The Internet Matters, Says McKinsey Study

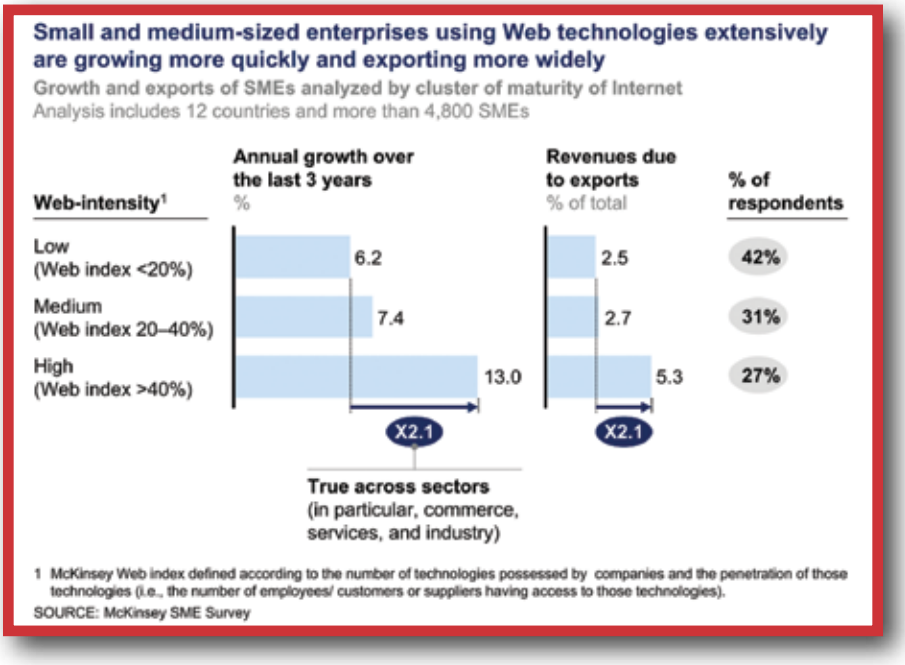
According to the McKinsey Global Institute, the Internet contributes strongly to growth in income and jobs. Government encouragement of broadband deployment and adoption can leverage the Internet for economic growth.

The Internet is often referred to as a general-purpose technology enabler because its contribution to the economy ripples through all sectors. Unlike, say, a medical imaging technology that overwhelmingly affects health care, the Internet affects every sphere of economic life – not only all sectors of private production but also government, education and households.

Because these spillover effects are diffuse, they are extremely difficult to measure. And because they are large, failing to measure them risks vastly understating the Internet's benefits.

In May 2011, the McKinsey Global Institute – the research arm of consulting firm McKinsey & Company – published the first of a planned series of reports intended to measure the Internet's economic effects and identify the factors that contribute to those effects.

This first report, "Internet Matters: The Net's Sweeping Impact on Growth, Jobs, and Prosperity," focuses on 13 countries, including the G8 Group (the U.S., Canada, the U.K., France, Germany, Italy, Japan and Russia); three emerging economies (China, India and Brazil) and two smaller countries that are Internet leaders (South Korea and Sweden). These 13 countries account for more than 70 percent of global GDP.



McKinsey used a variety of techniques and data sources to approach the subject in the broadest possible way. It examined national accounts, correlated Internet maturity with economic growth and surveyed nearly 5,000 small and midsized businesses about their Internet use.

Preliminary findings, based on data from 1995 through 2009, include the following:

- Consumption and expenditure tied directly to the Internet – including e-commerce purchases – accounted for an average of 3.4 percent of GDP in the 13 countries studied. In the most advanced economies, the average was close to 6 percent. Except in China and India, personal consumption accounted for a substantial portion of this amount.
- For the 13 countries studied, the Internet contributed an average of 7 percent of GDP growth over the last 15 years and 11 percent over the last five years. In mature economies, the effect was much greater – 10 percent of GDP growth over the last 15 years and 21 percent over the last five years.
- About 75 percent of the Internet's impact on GDP is based on indirect effects – that is, the increased

Three-quarters of the Internet's economic impact consists of productivity increases for non-Internet businesses.

productivity that non-Internet businesses derive from using the Internet. There are also benefits that are not reflected in the GDP – namely, the added value consumers derive from Internet use beyond what they pay for it. The annual added value, estimated based on consumer surveys, ranged from $215 per user in Germany to $330 per user in the U.K.

