

[youtube:<http://www.youtube.com/watch?v=xjoPB4hesZY> w auto]Summary of 2011 Keynote conference presentation by Futurist speaker Patrick Dixon for Ricoh - accurate predictions.

Key themes: rapidly changing nature of business, external operating environments, velocity of change in consumer and competitor behaviour, shifts in patterns of work, collaboration and partnership - relevant to key industries such as financial services and health.

CONVERGENCE

We think about convergence of technologies, and of businesses such as information and entertainment companies. But convergence also demands multi-skilled, multidisciplinary teams. People with unusual combinations of experiences and training. Globalisation of every large business, mergers, acquisitions – all these create new leadership pressures when it comes to sharing information. New blends of products and services. Blurring of differences between different kinds of corporations.

CONNECTIONS

Beyond increasingly mobile connections between people, to connections between apparently unrelated ideas and facts. Semantic web. Example: fraud detection in banking using complex data analysis to identify patterns of unusual activity, including unusual interactions between people. Example: detection of viral mutations and new patterns of disease. Example: predicting behaviour of customers through multivariate analysis. All these things require a much more sophisticated approach to data. A recent UK survey showed that in the largest corporations:

- 85% allow wireless access
- 90% allow remote access
- 75% use software as a service / cloud
- 44% entrust critical services to 3rd party

CLOUDS

Cloud computing is having a radical impact on corporate and personal IT. A digital world which is independent of any particular technology, device, platform, operating system. Everything everywhere, all the time. Corporations need to catch up with how their own teams are behaving in their private lives - storing all their e-mail, photos, videos, documents on remote servers owned by organisations like Facebook or Google. 25% of large corporations plan partial migration into the cloud in the next 2 years, 11% in 12 months. This is already a \$56bn / year, and will be \$150bn by 2013, according to Gartner. As part of the same trends we can expect to see rapid growth in software as a service – hosted on other company's servers.

CROWDS

Beyond virtual teams, virtual working and virtual organisations. Innovation in the past has tended to be limited to the capacity of teams inside organisations - even if they are spread across many time zones and sites. Expect rapid growth of crowd-sourcing or open innovation, with the same mindset as Wikipedia or Twitter: harnessing the intellectual power of communities to solve complex problems fast in profitable ways. Cost of innovation is shifting from cost of creating the ideas to the legal costs of protecting them, in a relatively open environment. We have seen widespread use of open innovation in computing, innovation in green technology, and also in health – for example matching disease to genetic code.

CONTROLS

Convergence, connections, clouds and crowds - each of these is creating new [risks](#) which are increasing dramatically. Corporations can only embrace these four Cs above by also building much more sophisticated controls. Such security needs to be dynamic: responding in the right way according to actual risk, without slowing down and frustrating our management and innovation teams. But we can also use Convergence, Connections, Clouds and Crowds to help find and develop the [innovations](#) we need in Controls.