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Consumer behaviour in a digital environment

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Consumer behaviour in a digital environment

DIRECTORATE GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT A: ECONOMIC AND SCIENTIFIC POLICY
INTERNAL MARKET AND CONSUMER PROTECTION

Consumer behaviour in a digital environment

STUDY

Abstract

This study analyses consumer behaviour and the interaction between consumers and businesses in the digital environment. At issue is how consumers benefit from the digital environment and whether and how they change their purchasing behaviour. A number of barriers to e-commerce and a more integrated European digital market are identified and specific policy recommendations are provided.

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CONTENTS

LIST OF ABBREVIATIONS

ACMS	Audio-visual Media Services Directive
CSD	Consumer Sales Directive
DMFS	Distance Marketing of Financial Services Directive
DPD	Data Protection Directive
DSD	Distance Selling Directive
ECC-Net	European Consumer Centres Network
ECD	E-commerce Directive
CJEU	Court of Justice of the European Union
OECD	Organisation for Economic Co-operation and Development
OFT	Office for Fair Trading (United Kingdom)
PECD	Privacy in Electronic Communications Directive
SEMPO	Search Engine Marketing Professional Organisation
SME	Small and Medium Sized Enterprise
SEPA	Single Euro Payments Area
TPM	Technological Protection Measure
UCPD	Unfair Commercial Practices Directive
UK	United Kingdom
UTD	Unfair Contract Terms Directive

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EXECUTIVE SUMMARY

The digital environment has changed the way consumers and businesses interact, provided new opportunities by facilitating access to information and reduced transaction costs. Furthermore, by allowing easier interaction between consumers and sellers in different locations, the digital environment, and e-commerce in particular, is central to the development of the European Single Market. The digital environment is also likely to have wider economic benefits in terms of increased innovation, creativity, learning, instant and unlimited access to information sources, and reduced environmental costs associated with transactions.

The purpose of this study is to analyse European consumers' behaviour in the digital environment based on a review of existing literature and data, and a limited stakeholder consultation exercise. In addition, the study provides information about the extent of e-commerce in Europe and examines how sellers have adjusted their behaviour to the digital environment.

Basic facts about consumers in the digital environment

Forty percent of EU consumers had purchased goods or services online in a 12 month period in 2009/10. Between 2005 and 2010, this figure doubled from just 20%. However, high growth mainly occurred in countries where e-commerce was already widespread in 2005, and consumers in Southern and Eastern Europe are much less likely to have purchased goods and services online.

Online purchases are still very much directed towards the domestic market of the consumer. In 2010, of all those individuals who made online purchase, only 23% did so from a seller based in another EU Member State.

Internet access is a key facilitator of e-commerce and there is a strong positive association between internet up-take in a country and the share of consumers who have purchased goods and services online.

E-commerce facilitates transactions in tangible goods and services but also gives online access to content and digital services (intangible goods). These areas often overlap, for example in case of books/magazines and literary content, CDs and music content, DVDs and cinematographic content, online software and games.

Access to content and digital services create numerous advantages due to low marginal costs of distribution, instant and unlimited access and reduced environmental costs. Opening access to information and content could also lead to increased creativity and innovation.

Despite all the advantages of the digital environment and e-commerce, the internet has also given consumers easier access to illegal content and made distribution easier for sellers. There is agreement among stakeholders that there are obvious problems with the current legal framework for copyright material that limits access to content and information leading to potentially inflated prices. It is possible that improvements to the legal framework that provide consumers with better access to content and information at a reasonable price could help to discourage use and provision of illegal content by consumers.

The internet has led to emergence of a "prosumer" (an individual who is both a consumer and a producer). Compared to the offline marketplace, the digital environment is much more interactive, allowing consumers not only to access content, services and products for consumption, but also to enter the market as creators or sellers of content, products and services through, for example, YouTube, eBay or other intermediaries. This potentially leads to innovation, creativity and consumer empowerment. However, prosumers cannot fully develop under current legal framework.

Consumer behaviour and behavioural biases

Traditional economic theory predicts that consumers are rational consumers who systematically search for and analyse information in the market before making a purchase and seek redress in the event of problems with the purchase. However, obtaining and analysing information may be costly and as a result rational consumers may not search the entire market before making a decision.

In addition, empirical data and the behavioural economics literature suggest that actual consumer purchasing behaviour may be influenced by a number of behavioural biases that may result in suboptimal search effort, influence consumers assessment of information, and cause decision errors. All of these outcomes may be detrimental to consumers.

In addition, firms may have incentives to try to exploit these behavioural biases for their own benefit (for instance by trying to encourage inertia or by making complaining or seeking redress seem very costly). As a result, the higher level of competition online compared to the offline market-place may not necessarily benefit consumers.

Firm behaviour in the digital environment

The internet has opened new opportunities for firms to reach consumers through new advertising and sales channels and made it easier for firms to bring their products to market, manage supply chains, reach new customers and build long term relationships with existing customers.

Although there is evidence of growth in the demand for e-commerce, this is not reflected in increased online presence of EU enterprises. Around 14% of EU enterprises sell goods or services online and this figure has remained relatively constant over the last 5 years. However, there are large sectoral differences in the use of e-commerce (44% of accommodation providers and 6% of construction operators used the internet to sell their services).

There is significant variation across the EU-27 in terms of the use of the internet as a sales channel. In 8 Member States (CZ, IE, DE, LT, NL, SE, DK and BE), more than 20% of enterprises used the internet as a sales channel in 2010, while in 11 Member States, less than 10% of enterprises did so (BG, IT, LV, RO, CY, SK, HU, PL, EL, EE, SI).

The digital marketplace is highly competitive with firms in different countries competing for the same customers and with a high level of transparency. As a result, firms may find their margins reduced in digital environment. However, there are several examples of firms differentiating themselves through brand promotion, advertising strategies, and social networking, and as a result, maintaining profits in the highly competitive digital environment.

There is, for example, evidence that firms may charge price premiums if they can make shopping more convenient e.g. by making websites easier to navigate or by appearing at the top of search results on search engines. However, there is also evidence that firms may be able to charge a price premium by reintroducing market frictions such as reduced price transparency and search frictions.

Price transparency, for example, may be reduced if firms use drip-pricing and hence only show part of the price up-front, but then add additional charges further along the purchasing process. Other examples include market frictions include price-framing, making bundled offers, baiting, and dynamic pricing.

It was originally thought that the internet would make the middleman obsolete. However, while some intermediaries (e.g. travel agents) have almost disappeared due to the internet, there is more evidence of re-intermediation than of de-intermediation. Many of the new intermediaries act as *information intermediaries* or provide platforms bringing together sellers and buyers.

Firms face some important barriers to e-commerce. For example, the costs of developing and maintaining a website, the lack of technical skills and fear of fraud seem to deter a number of businesses.

Due to the complexities involved, cross-border e-commerce raises a number of further problems for firms including the additional costs of shipment, the variable operation of the postal markets, non-standardised payment systems, dealing with post-purchase complaints, and importantly the costs associated with complying with non-harmonised and fragmented regulation. As a result some seller websites do not facilitate cross-border trade. Research has shown that cross-border online orders often fail because consumers are unable to register on the sellers' websites; shipment to the destination country is not possible; or the payment cannot be processed because of lack of standardised payment methods.

Clearly, the lack of an appropriate legal framework for copyright and payment systems blocks development of a digital single market as a true electronic platform that would allow for unlimited access to information and content against a reasonable fee.

Consumer purchasing behaviour in the digital environment

Accessing information

The internet provides consumers with much better access to information and sellers than other sales channels. This improved access to information about products, services and prices has been shown to have positive benefits for consumers. However, some consumers may find the information overwhelming.

Supplier and manufacturer websites, comparison websites, discussion forums and advertisements are all methods consumers use to identify relevant products and services; although search engines play a central role in filtering the vast volume of information and the great majority of consumers use search engines as part of their online purchasing process. For many consumers, the internet is essentially equivalent to Google. However, there is evidence that consumers do not utilise online search and filtering tools fully and only consider websites that appear among the top search results.

Assessment and analysis of information

Price comparison websites and recommendations from other consumers and friends through review sites and social media are also important sources of information. While price comparison websites are not always trusted sources of information, recommendations and consumer reviews are highly trusted sources that have been shown to influence actual consumer behaviour. However, it should be noted that online rankings and reviews may be manipulated by sellers and their competitors.

The issue of what information to trust is of particular importance in the digital environment and consumers perceive the risk of fraud as being greater online than offline. As a result, brand names are of greater importance in the digital environment. Online consumers trust well-known brands and established brands appear to be gaining market share.

One way for firms to build brand awareness is through advertisements. Online advertisements may also be used to generate interactions and more direct purchases and have been shown to influence consumer search. Evidence suggests that the framing of information may have a significant impact on decision making. However, consumer trust in advertising information is relatively low and some consumers find online ads annoying and have privacy concerns about targeted ads. Research has, nevertheless, suggested that the value of the free content paid for by advertisements far exceeds the costs of annoyance and privacy concerns for consumers.

Acting on assessment and analysis

The main drivers of online purchases for consumers are convenience and the potential to save money by purchasing online. Furthermore, consumers feel that they benefit from e-commerce through better deals and more product variety and some consumers feel e-commerce gives them a better shopping experience. However, there is still a large share of consumers who prefer to shop in person rather than online, or believe that they have no need to shop online, and e-commerce purchases remain centred around a few products.

Of those goods and services purchased online, consumers most commonly buy clothes and travel related goods and services. Computer and electronic goods are the least likely to be bought online, which may reflect the high value associated with these goods.

Consumers consistently mention the perceived risks associated with using the internet. Across the EU, 63% of consumers believe that there is an additional risk of online fraud, while 56% believe that there is a risk of others gaining access to personal information. However, there appears to be a discrepancy between consumers stated preferences about privacy and their actual behaviour.

