws help promote important incentives for innovation and creativity by enabling innovators to recoup their investments in research and development (R&D) and protect the value of their efforts. IP laws also create the conditions for the sharing of innovations among a larger community of customers and innovators. The loss of value through IP theft, including counterfeiting and piracy, results in lost jobs, a loss of over US\$600 billion in global revenues annually, and health and safety risks associated with unsafe products. A robust domestic patent culture is essential for R&D investment, IT innovation, and competitiveness in global markets. Governments can help foster local innovation and domestic economic growth by encouraging citizens to file new patent applications at home and abroad. Enforcing existing IP laws and updating them as necessary to adapt to new technologies is also critical. For example, IP rules should evolve to address online activities in ways that both encourage new and beneficial uses of Internet technologies and foster respect for the rights of all participants, including copyright owners and content creators.

Encourage and enable research. Government investment in basic research is critical to strengthening national competitiveness. Government-funded research at universities and labs stimulates innovation and helps train the next generation of scientists and engineers. Academic research is especially important because it can spur advances that lead to future entrepreneurial ventures and thereby create new jobs and potentially new industries. Private-sector research also plays a critical role and can be stimulated through R&D tax credits. Such credits are a proven incentive for companies to increase their research investments. Microsoft expects to spend about US\$9 billion on R&D in 2012 and the same amount in 2013. This reflects our commitment to investing in the future and our confidence in the role of IT in creating economic opportunity.

Educate the next generation of innovators. More than 100 million young people around the world lack access to education, and millions more do not get the quality of education they deserve. If governments are to maintain and strengthen their ability to compete globally, they must adapt and improve their education systems to train students for the global economy—with particular emphasis on science, technology, engineering, and math (STEM) skills, for which a broad spectrum of high-paying jobs are readily available. Building a qualified work force requires raising educational and teaching standards as well as rewarding effective educators and providing them with the technology and tools they need. Governments can also work to increase student awareness of multiple career paths and promote interest and participation in STEM fields.

Enable talent mobility. In today's economy, jobs often follow the supply of talent, not the reverse. This means that countries with the best supply of talent can more readily attract and retain well-paying jobs. Building the talent pool depends, first and foremost, on ensuring access to a quality education. But in countries where the talent pool is lacking, governments can address the gap by attracting expertise from other countries. Governments that work to remove legal, regulatory, and practical bars to importing talent can best take advantage of opportunities for economic growth.

Promote a global IT market. Global growth and prosperity rely on a shared commitment by governments to combat protectionism and keep markets open. With worldwide IT spending projected to reach US\$2.3 trillion by 2015, barrier-free trade in IT is particularly important to helping economies grow and fostering global economic development. By working together, governments can build on existing trade agreements or negotiate new ones to open new markets; establish a level economic playing field in important areas such as standards, IP laws, and regulatory due process; expand investment opportunities; preserve consumer choice; and promote the dissemination and adoption of new technologies.

Expand broadband access. The Internet's impact on global growth and job creation is rapidly accelerating. Over the past five years, the Internet accounted for 21 percent of GDP growth, compared to a 10 percent contribution during the previous 15 years. A survey of small and medium-sized businesses found that the Internet created 2.6 jobs for each job eliminated due to technology-related efficiencies. Most of the value created by the Internet is outside the technology sector, with 75 percent of the benefits captured in more traditional industries. To benefit from the Internet and powerful cloud computing services, all businesses and citizens need high-capacity Internet access. More than 2 billion people worldwide have Internet access, but the extent of access varies greatly depending on geographical area, and the number of users with broadband connections is a modest fraction of total users. In particular, rural and remote areas and underserved populations should not be left behind. Ensuring state-of-the-art connectivity for schools, libraries, and hospitals is equally vital.

Addressing Societal Challenges

Innovations in IT, including cloud computing, will help governments and communities address societal challenges such as improving education and healthcare, retraining workers for the technology-intensive economy, achieving energy independence, and mitigating climate change. IT innovations can also make public services more accessible, transparent, and responsive.

Address the youth opportunity divide. The global economic crisis has had a disproportionate impact on youth. Worldwide, across developed and developing markets, unemployment among youth ages 16 to 24 averages 20 to 30 percent, and in some regions the figure has reached a staggering 40 percent. A huge gap separates youth who have the access, skills, and connections to succeed in the global economy from those who do not. Addressing this gap requires focused efforts to empower youth to realize a better future, including training, grants and scholarships, and programs to foster better job and entrepreneurial opportunities.

Improve education through greater use of technology. IT can play a key role in transforming education and promoting lifelong learning. For this to happen, teachers need access to IT-based teaching methods that enable a richer, more personalized learning experience for their students, and administrators need access to the type of software infrastructure that businesses use to maximize efficiency and productivity. Cloud computing, in particular, can be instrumental in expanding the quality and accessibility of education—by enabling collaborative environments and anytime, anywhere access

to learning resources, providing opportunities in remote and underserved communities, and facilitating improvement in educational approaches through the collection and analysis of data. Game-based learning and other interactive learning experiences can help improve literacy, math skills, and even physical fitness.

Expand worker retraining opportunities. In the global economy, computer literacy is an essential workplace skill. Governments can use innovative and low-cost approaches to help workers learn IT skills, and nongovernmental organizations (NGOs) and the private sector can enhance worker mobility by offering skills training.

Increase access for people with disabilities and the aging population. The demand for accessible technology and a more personalized computing experience is growing. People with disabilities and the aging population use technology in many ways to enrich their lives. For example, technologies that are easier to see, hear, and use help people of all abilities and ages access government services, further their education, and pursue job opportunities. Governments can promote broad digital inclusion by encouraging accessible design and innovation across platforms and devices. Interoperability among software, services, and assistive technology also helps foster a broad array of solutions for people with disabilities and the aging population.