- Small and midsized businesses with strong Web presences – defined by penetration of Internet technology and its usage by employees, clients and suppliers – grew more than twice as quickly as other businesses. They also derived more than twice the share of revenues from exports and created more than twice as many jobs. Although the Internet also accounted for jobs being lost, on average 2.6 jobs were created for every job lost.
- Growth in per capita GDP and in labor productivity are correlated strongly with McKinsey's measure of Internet maturity. Doubling of Internet maturity is associated with a 2.6 percent increase in real per capita GDP growth. In the more developed economies, the increase in Internet maturity over the past 15 years was associated with an average increase of $500 in real per capita GDP – equivalent to the effect of 50 years of the Industrial Revolution.
- The Internet contribution to GDP is relatively high in countries that have strong Internet supply ecosystems and in countries with high public investment in the Internet.

Small and midsized businesses with strong Web presences grow twice as fast as other businesses, export twice as much and create twice as many jobs. Though jobs are lost through the Internet, 2.6 jobs are created for every one lost.

The last two findings suggest how governments might leverage the Internet to spur economic growth.

MEASURING INTERNET MATURITY AND SUPPLY ECOSYSTEM

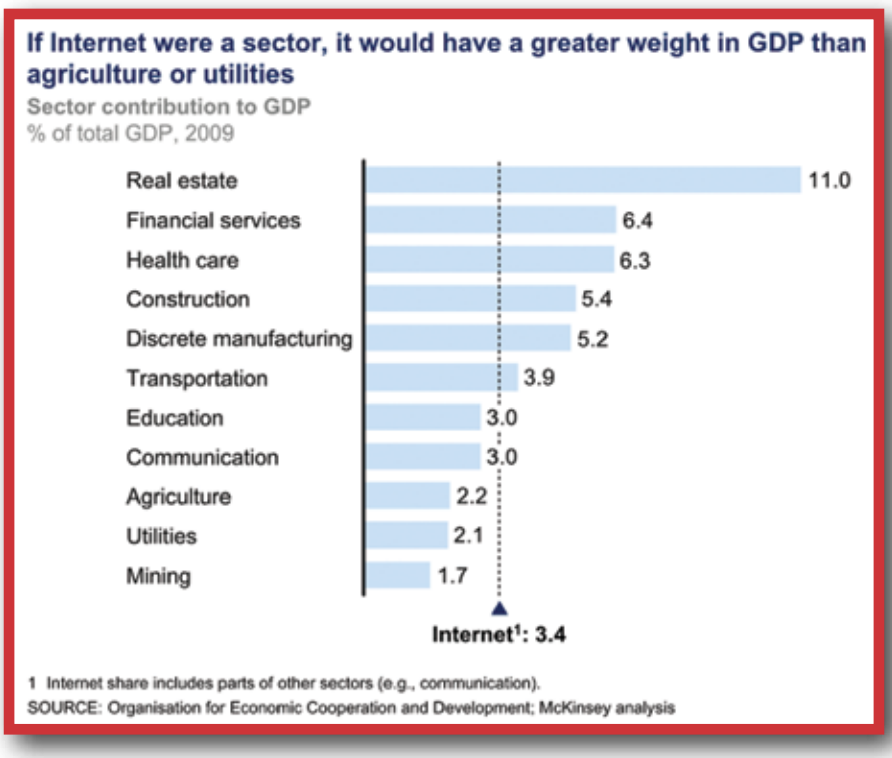
McKinsey calls its index of Internet maturity the "e3 index" because it is based on measures of Internet engagement, environment and expenditure:

Engagement, worth 40 percent of the total score, includes 10 metrics, among them household and business broadband penetration, mobile Internet subscriptions, the number of companies with websites, e-government applications, and government participation in Internet development.

Environment, also worth 40 percent, includes such measures as Internet speed, the number of homes for which high-speed Internet is available, the accessibility of digital content and the number of secure Internet servers.

Finally, **expenditure**, worth 20 percent of the score, measures the percentage of the population making online purchases, the percentage of total revenues accounted for by e-commerce, and online advertising spend.

On the supply side, the **Internet supply ecosystem** depends on broadband infrastructure, human capital (technical skills), financial capital and a supportive business environment.



RECOMMENDATIONS FOR GOVERNMENTS

Though specific government policies must vary from country to country, McKinsey recommends a number of approaches governments can use to promote economic growth:

- Bring government online with e-government applications.
- Promote Internet adoption by individuals, small businesses and schools.
- Subsidize broadband services in areas with low population density.
- Support education in the sciences and technology.
- Encourage deployment of advanced technologies.
- Ensure that small and midsized businesses have access to high-speed and very-high-speed Internet. ❖