Concerns over privacy risks, fraud, return policies and product and service quality may act as barriers to e-commerce for consumers, particularly for cross-border e-commerce. Further evidence suggests that of the consumers that have not made a cross-border distance purchase, 62% said the fear of fraud had stopped them; 59% were worried about what to do if they encountered a problem; and 49% thought delivery may be an issue. Uncertainty about consumer rights caused 44% of these consumers to abstain from participating in cross-border e-commerce.

Complaints and redress

Concerns related to redress, complaints and consumer rights are much more important for consumers in cross-border transactions than in transactions with domestic sellers and may be related to the fact that European consumer protection regulation and enforcement is not harmonised. Consumers may be confused or uncertain about the implications of the national differences in consumer law and practices.

When consumers purchase in the digital environment they may experience a change in the type of problem incurred compared to purchasing offline. Most typically, problems with e-commerce are related to delivery or the quality of the product or service. However, in some countries, problems with online scams are also very common.

According to stakeholders, the main frustration for complaining online customers is the poor communication levels they may encounter with online traders. However, although consumers often think that problems with online purchases are difficult to resolve, the majority of consumers are happy with the outcome of their complaint.

Post sale service

After an online purchase has been completed, almost three quarters of e-commerce sellers send at least one post-sale e-mail to customers. Post-sale advertising may increase e-loyalty, particularly if the consumer has opted in to the email service. Guarantees, transparent return policies, and order fulfilment have also been shown to increase the likelihood that consumers return to the retailer's website. Evidence has also shown that loyalty reduces the extent of search effort in future purchases.

Recommendations

Our review and analysis has a number of policy implications and gives rise to several specific policy recommendations. Before implementing any of these recommendations, a full impact assessment should be undertaken considering both the direct and indirect impacts on consumers, businesses and other stakeholders. This should be done in order to minimise possible unintended consequences.

For example, if policy makers were to consider a ban on cookies, it would be necessary to take into account that this could address privacy concerns, however, it might also reduce users' access to free online content because targeted advertisements rely on cookies and is a major source of funding for free online content.

In order to support development of e-commerce and in particular cross-border e-commerce we recommend:

1) Reforming EU provisions concerning intellectual property, and in particular copyrights, with the aim of eliminating inefficiencies arising from fragmentation of the Single Market. This could be done by harmonising copyright legislation further to create a more integrated European Digital Single Market.

2) Improving legal access to digital content in order to reduce consumers' incentives to access content illegally. For example, by developing a general system of payment for streamed content which is based on actual use (this could be based on the concept of computation as utility or pay-per-click) or alternatively by basing the system on ownership rather than actual use thus legalising transfer of legally purchased content between different devices owned by the consumer.

3) Increasing the harmonisation of the legal framework for e-commerce in order to reduce compliance costs for businesses and increase consumers' and businesses' trust in cross-border transactions. In particular we suggest:

   a) Reducing the extent of legal fragmentation across the EU with respect to consumer rights, taxation, advertising laws, product liability, guarantees and warranties and product labelling.

   b) Updating the definition of 'consumer' in consumer protection legislation to account for the fact that the distinction between consumers and businesses has become less obvious online.

4) Improving consumer awareness of current consumer protection in place in order to strengthen the level of trust in domestic and cross-border online transactions. Although the consumer is generally protected by his or her local consumer protection legislation, consumers may be confused and uncertain about the implications of differences in national consumer law and practices.

5) Enhancing dispute resolution processes by building online dispute resolution systems that allow for remote out-of-court settlements on an online platform, and integrate these systems with the existing network of European Consumer Centres.

6) Enhancing the level of trust in online traders e.g. by establishing regulated (pan-European) trustmarks for online traders; strengthening the *Trusted Shops* initiative; and increasing awareness of current EU level and national level initiatives.

7) Strengthening the support provided to businesses and individuals wishing to develop the skills necessary to use the internet confidently and to participate more fully in e-commerce.

8) Reducing practical barriers to cross-border e-commerce orders within the EU e.g. by adopting regulation limiting businesses' ability to refuse non-domestic orders from EU consumers at the point of registration, shipment or payment.

9) Restricting potentially abusive pricing practices which have been shown to adversely affect consumer decision making. Most importantly restrictions should seek to reduce adverse effects of so-called drip-pricing, for example, by regulating the number of screens that consumers must click through to determine the final cost or by restricting the size of additional costs (e.g. payment charges) that are not presented to the customer upfront.

10) Enhancing the level of trust in the search results generated by search engines and price comparison sites, by either

    a) adopting regulations either preventing payments from suppliers to search engines and price comparisons sites aimed at influencing the order in which the search results are presented, or

    b) ensuring that users of such sites are clearly and transparently informed by the sites that the order in which the search results are presented may have been influenced by special arrangements between the sites and suppliers.

11) Supporting and strengthening pan-European payment systems such as the Single Euro Payments Area (SEPA) with the aim of reducing transaction costs and improving trust in online payments. We note that it is still too early to assess the impact of SEPA and further initiatives may be necessary to ensure that payment methods are both secure (and therefore can be trusted) and widely available to consumers and sellers across Europe.

12) Supporting initiatives to improve the functioning of national postal markets as a well-functioning postal and parcel service which is an essential infrastructure for e-commerce. Some stakeholders argued that European postal companies are too inefficient and as a result timely delivery may be too costly.

13) Ensuring the provision of national level legal and technical guidance in multiple languages to reduce compliance costs for businesses and help businesses overcome language barriers.

1. INTRODUCTION

E-commerce is central to the development of the Internal Market. The digital market-place provides wider opportunities for consumers and businesses but at the same time may involve additional risks. Trust and confidence in the digital market-place will only improve if basic rights as well as obligations in the digital environment are clear.

At the core of the study of the consumer in the digital environment is the purchasing process that rational consumers would be expected to go through when acquiring a good or service. The analysis focuses on consumer behaviour at the different stages of the purchasing process and contrasts consumer behaviour in the online environment with consumer behaviour in an offline environment.

In addition to analysing consumer behaviour in the digital environment, the study examines how sellers (i.e. companies) have adjusted their behaviour in the digital environment to influence and interact with consumers and sell their products and services.

This study is based on a review of existing material including academic and quasi-academic literature, survey data and other data available from public sources. For each stage of the purchasing process, the various facts and data relevant to that particular stage is presented along with a synthesis of academic and quasi-academic literature. The study focuses primarily on literature addressing the behaviour of consumers in Europe, and where possible, presents data at Member State level drawing out regional trends. The data and literature for other major industrial countries is also discussed where relevant.

A limited stakeholder consultation exercise was also undertaken as part of the study. The purpose of this consultation was to explore in greater depth certain points emerging from the literature review.

The structure of the report is as follows:

- Section 1 contains the introduction
- Section 2 provides general information about consumers in the digital world
- Section 3 discusses consumer behaviour and behavioural biases
- Section 4 reviews firm behaviour in the digital world
- Section 5 analyses how consumers go about searching for and accessing information on the internet when they consider buying a good or a service
- Section 6 discusses how consumers assess and analyse the information they access through the internet
- Section 7 reviews how consumers act on their analysis, and purchase goods or services in the digital world
- Section 8 focuses on complaints and redress
- Section 9 examines some non-complaints related post-purchase interactions between the consumer and the business having sold the good or service
- Section 10 sets out high level conclusions and provides recommendations

2. BASIC FACTS ABOUT CONSUMERS IN THE DIGITAL ENVIRONMENT

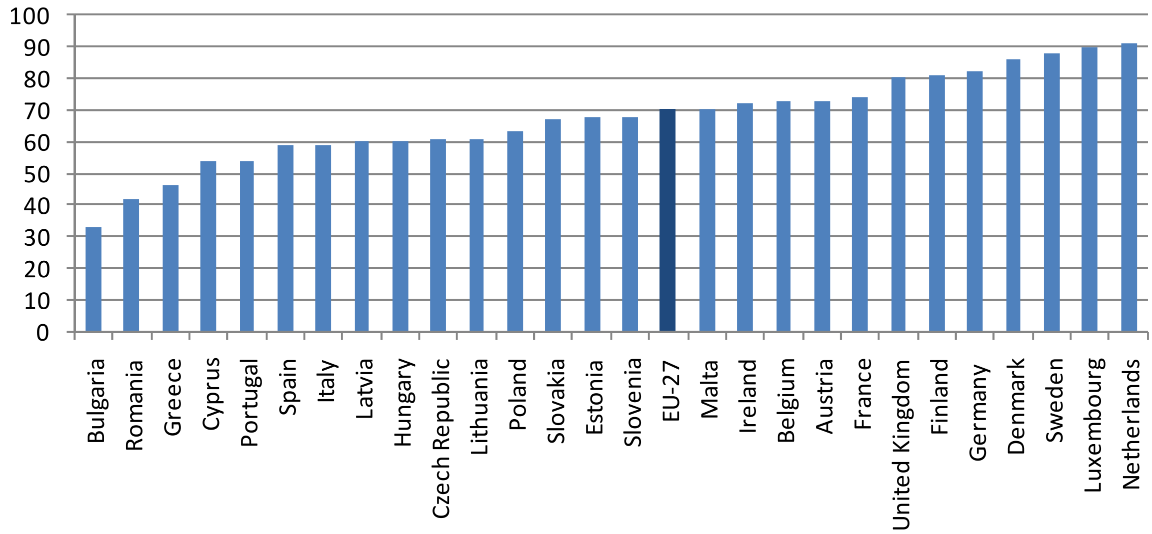
KEY FINDINGS

- In general, the digital environment has provided various benefits for both consumers and businesses. The digital environment is also likely to have wider economic benefits in terms of increased innovation, creativity, learning, instant and unlimited access and reduced environmental costs associated with transactions
- E-commerce is strongly associated with internet access. In 2010, 70% of EU households had access to the internet and 40% had purchased online.
- The high growth in e-commerce between 2005 and 2010 mainly occurred in countries where e-commerce was already well established.
- Online purchases are still very much directed towards the domestic market of the consumer. In 2010, of all those individuals who made online purchase, only 23% did so from a seller based in another EU Member State.
- Consumers increasingly demand personalised products and services and want to be able to purchase them when and where they find it most convenient.
- A comprehensive European legal and regulatory framework is in place; however, the legislation may not apply or may be hard to enforce when consumers interact with sellers outside the EU.
- Consumers are turning into 'prosumers', who both consume and produce online content. There may be a need to revise the definition of 'consumers' in the European legal framework.
- Despite all the advantages of the digital environment and e-commerce, the internet has also given consumers easier access to illegal content and made distribution easier for sellers. Improvements to the legal framework that provide consumers with better access to content at a reasonable price could help to discourage use and provision of illegal content.

