Hyperconnectivity

Billions of people now live in a networked world. No matter whether you're from Africa or South East Asia, New York or Shanghai, you can buy a relatively cheap internet-enabled device and join a global online community. And with the number of these devices set to increase in future, it's a community that will only keep on growing.

This hyperconnectivity is already having far-reaching effects across society and the economy, transforming everything from dating and elections to retail business models and education. In fact, anyone with web access can now access much of humanity's collective knowledge at minimal cost.

They can also connect with like-minded people regardless of their location or background, and organise and effect change in ways that were impossible even a decade ago. However, this shift toward a hyperconnected world also creates new challenges in terms of internet governance, transparency, privacy and the disruption of existing business models.

As more objects with embedded sensors and internet connectivity are hooked up to the web, creating an 'Internet of Things', further opportunities and challenges for individuals, communities and business will also begin to emerge.

Implications

- Hyperconnectivity and the increasing ubiquity of data it engenders are arguably the greatest source of disruption and innovation in the global economy, and will continue to be so for the foreseeable future. Companies spanning a variety of sectors are already assessing how these developments will affect their underlying business models. [1]

- The influence of the internet means the distributed network is now one of the dominant organising structures in both the virtual and physical world. Distributed business models such as Ponoko and Arduino are shaking up everything from manufacturing to music. And digital networks also underpin new civil society groups such as Avaaz and 38 Degrees. The Arab Spring was also built on the back of networking principles.

- Hyperconnectivity is driving many other trends we see shaping the world of tomorrow. First and foremost it is transforming civil society through social media and making radical transparency possible, thereby changing the relationship between citizens and government, as well as consumers and business. In both cases power is shifting from large institutions to smaller organisations and citizens.

Footnotes:

1. [PricewaterhouseCoopers (2014, April).](#)

Current trajectory

In 2013, the volume of mobile data traffic was nearly 18 times the volume of traffic on the entire internet in 2000. [1]

- At the end of 2014, global mobile phone penetration had reached 7 billion people, 78% of which live in developing countries. [2] Africa's mobile phone penetration has grown from 1% in 2000 to 54% in 2012 [3], and was expected to have reached 69% in 2014. [4]
- As of August 2014, the number of people actively using social media each month passed the 2 billion mark, which is 28% of the world's population. [5]
- The number of internet users worldwide had grown from 670 million in 2002 [6] to an estimated 3 billion by the end of 2014. Internet use continues to increase, rising by 6.6% globally in 2014 (3.3% in developed countries and 8.7% in the developing world). [7]
- Machine to machine (M2M) connections are expected to increase threefold from 2.3 billion in 2013 to 7.3 billion by 2018, by which point there will be nearly one M2M connection for every person on Earth. Applications for M2M connections include video surveillance, smart meters, smart cars, asset and package tracking, chipped pets and livestock, and digital health monitors.   [8]

Footnotes:

1. Cisco: Global Mobile Data Traffic (2014).
2. International Telecommunications Union (2014).
3. Deloitte and GSMA (2012) The Sub-Saharan Africa Mobile Observatory - Page 9.
4. International Telecommunications Union (2014).
5. WeAreSocial (2014, August).
6. International Telecommunication Union (2013) - The World in 2013: ICT Facts and Figures.
7. International Telecommunication Union (2014) - ITU releases annual global ICT data and ICT Development Index country ratings.
8. Cisco: Global Mobile Data Traffic (2014).