European Digital Economy

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Abstract

The present article analyses the modern electronic communication and online services, including e-government, as major drivers of change for our economies and our societies. They help to promote growth and jobs, productivity, savings in public spending, consumer welfare and they offer new opportunities for personal expression.

Key words and expressions: *electronic commerce***,** *e-government***,** *e-payments, Digital Single Market, The Services Directive, Online content and licences, taxation.*

Electronic commerce, commonly known as **E-commerce** or **eCommerce**, is trading in products or services conducted via computer networks such as the Internet. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web at least at one point in the transaction's life-cycle, although it may encompass a wider range of technologies such as e-mail, mobile devices, social media, and telephones as well.

Electronic commerce is generally considered to be the sales aspect of e-business. It also consists of the exchange of data to facilitate the financing and payment aspects of business transactions. This is an effective and efficient way of communicating within an organization and one of the most effective and useful ways of conducting business. It is a Market entry strategy where the company may or may not have a physical presence.

E-commerce can be divided into 7 subsections:

- E-tailing or "virtual storefronts" on websites with online catalogs, sometimes gathered into a "virtual mall"
- Buying or selling on websites and/or online marketplaces

- The gathering and use of demographic data through web contacts and social media
- Electronic data interchange, the business-to-business exchange of data
- E-mail and fax and their use as media for reaching prospective and established customers (for example, with newsletters)
- Business-to-business buying and selling
- The security of business transactions

Modern electronic communication and online services, including e-government, are major drivers of change for our economies and our societies. They help to promote growth and jobs, productivity, savings in public spending, consumer welfare and they offer new opportunities for personal expression. They are also important economic sectors in their own right. The digital economy can help European industry to grow, provide infrastructures for tomorrow's companies and boost growth of new start-ups. Even at a time of high unemployment, the internet creates five jobs for every two lost. By 2020, Europe could add 4% to its GDP by stimulating the fast development of the Digital Single Market and our public authorities could achieve 15-20% cost reductions by moving to e-Government.

The single market and the digital economy reinforce each other. Buying goods and services is much easier online – but it is also easier to spot where the single market is not working and to see the cost of fragmentation.

Europe's telecoms market is not working as it should. Unlike the EU, the US and China have unified telecommunications markets of respectively 315 and 1350 million customers, served by 3 or 4 operators, acting within a single framework. In contrast, Europe's telecoms markets remain fragmented along national borders. European companies are not big players on the Internet. Non-European internet platforms such as Google, Apple, Amazon, Baidu are leaders in the Internet economy and they are also among the biggest companies in the world. Europe has been a leader in the past and has a number of global Information and Communication Technology (ICT) industries. It has innovated in healthcare applications, smart city technologies, electronic public services and open data. Europe has so much potential to boost its growth and competitiveness but is now falling behind other world leaders in this field. Europe urgently needs decisive action to regain momentum in this crucially important sector.

1. Promoting the uptake of e-commerce and e-services

The European Union's longer term goal is to ensure that businesses and consumers can buy and sell on the internet as if on their local markets and that all services, information, administrative formalities and creative content are accessible on-line. The potential of online services should be fully exploited in the pursuit of the Europe 2020 objectives.

E-commerce

E-commerce is growing rapidly in some Member States. On average, it grew by 20% in value in 2011-2012. However, cross-border e-commerce is still under-developed in the EU. While 45% of consumers bought online in 2012, only 11% did so cross-border. This is an increasingly serious obstacle to the development of the single market generally, as the economy becomes more dependent on the internet. For SMEs, e-commerce is an opportunity to extend their activities beyond their regional and national boundaries, but it also increases challenges and competitive pressure. Retailers report difficulties and higher costs due to different tax and contract law, higher cross-border delivery charges and restrictions imposed on cross-border transactions by suppliers.

More e-commerce would result in a gain for consumers of around EUR 204 billion (1.7% of European GDP) if e-commerce reached 15% of retail sales and if the obstacles to the Single Market were removed.

In its e-commerce action plan of 2012, the Commission set out five priorities to tackle remaining obstacles to the development of digital services:

– Develop legal rules to facilitate cross-border offers of online products and services.

– Improve operator information and consumer protection.

– Ensure reliable and efficient payment and delivery systems.

– Combat abuse and resolve disputes more effectively.

– Deploy high-speed networks and advanced technological solutions.

E-payments

Electronic payments are central to the efficient functioning of the digital single market. The cost, convenience and security of making a payment online are key factors in deciding whether to buy from an internet site. In 2009, 35% of internet users did not buy online due to doubts on payment security. And the payments operation is also a promising economic sector in its own right. The untapped demand for mobile payments in the EU was estimated at approximately EUR 50 billion in 20129. Importantly, the use of non-cash payment methods helps to prevent fraud and tax evasion, as Member States which have introduced an obligation to pay by electronic means (credit transfer, direct debit, cards) above certain amounts have recognised.

However, the payments market in the EU is fragmented and costly. According to European Central Bank estimates, the social and private costs of payments in the EU equate to 1.2% of GDP or EUR 156 billion a year.

The Services Directive

Effective implementation of the Services Directive is also crucial for the development of

Europe's online markets. In particular, the Points of Single Contact (PSCs) have potential that goes well beyond the provisions of the Services Directive. These ‘one-stop shops’ offer information on legal and administrative requirements for service providers who want to set up an activity at home or abroad. The businesses can also use the PSC to complete all the official formalities online via one entry point.

Member States should now step up their efforts to upgrade their PSCs to offer comprehensive e-government services for businesses. This would save time and money for both businesses and public authorities. Easily accessible and transparent information on how to exercise single market rights is one of the building blocks of efficient e-government services. Member States should invest in electronic portals that constitute a one-stop-shop for citizens and businesses and link them to relevant EU portals such as Your Europe. Two further communications have also recently been adopted by the Commission in the context of the Services Directive: one concerns regulated professions while the other addresses the findings of the peer review on legal form and shareholding requirements.

