

EIF Report overview

THE TECHNOLOGIES DRIVING MASS COLLABORATION

Tomorrow's digital technologies will be the result of today's R&D investments. The trend is very clear: at every level of the value-chain from computer processing power and data storage to network capabilities, software tools, intermediate applications and digital content, R&D investments are increasingly driven by the prospect and promise of exploding worldwide demand for the ability of individuals (and now also "things") to communicate and collaborate with each other online, en masse. The aggregate effect must surely be to shift mass collaboration into a much higher gear by 2025: more people will be connected, with mobile devices to connect to the Internet anywhere at any time; user interfaces to access the network will be simplified and more intuitive; many new intermediate tools, applications and services will be part of the network or available through the network to manage and make sense of vast volumes of data; and much content will itself be built on new technologies and tools of mass collaboration.

TOWARD THE DIGITAL ECONOMY OF 2025

By 2025 we may expect to inhabit a world of digitally-enabled mass collaboration built on "fast, fat mobile pipes and smart networks", connected by the Internet to limitless computing power and – most importantly – to billions of human beings and inanimate objects. To assert that, as a consequence, the "traditional economy" will by 2025 be radically transformed, superseded by a "global digital economy", is already to repeat no more than conventional thinking. Indeed, it is self-evident that digital communications are already changing traditional models of production, supply and demand at every level of the value chain for ever increasing numbers of economic sectors and actors. On the other hand, can anybody yet say with any authority what the sum of countless such micro-economic revolutions will add up to by 2025 in macro-economic and structural terms? Steel will still be steel, and humankind will still need to eat. One way to try to wrap our minds around this may be to ask ourselves:

- In the digital economy of 2025, who will be prepared to pay for what?
- Looked at from the other end of the value chain, who will be prepared to invest in what?
- Who will be offering what value added, and through what structures?
- What will be the role of government?

SOCIAL & POLITICAL FEATURES OF THE DIGITAL WORLD IN 2025

What will be the effects of these technological capabilities on our social interactions and governance in a hyper-networked world? It is useful at the outset to observe just how much has already changed in the last 10 years. Who would have thought ten years ago that today the biggest and most trusted tv station in the world would be a website, that you can win the American elections by building on-line communities, or that legislators would be twittering to engaged constituents from inside the halls of parliaments? Equally, there is a surge in online social behaviour, as we increasingly create, maintain and facilitate relationships via greatly expanded social networks, and use them to organize not just our own social activity, but social and political movements, organizations and events.

New digital tools will have been developed by 2025 to further broaden and deepen these trends (high resolution two-way video capability looks to be one). This prospect poses fundamental questions:

- In the digital society of 2025, what will be the role of government and public service?
- How will we deal with issues like security, privacy and identity?
- How will we inform ourselves and make judgments?
- How equalitarian and how virtual will society become?