2.1. Access to the internet

According to the latest Eurostat data, 70% of households had access to the internet in 2010 across the EU-27 (Figure 1). The Netherlands posted the highest access rate (at 91%); while in Bulgaria, only 33% of households had access to the internet. Internet penetration is generally lower in Eastern and Southern European countries. The proportion of EU households with access to the internet has increased by 46% since 2005.

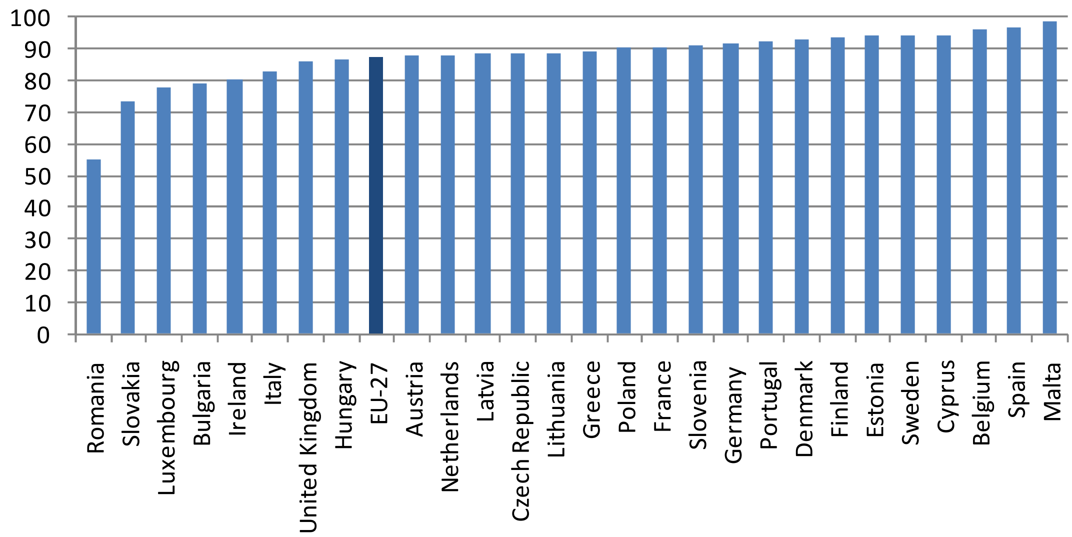
Figure 1: Internet access of households in the EU-27 in 2010 (% of all households)



Source: Eurostat (tsiir040), Figure 1

In all but one Member State, the vast majority of households had access to the internet through a broadband connection. In fact, 90% or more households with access to the internet had a broadband connection in 13 Member States, while in a further 7 Member States, between 85% and 89% of households had a broadband connection.

Figure 2: Household access to broadband as % of internet access in the EU-27 in 2010

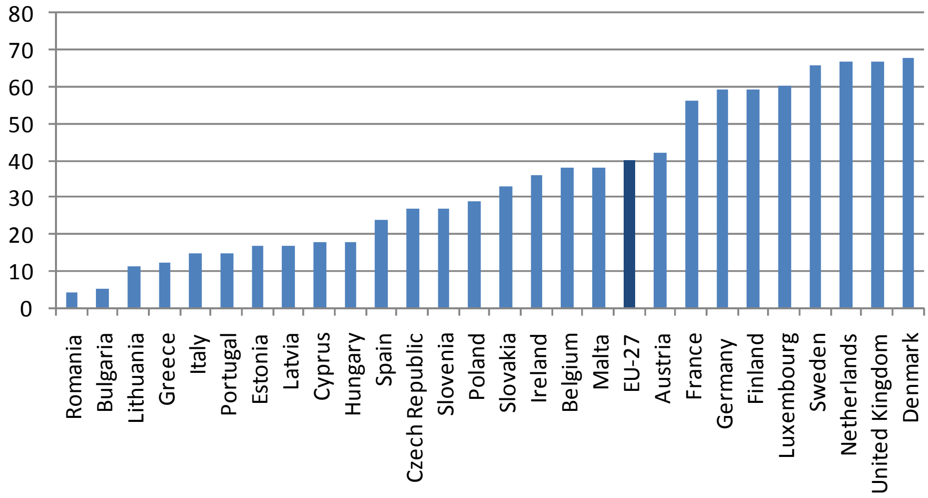


Note: 2009 in the case of the United Kingdom
Source: Eurostat

2.2. Purchases online

Across the EU-27, 40% of individuals purchased goods or services online in the 12 months prior to the latest Eurostat survey (Figure 3). However, the EU-27 average hides large cross-country differences, with less than 25% of individuals having made an online purchase in 11 Member States compared with more than 50% in 8 other Member States.

Figure 3: Internet purchases by individuals 2010 (% of all individuals)



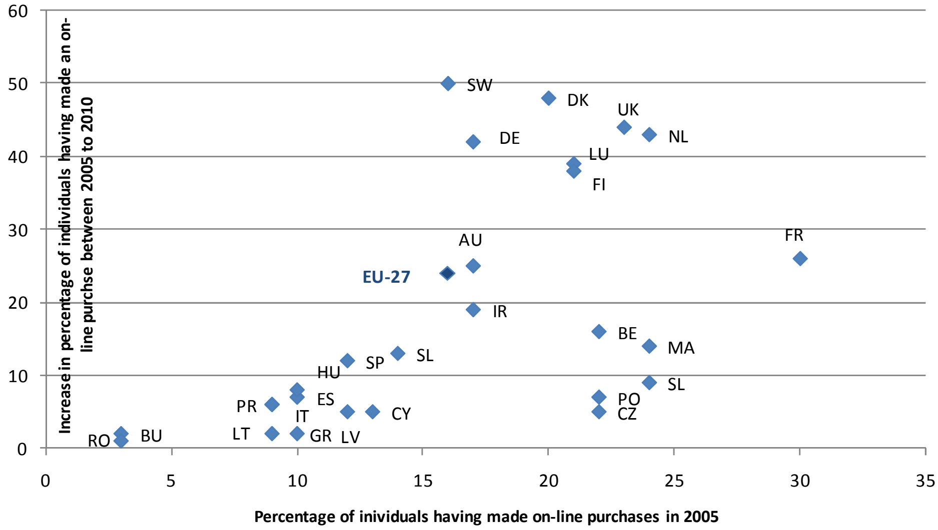
Source: Eurostat (isoc_ec_ibuy)

Overall, online purchasing has doubled between 2005 and 2010 across the EU-27, with an increase in the share of individuals having made internet purchases increasing by 20 percentage points from 20% in 2005 to 40% in 2010. Evidence suggests that older consumers are less likely to have purchased online and among individuals aged 25 to 64 43% purchased online in 2010. There is also indication that men are more likely to buy online than women. In 2010, 46% of men aged 25-64 made at least one online purchase compared with 41% of women in the same age group.

However, the take-up of online purchasing over the period 2005-2010 differs markedly across Member States (Figure 4). In particular, countries with high existing levels of take-up in 2005 also saw the largest increases between 2005 and 2010:

- In 13 Member States, the percentage of individuals making online purchases increased by less than 10 percentage points from 2005 to 2010, and in most of these Member States the percentage of individuals purchasing online was very low in 2005 (Figure 4).
- In contrast, in 9 Member States, the percentage of individuals making online purchases increased by more than 20 percentage points between 2005 and 2010, with many of these Member States already having relatively high online purchase rates in 2005.

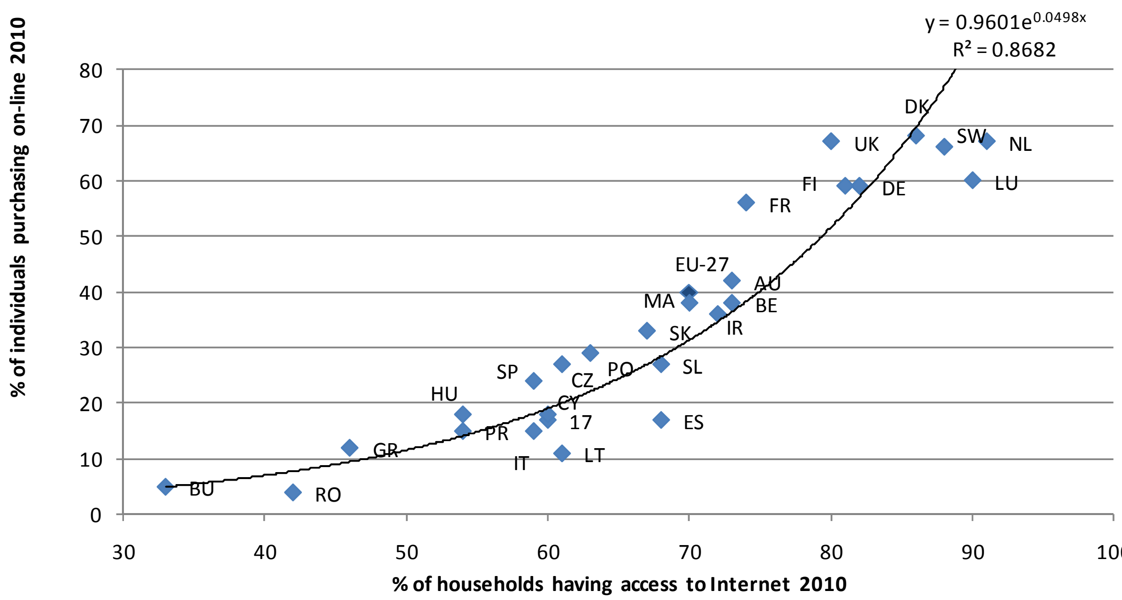
Figure 4: Internet purchases by individuals in EU-27 between 2005 and 2010 (% of all individuals)



Note: 2006 in the case of Bulgaria, Romania and Slovenia
Source: London Economics' analysis based on Eurostat data

Unsurprisingly, internet purchasing varies exponentially with households' internet access rate (Figure 5) reflecting that internet access is a strong facilitator of internet purchases.