E-government

The smart use of ICT by public bodies can reduce cost of public administrations by 15-20%. Providing high-quality services in a time of fiscal consolidation requires significant reform and new technology, including cloud computing, can support this change. Estimates show that the adoption of e-invoicing in public procurement across the EU could generate EUR 2.3 billion of savings. It is expected that in most cases, the initial investment would pay for itself in 2 years.

Some Member States (Denmark, Sweden, and Finland13) already use e-invoices. However, these are based on national standards, most of which are not interoperable.

Online content and licences

Access to music, films, TV programmes books and press online is now a huge part of how people everywhere use the internet. Europe has some world leaders in the creative sector and this part of the economy accounted for EUR 280 billion in the EU in 2010 and a workforce of approximately 6.7 million.

Citizens do not understand why they cannot legally access creative content online anywhere in Europe. Geographical blocking of content, which tells them that they are in the wrong territory for accessing what they want to look at, clearly shows that the single market is not working in this area. These obstacles in the copyright area need to be addressed.

Cooperation in different internet-related areas.

Taxation

The shift to the digital economy also raises challenges when it comes to taxation. Traditionally, profits have been taxed in the country where the activities were physically performed which normally coincided with the residence of the customer. With the move to online, new approaches are needed to avoid the emergence of tax loopholes and arbitrage. The VAT one stop shop for online services will begin operation in 2015 and will provide a simple, business-friendly tool to ensure VAT is paid in the place of residence of the customer. Digital companies are also more easily able to apply aggressive tax planning techniquesavailable to all multinational enterprises. The EU is contributing actively to the work of the OECD on Base Erosion and Profit Shifting (BEPS) and notably the developments of solutions for the digital economy.

2. Boosting investment

To give Europe the service its businesses and consumers need in the digital age, investment in state-of-the-art communications infrastructure and networks must be stepped up. The average European mobile data speed is half of that of the US. In Europe, investment in 4G wireless communication is being hampered by regulatory barriers and slow and inconsistent spectrum assignment. Networks in the US, Korea and Japan jointly have 88% of the world's 4G mobile subscriptions, whereas Europe has just 6%. For fixed networks, likewise, European fibre rollout and average broadband speeds trail behind our international competitors. In Korea, 58% of homes are connected by fibre, 43% in Japan, but only 5% in Europe. This is particularly troubling given that new digital developments require connectivity that is fast, reliable and pervasive. We have already moved from a world of emails and simple websites to internet and broadband telephony, file sharing, games and videos. The next generation of technology (cloud computing, 3D printing, e-health, e-government, smart cities, High-Definition TV and tele-presence, big data, connected cars, etc.) will need even more bandwidth and a seamless service across the continent.

As many households are already finding, bandwidth needs rise and quality can drop dramatically when using several different services at the same time.

The regulatory environment has to provide favourable conditions for investment in high speed networks by the whole sector, while promoting competition in the transition from traditional (copper) technology to fibre.

Private investment in telecoms infrastructure has to become more attractive, not least to institutional investors. The savings of governments, companies and households need to be channelled effectively and efficiently. This can be done by various intermediaries (e.g. banks, insurers and pension funds) and by direct access to capital markets. Attracting long-term financing is central to supporting structural economic reform and returning to the long-run trend of economic growth.

3. Safeguarding an open internet

Open and non-discriminatory access to services is essential on the internet. 'Net neutrality' requires that all end-users have open access to the internet and that all electronic communication data passing through a network must be treated equally. A recent report from the Body of European Regulators of Electronic Communication (BEREC) shows that many consumers face blocking of some internet services. Content providers are also worried about internet access providers discriminating in favour of their own content. As a result, several Member States are considering or have already introduced national measures on net neutrality (Belgium, Germany, France, the Netherlands, Slovenia). However, different approaches to this issue risk leading to further market fragmentation.

4. Overcoming a fragmented telecoms market

In the 1990s, Europe held a strong position in ICT – aided by a pro-competitive EU telecommunications framework and stimulated by investment in innovation and standards.

But over time this lead has been eroded for various reasons: policies often failed to adapt, industries failed to capitalise on internet opportunities and not enough has been done to remove the obstacles within our single market. While we have a home market of 500 million people, fragmented regulations often mean EU telecoms operators, service providers and innovative start-ups in effect have to deal with 28 separate market places. The cost of not having a competitive single market in e-communications is estimated at up to €110 billion per year (0.9% GDP). For consumers, the absence of an EU telecoms market is most visible in the form of the roaming charges they must pay when they cross a national border within the EU and want to use their mobile phone. Lack of transparency and competition means consumers and businesses have a limited choice of operator, further driving up costs. On the operators' side, the fragmented market holds back the telecom sector in rolling out the Next Generation Network-ready services (‘NGN-ready’) across Europe. Mobile services have to work with very different spectrum regimes. Operators of networks, both fixed and mobile, face diverging interpretations of EU law. All of these issues need to be addressed at a European level. To ensure high-quality cross-border communications for citizens and businesses, telecoms operators need to operate in an open and seamless single market. To invest in high-speed broadband networks, they need certainty, consistency and competition. And it needs to be easier for them to work across borders including by having a single authorisation system, more aligned rules for spectrum assignment, more consistency in access to fixed broadband networks, and interconnections that guarantee consistent quality. Within this single telecoms market, consumers and businesses should not face unfair charges when they call or roam across borders – and should be protected by net neutrality rules safeguarding an open and innovative internet whilst allowing the development of specialised services.

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