



"EU 2020" consultation

"A crisis is a terrible thing to waste."
Paul Romer, Stanford University

Google welcomes the Commission's consultation on EU2020. We strongly endorse the emphasis on the opportunities of the knowledge economy in meeting the multi-fold challenges facing the Union - Google is, and will be, a willing partner for the Commission as it seeks to define policy to change the EU for the better.

In this paper we recommend:

- Developing a broad agenda of reform to promote the knowledge economy - **the "Fifth freedom"** - including particular emphasis on:
 - Maintaining the openness of the Internet as an platform for innovation and creativity;
 - The "new intellectual property strategy" announced by the President;
 - Improving access to public sector data in general. A specific sub-target should be to move from 20% of EU funded research made available for open access to 80% (and 100% in time).
- **Policy neutrality** between manufacturing and services as regards innovation and productivity

1. Change

The Commission identifies the need to be "**bold**" in setting "the next generation of public policies". Google agrees and believes that the proposed emphasis on "people and responsibility" is not only appropriate, but also that the Internet is uniquely suited to implement that vision.

Such boldness is certainly justified. As the working document notes "jobs that have been destroyed [by the present crisis] will not be replaced"; climate change has to be addressed; and we face a profound "challenge ... by European demography". In other words, the EU of 2020 will not, and must not, be the same as that of 2010. And yet, change is of course hard for any society.

However, fundamental **societal transformation** is being embraced voluntarily every day by Europe's increasingly active online population.

Google believes that **the central challenge for today's policy makers is to harness the power of the Internet to address our new societal goals**. We are not alone. A

recent paper from the European Parliament's European Internet Foundation - the Digital World in 2025 - likewise envisages "a world driven by mass collaboration" where "by 'collaboration' we mean not simply online 'connection' or even 'interaction', but rather interaction with the intent to create economic or social goods and effects. It is the inexorable spread of such purpose-driven online collaboration that takes us beyond the domain of the enabling technology and into the domain of public policy, politics and politician."

2. Openness

When the Lisbon Agenda was adopted it was common to talk of the information society being a transformation every bit as big as the industrial revolution. Now that the revolution is underway, it is possible to lose sight of the destination in the day-to-day incrementalism.

So the renewal of Europe's reform agenda is the ideal moment to look up and adopt a vision to power Europe's further progress towards the knowledge economy, by adopting a bold commitment to the '**Fifth Freedom**' of knowledge and the social momentum knowledge creates.

A powerful example of this sort of thinking can be seen in **smart meters**. Imagine if consumers not only got immediate data on their power consumption from their smart meter but they had the *choice* to share and compare their data with friends or neighbours through the use of social media. The ensuing competition and collaboration is a strikingly different, and yet complementary, approach to addressing carbon emissions.

The President has asked Commissioner-designate Geoghegan-Quinn to "take the lead in making the 'Fifth Freedom' a reality". Google believes that in taking forward this central component of EU2020 the Commission must first **improve its understanding of how the knowledge economy itself works**, what are the drivers, and what public policy is needed to support it? This section is a very brief sketch of the lay of the land.

We believe "openness" will quickly emerge as a central theme of this analysis - **open innovation and open platforms**. Fortunately, and as the working paper recognises, the EU has a long standing commitment to openness to the rest of the world - we live in an economically and culturally open continent. This will be a core strength for EU2020.

2.1 Incentives to innovate

Consider this:

- An entirely open set of software tools (so-called 'open source') power the majority of websites of the world.
- A community of passionate collaborators have built an online encyclopedia that is available for free to all corners of the planet where the Internet is available.
- The human genome was mapped in an open and collaborative manner.

These examples challenge our traditional notions of innovation incentives. For example, **open source** licensing relies upon copyright, but to cascade openness on to subsequent developers. Open source is not some idyllic niche, it is increasingly being driven by big business (Google is the world's largest contributor of open source code). The **Creative Commons** movement facilitates a broader spectrum of licensing practises for access and re-use of content.

Open innovation does not replace proprietary innovation, but it is complementary, and thus far overlooked in Europe's IP strategy. Innovation without the 'hold-up' costs of

traditional copyright exploitation is an incredible opportunity for developing sustainable economic growth. The key point though is that **today's regulation to support proprietary innovation may prove to be a break on open innovation**. The working paper notes the need for "well functioning system of intellectual property rights" and the President of the Commission has recently called for a "new intellectual property strategy". Google agrees and calls on this strategy to support open as well as proprietary innovative models as they will both support innovation in Europe.

2.2 The shift to open platforms

Knowledge needs to be exchanged to be valuable to society. Likewise, culture, and the ideas embodied in art, needs to be exchanged if they are to enrich and bind the people of Europe closer together. Such exchange requires a platform.

A fundamental economic characteristic of platforms is that they exhibit "**network effects**" - the more users of the platform, the more valuable it is for everyone. However, where the platform is proprietary these network effects risk become enduring structural monopolies.