Figure 5: Link between 2010 access rates to internet and 2010 online purchase rate

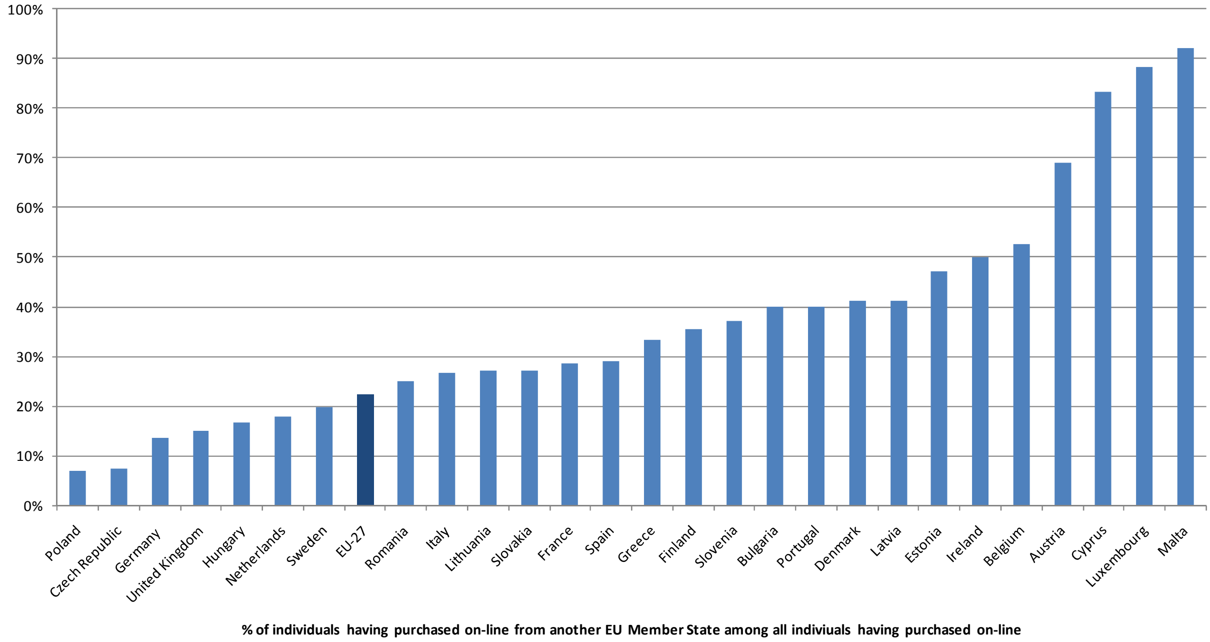


Source: London Economics' analysis based on Eurostat data

Overall, online purchases are still very much directed towards the domestic market of the consumer. In 2010, of all those individuals who made online purchase, only 23% did so from a seller based in another EU Member State (Figure 6).

The practice of buying online from a foreign seller varies considerably across Member States with less than 50% of online buyers in 19 Member States (Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom) having made a cross-border online purchase.

Figure 6: Cross-border online purchases in EU-27



Source: London Economics' analysis based on Eurostat data

2.3. Trends in consumer demand of relevance for understanding the consumer in the digital environment

A recent study for the European Commission identified a number of trends in consumer demand (Helsper, et al., 2010):

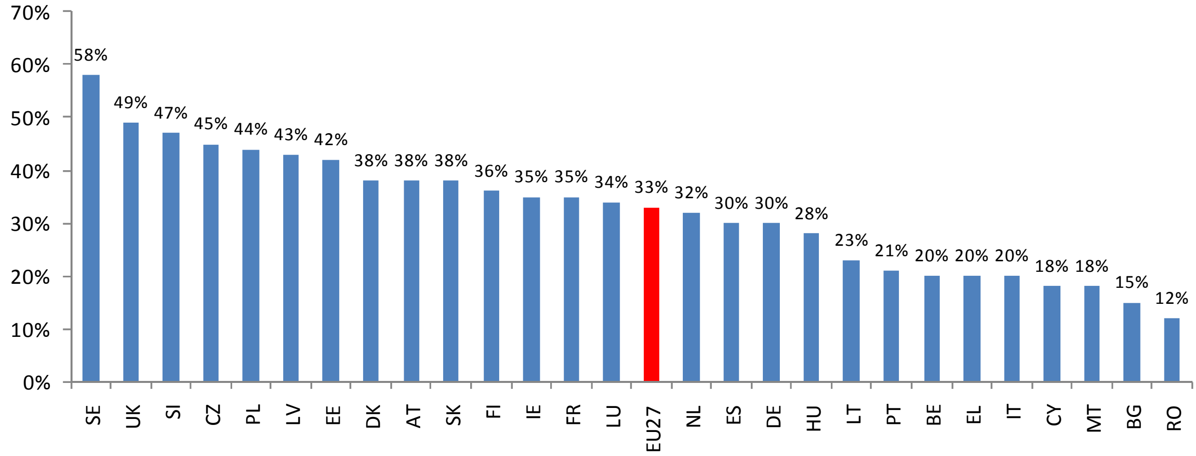
- *Domestication and mobilisation of consumption*. Consumers increasingly consume at home or on the move. In 2008, 12% of consumers have undertaken e-commerce activity in the office (Gallup Organisation, 2008a) and 7% of EU citizens had accessed the internet on their mobile phone. Interestingly, only 5% of women accessed the internet on a mobile device compared with double the amount of men at 10%. In total, 33% of consumers in the EU have access to the internet on their mobile phone. In addition, there is a trend that consumption takes place not only *where* the consumer wants but also *when* the consumer wants. These trends are facilitated by new technologies such as internet and mobile phone services with 24 hour access to sales platforms making it possible for consumers to make orders whenever they find it convenient (e.g. NRC, 2009).
- *Globalisation*. Just as production has become increasingly international, demand is also affected by globalisation trends. Consumers now expect products from all over the world to be delivered to their doorstep. Information and communication technologies have made cross-border trade easier and consumers in very different parts of the world now have access to very similar products.
- *Personalisation*. While mass production is an important part of globalisation, an important counter trend is customisation of products and services to individual needs and wishes. An example of this trend is the increasing importance of tailor made travel packages[1].

[1] Tailor made travel packages are also known as 'Dynamic packages' and their usage and characteristics are discussed in London Economics (2009).

This has given rise to niche markets and globally these niche markets can be linked through e-commerce to form relatively large markets that may be profitable to serve. Personalisation is also related to domestication where products are brought into the home and are 'on demand'. Registration of consumer data supports this trend and makes it possible for sellers, service providers and manufactures to tailor products and advertising to individual consumers.

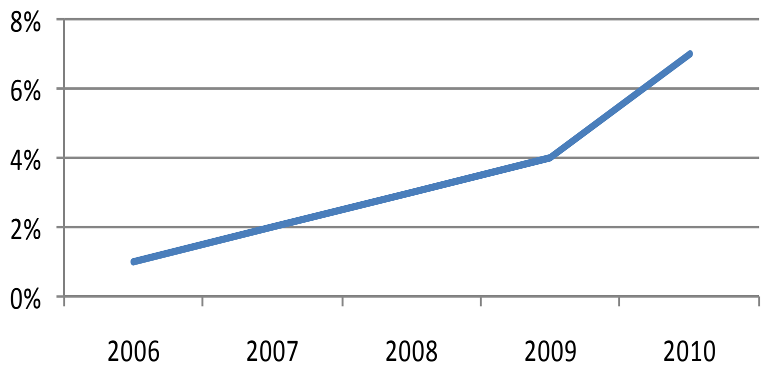
- Special Eurobarometer 335 collects information on the proportion of people that are able to use the internet for playing or downloading music and videos or sending and receiving emails on their mobile phones.
- In Sweden, 58% of consumer respondents said that their mobile phone subscription allowed them to do this, whilst in Romania this figure was only 12%. This shows that there is still a wide gulf in the availability of these services across the EU, whilst the average proportion of consumers able to use the internet on their mobile phones across the EU is 33%.

Figure 7: Percentage of EU-27 individuals <u>who have access to</u> the internet on their mobile phone



Source: Special Eurobarometer 335

Figure 8: Percentage of EU-27 individuals who <u>have accessed</u> the internet via their mobile phone using UMTC (3G)



Source: London Economics' analysis based on Eurostat data (isoc_ci_im_i), extracted 9 May 2011.

2.4. Legal and regulatory environment for e-commerce in EU-27

A number of Directives provide the legal framework for the consumers engaging in e-commerce. These are:

- the Data Protection Directive 95/46/EC (DPD)
- the Privacy in Electronic Communications Directive 2002/58/EC as amended by Directive 2009/136/EC (PECD)
- the E-commerce Directive 2000/31/EC (ECD)
- the Distance Selling Directive 1997/7/EC (DSD)
- the Distance Marketing of Financial Services Directive 2002/65/EC (DMFS)
- the Consumer Sales Directive 1999/44/EC (CSD)
- the Unfair Contract Terms Directive 93/13/EEC (UTD)
- the Unfair Commercial Practice Directive 2005/29/EC (UCPD)
- the Consumer Rights Directive[2]

Annex II provides an overview of these Directives and discusses the interplay with national regulation, as well as areas that are addressed in the current European regulatory framework. Some of the Directives reviewed directly address issues arising from internet use by consumers, while others relate to consumer protection more generally.