Modernize government. IT and the Internet can facilitate greater citizen participation in government and the political process, as well as improve how government employees collaborate. Modern tools and infrastructure can help citizens, government agencies, policymakers, and government workers connect to each other and to information that can lead to better decision making, improved services, and greater efficiency, accountability, and transparency. Improved access to government data can also create new jobs and business opportunities. Cloud computing offers an economical way to improve government performance, with some studies finding that agencies can cut their IT budgets in half by migrating their IT solutions to the cloud.

Address energy and environmental challenges. Reducing energy use and limiting the effects of climate change will require technological advances and innovation. Governments can help in this effort by promoting wide-scale broadband connectivity and deployment of smart devices. We encourage policymakers to adopt policies that will stimulate innovations in energy technology and provide market-based incentives for private investment in the transition to sustainable, low-carbon energy sources and technologies. For example, policies that promote state and local investment in intelligent transportation technologies are a cost-effective way to ensure that transportation systems are safer and more efficient. Such technologies can provide accurate, real-time information to measure system performance and manage the transportation network. Cloud computing can also play an important role by providing tools to measure and reduce energy use in the home, factory, and office—and reduce the environmental impact of IT itself by decreasing the energy use and the carbon footprint of computing by 30 to 90 percent per user.

Improve healthcare. Advances in IT can help increase access to and improve the quality of healthcare while reducing costs and giving people more control over their health data. Cloud-based services can be instrumental in this effort by offering healthcare organizations, patients, and referring providers a way to share health information before, during, and after treatment. Government policies in this area can ensure adequate protection of consumer privacy, promote efficiency and improved outcomes, and provide incentives to unlock health data from information systems that do not interact with other information systems.

Working Responsibly in the Information Economy

The business world has become increasingly interconnected, with dependencies among numerous participants—including consumers, businesses, governments, and NGOs. Because the activities and fortunes of these participants are so deeply intertwined, governments have a strong interest in promoting responsible business practices in the information economy.

Encourage responsible leadership. The public and private sectors can both play an important role in ensuring that businesses operate ethically, in an environmentally aware manner, and with sensitivity to issues such as human rights, responsible sourcing, online privacy and safety, environmental sustainability, and corporate governance. Government policies can encourage businesses to adopt principled approaches to conducting business and to uphold their public responsibilities.

Promote respect for IP rights throughout the supply chain. Too many companies around the world rely on stolen IT to run their businesses. Businesses that misappropriate IT not only violate the rights of the IT owner, but they also gain an unfair competitive advantage over companies that abide by the law and pay for the technology they use. This can result in lost jobs and reduced productivity for responsible businesses, as well as a business culture that ignores the rule of law and ethical standards. Governments can make their industries more competitive by modernizing their unfair competition and other IP-related laws and regulations and by supporting anti-piracy efforts and ensuring access to courts and other legal and regulatory enforcement bodies by both citizens and non-citizens.

Promote online competition. The interconnected nature of the Internet means that a lack of competition in any single sector can quickly affect the entire ecosystem. To allow consumers to enjoy the benefits of vibrant online competition, governments can adopt policies that ensure competitive markets for all online business and commerce, including advertising and search.

Promote user choice and interoperability. Users want the freedom to use whatever technologies and cloud computing services best meet their needs. Government policies can promote user choice by supporting industry-led efforts to increase interoperability among products from different online vendors and ensure that users have access to and control of their data and documents across various online products and cloud services.

Promote online privacy and security, transparency, and uniformity of laws across jurisdictions. Users should be informed about their online privacy options through clear notices, be able to make choices about the use of their personal information, and be assured that their data will be protected. Regulators and lawmakers can meet these needs by collaborating to develop globally consistent policy frameworks that recognize the worldwide nature of data flows and, at the same time, protect the privacy and security of user data.

Strengthen efforts to fight cybercrime. The increased use of online services has many benefits for consumers and businesses, but it can also lead to security and safety risks. Governments have a compelling interest in securing IT systems and strengthening enforcement of laws against cybercrime. Fighting cybercrime has always been a global issue, but cloud computing makes it more so. When a victim is in a different jurisdiction from the data center and the perpetrator is in yet another jurisdiction, law enforcement agencies need effective mechanisms and standards for cooperation. Also crucial are electronic surveillance laws that reflect modern computing realities, technology training for local law enforcement, and cooperation in establishing international clearinghouses of cybercrime data.

Promote free expression. The growth of the Internet and communications technologies has led to a vast array of ways to publish and respond to news, information, and opinions. People are justifiably concerned about how these developments might affect personal reputations, morals, and public safety. At the same time, these technologies offer tremendous potential to disseminate the truth, enhance accountability, and introduce societies and individuals to new ideas. Governments can help foster free expression and access to information by showing restraint in imposing restrictions on Internet content and online anonymity, and by engaging in intergovernmental dialogue and cooperation.

Founded in 1975, Microsoft is a worldwide leader in providing software, services, and solutions that help people realize their full potential. Our “Putting People First” business model, which includes more than 600,000 partners worldwide, and our commitment to investing in R&D—approximately US\$9 billion annually in 2012 and 2013—have generated millions of jobs and have helped make the IT industry one of the most vibrant sectors of the global economy. Since Microsoft’s inception, we have worked to democratize computing by making IT more affordable and accessible. We are committed to putting our customers, our partners, and our communities first, investing in innovation, addressing the world’s most pressing challenges, and advancing global prosperity through technology. Microsoft is also furthering the adoption and advancement of cloud computing by offering a broad range of cloud services. We believe that cloud computing will provide new opportunities for innovation, connectivity, and economic growth, and we are investing heavily in cloud services for consumers, businesses, and governments. For more information, please visit www.microsoft.com/publicpolicy.