Fortunately, what we are seeing is that the knowledge economy is being built on an entirely open platform - the Internet. The Internet is based on open standards and operated in an open, stakeholder-inclusive manner. And the Internet's primary application, the World Wide Web, is likewise built on open foundations.

At the heart of the "Digital Agenda" must be a profound European commitment to **keeping the Internet an open platform**.

2.3 Longer term economic sustainability - education

The openness agenda applies equally to education:

- In other parts of the world, commercially run universities are publishing **lecture notes** online. Europe's publicly funded universities should adopt this practise.
- The EU already requires that 20% of the research funded by FP7 funding is made available for **open access**. The target for EU2020 should be 100% - R&D is the fuel of the knowledge economy.
- The Internet should be used to accelerate the **journal publication** of science, while respecting the tradition of peer review.

Knowledge transfer is a vital component of innovation. Developing university-industry partnerships in the **sciences, maths and computer science** should be a priority. In Google's experience, there is considerable unmet supply of **women graduates** in these subjects.

Needless to say the broader regulatory climate to permit Europe's graduates to develop their talents and address the global "competition for brains".

3. Jobs, innovation & productivity

How do we make open innovation and open platforms power the broader economy, in addition to the knowledge intensive sectors of IT?

A great number of the opportunities will accrue to **services** and the the Commission needs to deliver an innovation and productivity agenda that is neutral between manufacturing and services. For example, changes in business processes can often have as substantial an impact on competitiveness as technical innovation.

The Commission's paper correctly points to evolutions in the work place, and the emergence of self-employment. Google believes that this is a trend that will continue and be powered by the Internet. The productivity benefits of cloud computing for **SMEs** has already been noted by the Commission and need support by the Digital Agenda. From our vantage point, for example, we see numerous examples of small businesses that have been able to take advantage of the opportunities online to advertise their products and services to a broader - often Single Market - audience.

There are two topics that Google recommends the Commission prioritise in EU2020: fostering experimentation and modernising the EU's approach to data.

Innovation begins with **experimentation**, and that is an area where Europe is under-served. Early stage businesses are challenged not only by the well documented under-provision of venture capital, but in other ways too, notably in respect of knowledge working.

Many of the new Internet-based knowledge working services emerging in the US - including those of Google - are built upon existing content available on the Internet. A flexible regime of exceptions to copyright rules support the development of such services which in turn increase access to and value of content. This flexibility is largely absent in Europe, and this acts as a strong disincentive for European players to experiment and innovate. Yet, as Internet services are inherently global, this simple difference has substantial repercussions for global competitiveness. While the value of copyright exceptions is largely ignored in Europe (at least compared to attention to the value of copyright protection), US estimates¹ suggest that a substantial 'Fair Use' industry has developed, demonstrating that a "well functioning" copyright system needs, to support such **follow-on creativity and innovation**.

The processing of data is becoming an increasingly important source of value added in Europe. **Decisions driven by data** will be better decisions: by government, by industry or by us all (e.g. with respect to the environment and other scarce resources). Two policy areas deserve particular attention in this respect:

- Government's collect huge amounts of data which can serve as a powerful catalyst for European information entrepreneurialism. Policy on access to **public sector information** must be reinforced and the existing provisions made to work. Cloud computing technologies could play a key role in how governments implement open government provisions to provide the data and keep it updated without much extra administration cost.
- The so-called "**Internet of Things**" (objects and sensors relaying data back over the Internet) will probably be the largest source of such data (see the example of smart meters above). It needs careful regulation that protects fundamental rights *and* supports innovation based on data.

4. Digital single market

Google welcomes the emphasis on a digital single market, and particularly applauds the emphasis on "making markets work for people". Indeed, the **digital consumer** is awaiting digital single market offerings with increasing impatience. And rightly so - the pace of change from business has generally been unimpressive.

This is certainly the case for content, which needs to be online in ways that meet today's **consumer needs and expectations**. Policy that holds out the hope of protecting business models that are progressively disregarded by consumers is ultimately counter-

1. <http://www.ccianet.org/CCIA/files/ccLibraryFiles/Filename/000000000085/FairUseStudy-Sep12.pdf>

productive. It also seems inappropriate to try and define the contours of new services. We do see content transcend national borders but the new 'borders' are often defined by communities of interest and culture, and the market process could be the more appropriate way to evolve towards this demand.

The Digital Agenda should not stop at copyright though. In the entertainment industry, for example, advertising support has always been an important part of the business model. Addressing barriers to a cross-border **digital advertising** needs to be a priority for the Commission, and several profound issues need to be worked through in this context and addressed in a modern manner.

The Digital Agenda must embrace the e-commerce of material goods. Consumers are rapidly adopting e-commerce for a broad range of purchases. The consumer acquis needs to support the growth of competitive online offerings, and it needs to recognise the Fifth Freedom dimension here too: the emergence of **digitally empowered consumers** who use online communities to be more demanding, better informed and capable of sanctioning suppliers that do not place their interests at the heart of business strategy.

Google
14 December 2009