2.4.1. Potential problems with the current European framework

As indicated above, the European legal framework is comprehensive and there may be scope for consolidation of some of the current directives (e.g. the DSD and the ECD). Currently, core consumer directives such as the DSD, DMFS, CSD and UTD are being consolidated into a new Consumer Rights Directive.

Although the European legal framework is comprehensive, there are some consumer issues in the digital environment that have not been addressed:

- First, EU consumer protection rules may not apply if a consumer interacts with an online operator who is legally established and located outside the EU/EEA, and even if the rules apply (for example, the data protection rules apply where an operator processes data using equipment within the EU other than for transmission purposes), there are real issues about extraterritorial enforcement.
- Another issue with the current legal framework are the questions of who is a consumer and who should be protected? Consumer protection laws are based on the idea that there is a power imbalance between the business and the consumer; however, the power imbalance may have changed in the digital environment.
- Copyright is another major problem in the digital environment.

Some of these issues are discussed in further detail in the next two subsections of this chapter. In particular, we discuss the emergence of the 'prosumer' and secondly we discuss access to illegal content including illegal access to copyrighted material.

We also note that there is scope for additional harmonisation in the European legal framework. At present, only the UCPD stipulates full harmonisation and there exist considerable differences in national legal frameworks.

[2] Proposal for a Directive of the European Parliament and of the Council on consumer rights Brussels, 08.10.2008 COM(2008) 614/3.

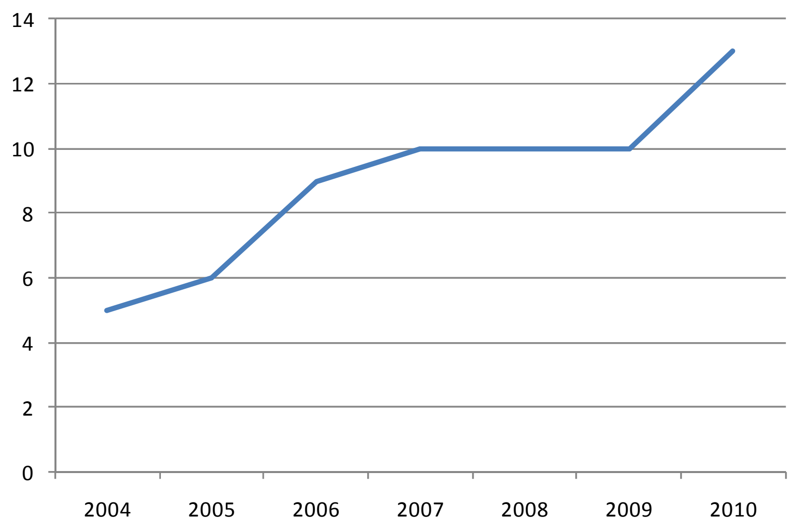
2.5. The rise of the 'prosumer'

While there exist a number of different definitions of a 'prosumer', for the purpose of the present study, a prosumer is an individual who acts not only as consumer but also as producer. In the digital environment, the traditional distinction between consumer and producer has become increasingly blurred, and consumers are often both consumers and producers of content online that is consumed by other consumers.

By giving individuals access to world-wide content, the means to generate content, access to a distribution infrastructure for user-generated content and access to an audience, the internet has had a huge impact on how people communicate and share information and knowledge, and has also encouraged personal creativity and innovation.

Many web 2.0 applications such as social networks, eBay and YouTube allow users to upload, create and sell information. Auction websites such as eBay have made it easier for consumers to sell products and the platform allows users to be consumers and sellers at the same time. In 2010, 13% of all individuals sold goods or services online across the EU-27. This figure has been steadily increasing from just 5% in 2004. Further analysis shows that men sold more on the internet than women.

Figure 9: Consumers in EU-27 who have used the internet for selling goods and services (% of all individuals)



Source: London Economics based on Eurostat data (isoc_ci_ac_i). Data extracted 4 May 2011.

There are, however, as discussed below, some issues related to prosumers and the content they produce.

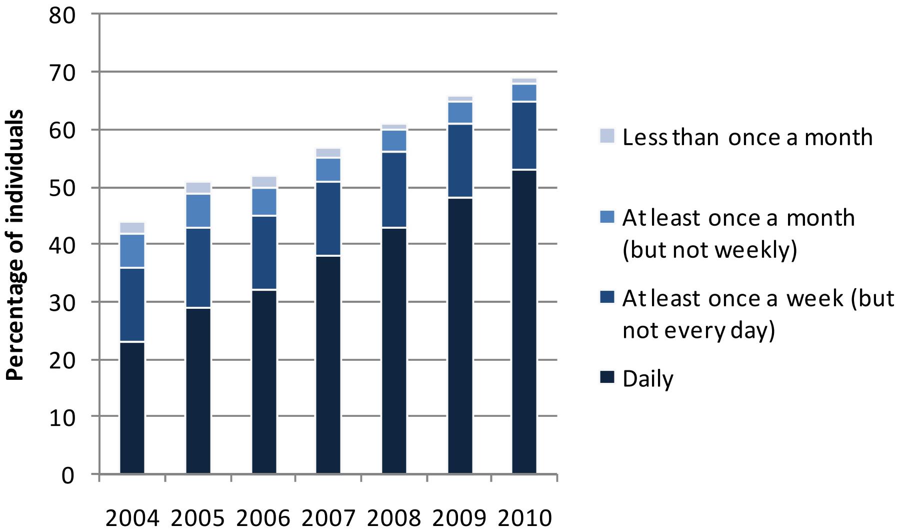
In addition, the current legal framework for the digital environment does not address the new phenomenon of prosumers and this omission may limit the full development of this new aspect of the internet. Current consumer protection rules do not account for 'prosumers', and consumer-to-consumer sales are not currently covered by European law. It is not clear who should be protected in these transactions and how. There is an obvious issue of whether prosumers should be viewed as consumers or businesses and this issue is particularly pertinent on online auction websites. Furthermore, businesses currently have an incentive to pretend that they are consumers when selling online (Civic Consulting, 2010a).

2.6. Access to legal content

One of the main benefits of the digital environment is arguably that it provides users with easier access to content (whether information, services or products). Although this study mostly focuses on consumers in the digital environment and hence the interaction between consumers and businesses in e-commerce transactions, it is also important to note that the digital environment facilitates easier access to many other types of contents and services. This includes content and services provided by public sector providers, charities and other not-for-profit organisations.

As shown above an increasing number of individuals in EU-27 have internet access and thus the possibility to access online content. There is also evidence that individuals use the internet more frequently (Figure 10) and there is evidence of an increasing number of consumer transactions online (see Figure 4 and Figure 9 above).

Figure 10: Frequency of use of internet by individuals in EU-27 (% of all individuals)



Source: London Economics based on Eurostat data (isoc_ci_ifp_fu). Data extracted 10 August 2011.

In 2010, most users had used the internet for communication services (Table 1). Sixty-three per cent of individuals in EU-27 used the internet to communicate; the majority (61%) using the internet to send and receive e-mails and almost a third of users used the internet to post messages.

More than a third of individuals in EU-27 used the internet for internet banking in 2010 and 32% used the internet to interact with public authorities; mostly to obtain information. There has been a clear upward trend in the use of the internet for communication services, internet banking, selling goods and services online and interactions with public authorities (obtaining information, downloading official forms and sending filled forms) since 2004 (12).

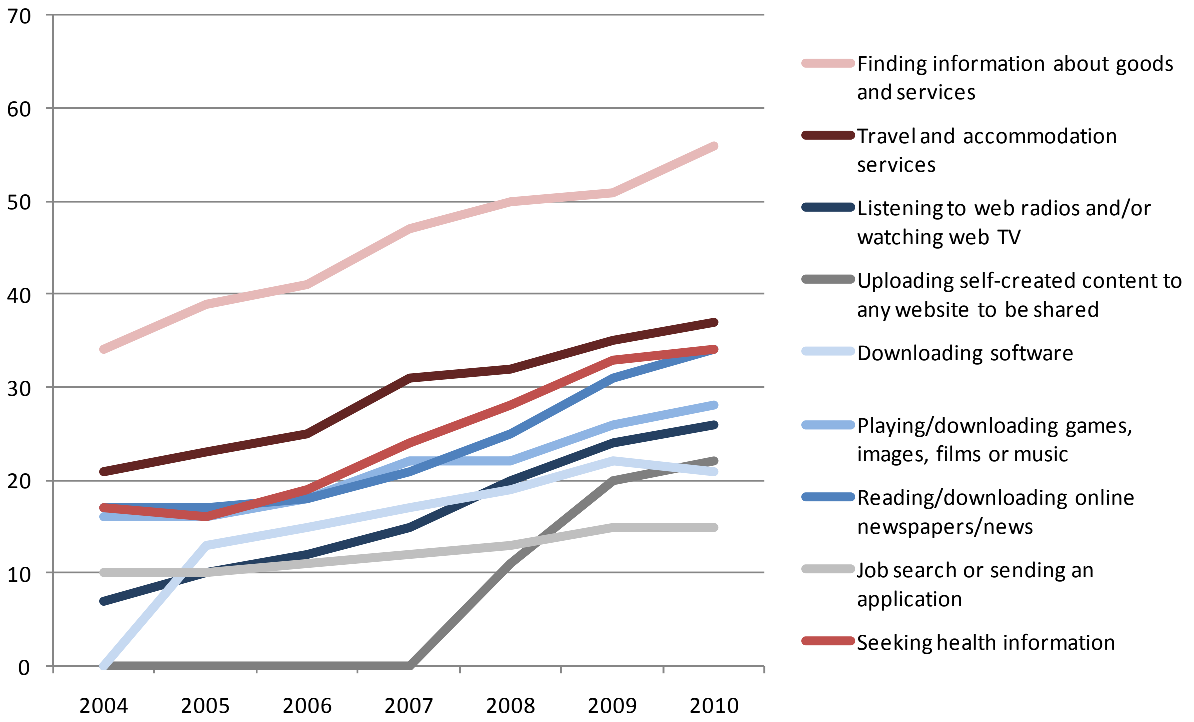
The majority of individuals have also used the internet to search for information about goods and services in 2010. The internet was also used commonly to search for other types of information (e.g. travel and accommodation services, health information, and employment opportunities), accessing digital content (online newspapers/news, games, images, films, music, radio, TV and software) and uploading self-created content. There has also been a clear upward trend in the use of internet for all of the analysed aspects of information search and online services since 2004 (Figure 11). The upward trend in recent years has been particularly strong for uploading self-created content.

Table 1: Activities undertaken online by individuals in EU-27 in the last three months (2010)

Activity	Percentage of individuals
Communication	**63**
- Sending/receiving e-mails	61
- Posting messages to social media sites or instant messaging	32
- Telephoning or video calls	19
Banking and selling goods or services	**n.a.**
- Internet banking	36
- Selling goods or services	13
Interacting with public authorities	**32**
- Obtaining information from public authorities	28
- Downloading official forms	18
- Sending filled forms	13
Information search and online services	**n.a.**
- Finding information about goods and services	56
- Travel and accommodation services	37
- Reading/downloading online newspapers/news	34
- Seeking health information	34
- Playing/downloading games, images, films or music	28
- Listening to web radios and/or watching web TV	26
- Uploading self-created content to any website to be shared	22
- Downloading software	21
- Job search or sending an application	15

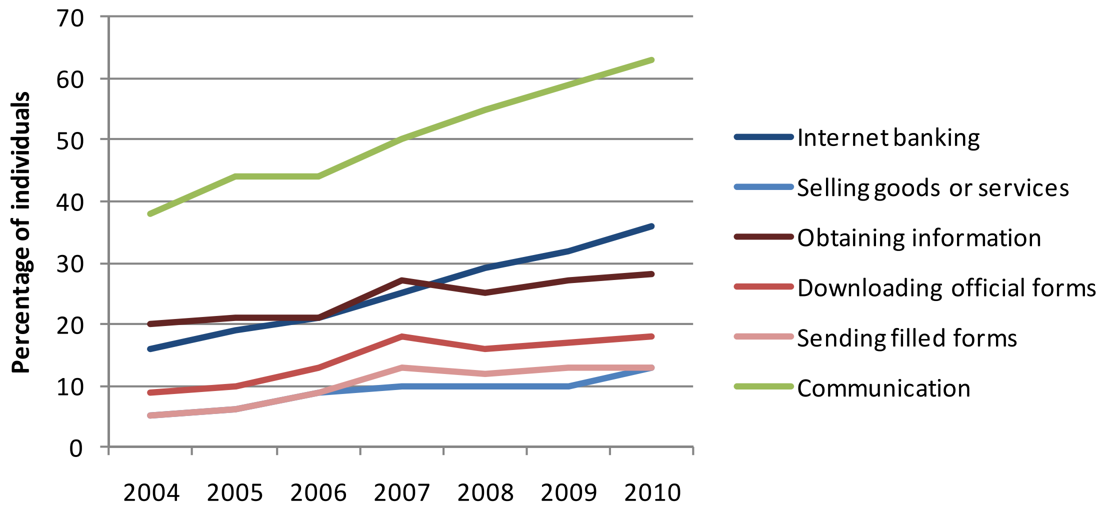
Source: Eurostat (isoc_ci_eu_i). Data extracted 10 August 2011. Note: The activities are not mutually exclusive. Aggregate numbers of 'Communication' and 'Interacting with public authorities' indicate the percentage of individuals who have used the internet for one or more of the activities in that subgroup. Aggregate numbers are not available for 'Information search and online services' and 'Banking and selling goods or services'.

Figure 11: Information search and online services activities undertaken online by individuals in EU-27 in the last three months 2004-2010 (% of all individuals)



Source: London Economics based on Eurostat data (isoc_ci_eu_i). Data extracted 10 August 2011. 'Playing/downloading games, images, films or music' is missing in 2008 in the raw data but for the purposes of this report it has been set equal to the same category in 2007.

Figure 12: Other activities undertaken online by individuals in EU-27 in the last three months 2004-2010 (% of all individuals)



Source: London Economics based on Eurostat data (isoc_ci_eu_i). Data extracted 10 August 2011. 'Communication' in 2004 is missing in the raw data but for the purposes of this report it has been set equal to 'sending/receiving e-mails' in that year.

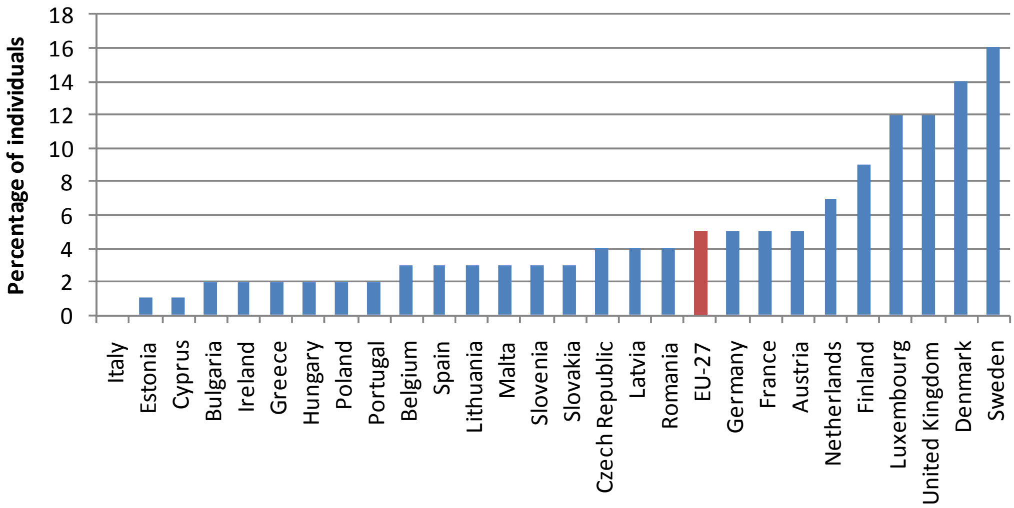
2.6.1. Provision of legal access to content: business models

The content provided to internet users may be funded in a number of ways. In this section we consider only legal access to content and in section 2.7 we discuss illegal access to content in detail.
Legal access to content may be free of charge for the user or may be paid for. Content that is free to users is, generally, funded by advertising revenues or by the public sector. It is worth noting that stakeholders interviewed for this study have highlighted large benefits to consumers of access to free content paid for by online advertising (discussed in further detail in section 5.4.3).

Some businesses have also developed business models charging for access to content, for example, on 'pay-per-consumption' or subscription basis (European Commission, 2009b). Although, most content is funded by advertising, participants on the 'Content Online Platform' hosted by EC DG Information Society and Media suggested that most providers of quality content would continue to charge for access (European Commission, 2009b). Platform participants also suggested that more and more consumers are willing to pay for legal online offerings and accept limitations to the availability of online content.

Across EU-27, 5% of consumers paid for access to audiovisual content in a three month period in 2008. The share of individuals who paid for access was above 10% in Luxembourg, the United Kingdom, Denmark and Sweden. In comparison, the share of individuals who had paid for access to audiovisual content in Eastern and Southern European countries was generally lower than the EU average.

Figure 13: Percentage of individuals who have paid for audiovisual content in the last 3 months (2008)



Source: London Economics based on Eurostat data (isoc_cias_avp). Data extracted 9 August 2011.

The success of the different business models (and paid content vs. free content) largely depends on the type of content being sold. For example, video-on-demand is typically provided either though a more traditional rental service (pay-per-consumption) or on a subscription basis. The subscription based model is now generating more revenue in Europe than rental model (KEA, 2010). Major players in the European video-on-demand market include iTunes and xBox. YouTube has also stated that it is investigating entering the market for paid content and in 2010 it announced the launch of a film rental service that will offer independent content in the near future (KEA, 2010).

However, the paid-content business models which seem to work for video-on-demand do not seem to work nearly as well for newspapers and news. Digital content is generally free for users and funded by advertising revenues. Online subscription models have generally failed in this market (ScreenDigest et al., 2006).

2.6.2. E-commerce: tangible and intangible goods

The remainder of this report mainly focuses on e-commerce and the interactions between consumers and businesses. In this context, it is worth noting that e-commerce includes both transactions involving tangible goods such as electronics, groceries and toys which need to be physically delivered to the consumer and transactions involving access to digital content, services and products which can be delivered digitally to the consumer (intangible goods). It is worth noting that some goods exist as both tangible and intangible goods. For example, books, newspapers and magazines, music, videos, online software and games.

Intangible and purely digital goods are probably less likely to suffer from some of the most common problems related to e-commerce: delayed or non-delivery of goods (problems and complaints in the digital marketplace are discussed in further detail in section 8).

However, the Internal Market for purely digital goods may suffer from some of the same problems as the market for tangible goods. In particular, cross-border access may be limited and some businesses may only wish to sell to consumers in some European Member States.

For example, the audiovisual sector is highly fragmented across Member States. This fragmentation is mostly due to traditional cultural and linguistic differences between Member States which have required different versions of films and television programmes in different Member States. Versioning of films for different markets requires significant investments in advertising, labelling, subtitling, dubbing, etc. and as a result territorial licensing contracts have traditionally been used (KEA, 2010).

Market fragmentation is potentially a greater barrier for consumers of purely digital goods than for consumers of tangible goods: If a product is only available in one Member States, consumers from other Member States can physically pick up the product in that Member State. This may be more difficult or practically impossible to do for purely digital goods. However, we note that the difference between tangible goods and intangible goods may in practice be relatively small because the costs of picking up a tangible good in another Member State may be sizable.

In order to address market segmentation by Member States for purely digital goods, stakeholders have called for 'de-territorialisation' of content distribution (European Commission, 2009b).

In comparison with tangible goods, it is also plausible that transaction costs for purely digital and intangible goods are lower because no physical storage and delivery is required. As a result, we would expect prices for products that are available both as tangible goods and as purely digital intangible goods to be cheaper in the digital format than in the tangible format. This could further imply that the potential benefits for consumers of e-commerce could be greater for intangible goods than for tangible goods. However, to our knowledge there is no thorough analysis of price data to confirm how prices for tangible goods compare with prices for intangible goods online.

Although prices and transaction costs may be lower for intangible goods than for tangible goods, Helsper, et al. (2010) argue that the digital environment has changed rather than reduced the costs associated with a given transaction. While storage and delivery costs may be reduced, consumers' search costs could have increased because consumers have to search through more information online (as discussed in section 5). This is of particular relevance for products that are both available as tangible and intangible goods.

For these products it may not always be the case that transaction costs are lower for the online purchases of the intangible good than for offline purchases of the equivalent tangible good.

2.6.3. Benefits of legal access to content

It is widely acknowledged that one of the main benefits of the digital environment is instant and unlimited access to content. This has facilitated the new demand patterns discussed in section 2.3 (domestication, mobilisation, globalisation and personalisation) and it has been argued to widen the breath of content available to users though access to online libraries, etc. (ScreenDigest, et al., 2006).

In the context of e-commerce (i.e. transactions in the digital environment) this means that consumers have better access to information about sellers and products; that consumers benefit from increased product choice; and that business users benefit from improved access to more markets and consumers. For a more detailed discussion of the benefits of e-commerce to consumers and businesses, we refer to section, 7.6 and section 4.1, respectively.

The benefits to users of access to content is likely to have been and continue to be one of the main drivers behind the increased use of internet and online services in the European Union and worldwide.

The digital environment has provided wider benefits such as increased innovation, creativity, learning, and reduced environmental costs (for a discussion of social impacts of the digital environment see for example Universität Siegen (2010)). Such benefits may arise, for example, if employees are able to work from home using the internet which would lead to reduced environmental costs. Across the EU-27, 47% of employees in EU-27 worked from home and accessed their work via the internet at some point in 2006.[3]

Wider social benefits could also arise from e-commerce transactions; particularly from transactions involving intangible goods that require no physical delivery. Compared to offline purchases of the same products there could be a reduced environmental impact.

We note that policy making in the digital environment should take the wider benefits and the impacts on wider benefits into account in order to avoid unintended consequences of policy changes. This is best done through detailed impact assessments of policy proposals. We note that while this study provides a number of policy recommendations to address the issues identified in the study, a detailed impact assessment of each of the proposals considering the social benefits has not been undertaken.

2.6.4. Obstacles to legal access to content

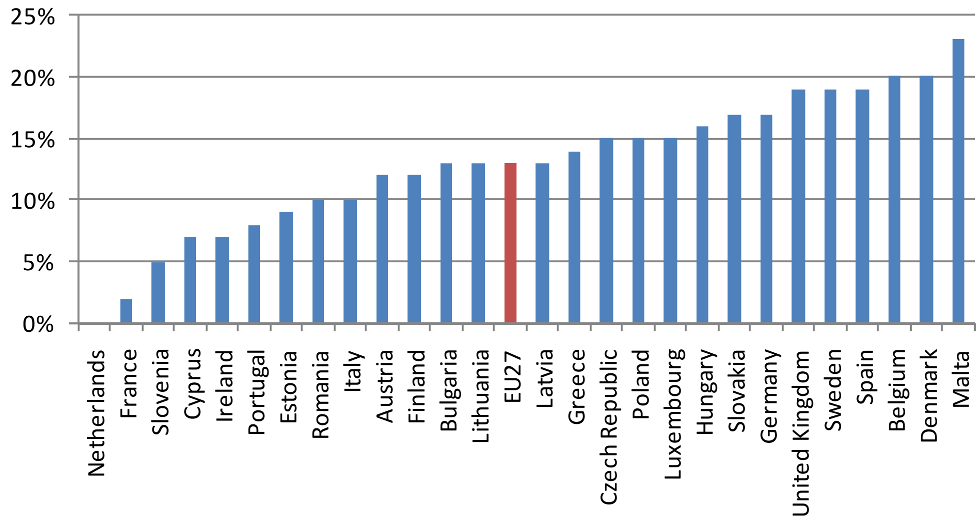
It is important to note that there continue to be a number of obstacles to the provision of legal access to content.

Stakeholders have argued that the large supply of illegal (and free) content online makes it almost impossible for legitimate online providers to compete with illegal providers because many consumers seem unwilling to pay for legal access to content. This view is somewhat supported by data. Across the EU, 13% of citizens indicate that they have no willingness to pay for online audiovisual content. There is some variation across Member State, with more than 20% of respondents in Belgium, Denmark and Malta stating that they have no willingness to pay for online audiovisual content while no respondents in the Netherlands indicate this to be the case (Figure 9). Eurostat data also suggests that a higher proportion of men indicate they have no willingness to pay compared to women.

[3] Eurostat (isoc_ci_tw_p). Accessed 10 August 2011.

We note that lack of willingness to pay for audiovisual content may very well be linked to the low marginal costs of production and distribution of purely digital content.

Figure 14: Percentage of individuals in EU-27 who indicate no willingness to pay for online audiovisual content (2008)



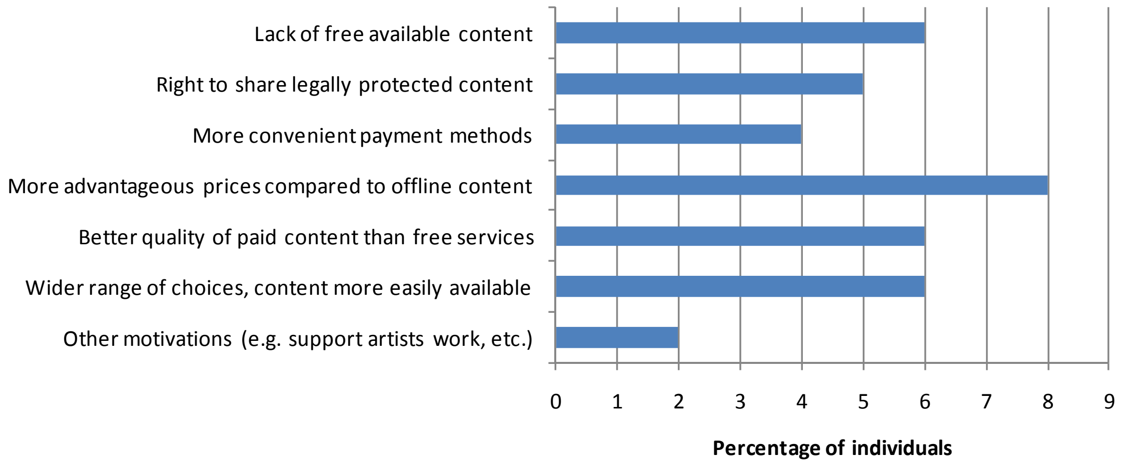
Source: London Economics' analysis based on Eurostat data (isoc_cias_avp). Data extracted 5. May 2011.

However, other stakeholders argue that the key issue in relation to piracy is not price but availability and Helsper, et al. (2010) argue that there are in fact relatively few convenient and licensed media services on the internet. According to stakeholders, consumers will look for other (illegal) ways of obtaining content if they are prevented from achieving immediate legal access to the same content. In addition, some stakeholders have pointed out that it is problematic that consumers in some Member States cannot legally copy digital content they have purchased between different devices. Private copying exemptions exist in Member States such as France, Germany and Belgium and are being introduced in the UK.

Some stakeholders also argue that consumers would often prefer the option of paying for services and content but others argue that for businesses to be able to require payment for services for which illegal content is also available non-price factors such as quality, legality and availability must be important to consumers. Data from Eurostat suggests that more consumers may be willing to pay for legal access in the future. In particular, consumers who have not previously paid for audiovisual content online might consider it in the future if it gives them the right to share legally protected content; if it is cheaper than comparable offline content; if the quality of paid content is better than the quality of free content; and if it provides them with a wider range of choice and easier access to content.

However, we note that in comparison a much higher share (13%) indicated that they have no willingness to pay and 6% indicate that they would only pay if there was a lack of free available content.

Figure 15: What could incentivise consumers who have not paid for access to audiovisual content to pay for it in the future? (% of individuals, 2008)



Source: London Economics based on Eurostat data (isoc_cias_avp). Data extracted 9 August 2011.

2.7. Access to illegal content

Despite all the advantages of the digital environment and e-commerce, the internet has also given consumers easier access to illegal content and made distribution easier for sellers (Gentry, et al., 2006).

Illegal content may include anything from counterfeit products through illegal sale of copyrighted products to child pornography. In this section we discuss access and usage of:

- non-licensed copyrighted material (e.g. books, films, music);
- counterfeit goods (i.e. copies of patented goods); and
- child pornography.

2.7.1. Consumer demand and benefits

Measuring the availability and use of illegal content is difficult just like measurement of other types of illegal activity. However, in general, economic theory predicts that individuals are willing to supply and/or use illegal content if the benefits of doing so exceed the expected costs of the punishment.

One of the factors affecting the benefits associated with using illegal content is the price. For example, buyers of non-licensed copyrighted material and counterfeit products benefit from a lower price than buyers of the same licensed material. This means that there are clear benefits and incentives for consumers to use illegal content (Wee, et al., 1995; and Bloch, et al., 1993); especially if there is little social stigma associated with using the material and if the risk of punishment does not act as a sufficient deterrent.

The demand for child pornography is likely to be very different from the demand for counterfeit goods and pirated material. Firstly, the demand is likely to be driven more by physical or psychological desire than by the wish to achieve savings. Secondly, usage is associated with much stronger social stigma.

Ang, et al. (2001) argue that consumers' perception that buying counterfeits and non-licensed goods is not unethical may stem from the philosophy of sharing. Although consumers may view it as unfair on manufacturers of genuine brands and rights holders, it is not viewed as unethical. Ang, et al. (2001) also argue that media reporting of the value of licensed and genuine products and the profits made may have dampened any thought of ethics associated with counterfeit purchases.

The demand for counterfeit products depends on the quality and price differences between genuine and counterfeit products. Genuine products are generally of a higher quality and there is higher value associated with genuine brands. As a result, consumers will generally have a lower willingness to pay for counterfeit products than for genuine products. In addition, consumers will, generally, have a higher willingness to pay for counterfeit products than for generic products of the same quality because counterfeit products offer some of the same brand value as genuine brands.

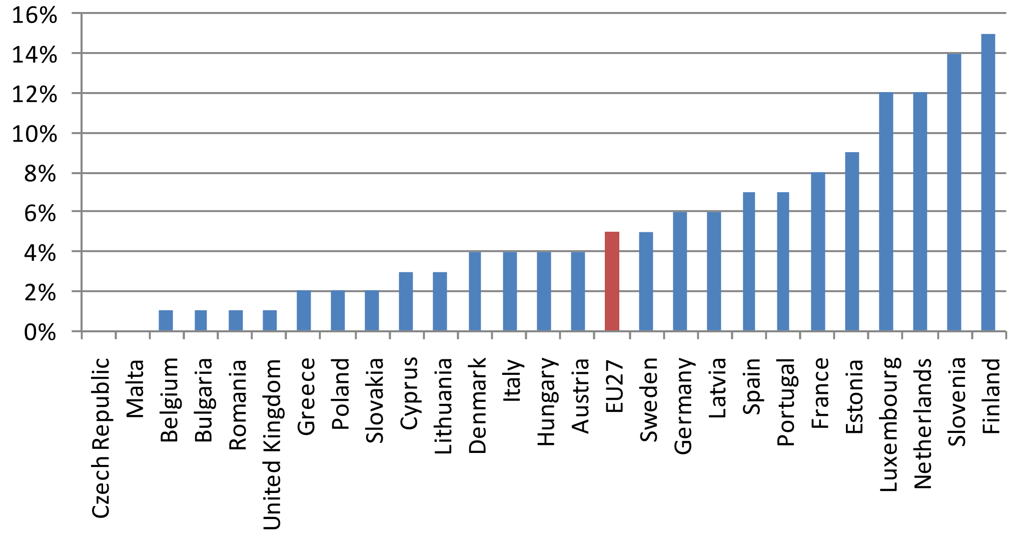
As discussed in section 2.6 key drivers of demand for non-licensed copyrighted material are likely to be lower costs of unlicensed material and lack of availability of legal access.

2.7.2. Prosumers as providers of illegal content

The rise of the prosumer and the exchange of products and files online between consumers have arguably exacerbated copyright issues (as argued by Helsper, et al., 2010), problems with counterfeit goods, and led to easier access to illegal content. This may be both intentional and non-intentional.

A 2009 survey of UK consumers shows that 73% of UK consumers who had bought copyright protected digital or audio content did not know what they were allowed to do with it (Consumer Focus, 2010). It is also notable that 5% of EU citizens think that they have a right to share legally protected content, with marginally more men than women expressing this view. The number exceeds 10% in Luxembourg, the Netherlands, Slovenia and Finland. In addition, as will be shown in the section reviewing the legal and regulatory environment, the legal framework for copyright issues is not yet harmonised across the EU, and there are few convenient and licensed media services on the internet (Helsper, et al. 2010).

Figure 16: Percentage of individuals in EU-27 who feel that they have a right to share legally protected content (2008)



Source: London Economics; analysis based on Eurostat data (isoc_cias_avp). Data extracted 5. May 2011. No data available for Ireland.

Business stakeholders have pointed out that new products and business models emerging on the internet may contribute to this confusion over what exactly is legal under copyright laws. For example, it may not be clear who is responsible for compliance with copyright laws on social network sites that feature user-generated content, such as YouTube.

It should be noted that prosumers often do not supply illegal content to obtain monetary benefit. However, because the cost to the individual of supplying the digital content is close to zero, people may have incentives to supply the content in order to keep the network functioning so that they may continue to have access to other digital content without having to pay for it (OECD, 2009).

Prosumers may also play a role in providing counterfeit products through online sales platforms such as eBay. However, there is little evidence of the extent to which this occurs.

2.7.3. Commercial providers of illegal content

Firms that provide illegal content often have large economic incentives to do so. Standard economic theory predicts that profit maximising firms will only provide illegal services or products if the benefits to the firm of doing so exceed the costs associated with providing the service or product and the expected cost of being caught and convicted.

This is, for example, the case in the market for counterfeit medicine, where genuine pharmaceutical products often command high prices or are subject to high levels of demand, while simultaneously, current legislation does not provide a strong enough deterrent to discourage counterfeiters (Parliamentary Office of Science and Technology, 2010). In addition, the internet provides counterfeiters with ready access to markets outside regulated medicine supply chains.

Globally, the market for counterfeit goods is estimated at $300bn, with the International Chamber of Commerce estimating that counterfeit products account for 8% of world trade (Gentry, et al., 2006). Trade in counterfeit products is often highly profitable with high margins and strong demand (Ang, et al., 2001). Sometimes, the profitability of counterfeiting for providers requires that unscrupulous producers are able to deceive consumers regarding the quality of their products (Grossman and Shapiro, 1988). Some consumers may prefer the genuine product to the counterfeit product because the price of counterfeit products is not low enough to compensate for the lower quality and the lower brand value. As a result, counterfeiters may try to deceive consumers to believe that the quality of the counterfeit product is higher than it is.

There is also a small commercial market for illegal pirated content that services niche markets. This may be a highly profitable business because of the low cost of operation, especially if commercial providers can mislead users into thinking they are legal providers (OECD, 2009).

Commercial providers are also active in the market for child pornography online and one of the ways child pornography is distributed is through commercial websites where customers pay for a subscription access[4].

2.7.4. Problems associated with counterfeiting and piracy for consumers

Although there is clearly a demand for illegal content, all consumers may not benefit from counterfeiting and piracy.

First, some consumers may buy and use illegal content without knowing it. For example, in the case of counterfeit products consumers may intend to buy the genuine brand but may have difficulties identifying bona fide sellers. This may be an issue online in particular, where consumers may find it more difficult to evaluate the quality of the product and the seller before they make the purchase.

[4] According to the European Financial Coalition: http://www.ceop.police.uk/EFC/Background/

Stakeholders have pointed out that if consumers unintentionally find themselves in receipt of counterfeit goods, there are major problems in achieving redress. For example, eBay and Amazon do not have specific policies with regard to redress for counterfeit goods. In the case of eBay, it acts as mediator between buyer and seller when there are problems; however, if a trader disappears and therefore doesn't enter into the mediation process, there is no policy for ensuring the consumer achieves redress.

In addition, consumption of counterfeit and pirated products has negative externalities on consumers of the genuine and licensed products. For example, counterfeit status goods impose a negative externality on consumers of genuine items because fakes degrade the status associated with a given label (Grossman and Shapiro, 1988). Furthermore, consumers of genuine and licensed goods may pay more for their goods than would otherwise be the case because rights and patent holders lose revenue to the illegal goods and content.

2.7.5. Problems associated with counterfeiting and piracy for rights holders and manufactures of genuine brands

Stakeholders have pointed out that the impact of copyright infringement on rights holders is financial and generally rights holders collect little revenue through online services. This significantly affects the ability of rights holders to grant licenses, even for legitimate sites that are trying to operate in a niche. In addition, manufactures and copyright holders spend significant amounts combating piracy and counterfeiting (Gentry, et al., 2006).

However, there is an argument that counterfeiting actually increases sales of some real life products, by introducing the consumer to a low-grade version of the good, which then leads them then go on to purchase the real good (Gentry, et al., 2006).

2.7.6. Challenges for the legal copyright framework

The Copyright Directive 2001/29/EC has harmonized some aspects of copyright but there are still potential issues with the European legal framework. We have identified the following challenges:

- The exceptions to copyright still differ significantly from Member State to Member State.
- Licensing arrangements through collecting societies have not been harmonized.
- Some Member States have introduced laws allowing restrictions on internet access for connections where illegal file-sharing has been conducted (UK: Digital Economy Act, France: HADOPI). This may lead to market distortions and raises the question of whether the right to internet access introduced by the Framework Directive[5] is infringed.
- Finally, the issue of who is responsible for clearing copyright on social media such as YouTube is not clearly defined in the e-commerce directive because peer-to-peer sites were much less prevalent when the directive was written.

As a result, some stakeholders argue that the legal framework for copyright issues is not yet properly harmonised across the EU and needs updating to reflect the current reality of the digital environment. Furthermore, they argue that traditional intellectual property right laws are useful to fight physical piracy but less effective in terms of online infringements.

[5] Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications. Official Journal of the European Union L108 of 24/4/2002 p. 33.

Other stakeholders argue that the legal framework is adequate but lacks sufficient enforcement. Enforcement is, however, complicated by the fact that there is such a large number of potential suppliers, and the fact that suppliers are often consumers rather than businesses. This problem is compounded to by the fact that the people distributing these goods operate all over the world (also outside the EU), in different jurisdictions that are covered by different laws and regulations. Furthermore, the flexibility of digital piracy means that suppliers can easily shift their activities to markets where the legal regimes are weaker (OECD, 2009).

Another issue in relation to enforcement of copyright protection is the role of Internet Service Providers (ISPs). ISPs argue that their role in the market should remain neutral and have warned against recent moves to involve ISPs in the battle against piracy, arguing that there are both technological and privacy issues related to tracking users' online traffic and use of illegal content.

Stakeholders point out that small scale infringement on personal websites is less of an issue than peer-to-peer file-sharing through intermediaries, where millions of files are being made available in breach of copyright law. Furthermore, several stakeholders argue that more should be done to encourage legal and licensed access to content and that discussion is required as to how copyright levies can be implemented more effectively. It is possible that improvements to the legal framework that provides consumers with better access to content and information at a reasonable price could help to discourage use and provision of illegal content by consumers.

3. CONSUMER BEHAVIOUR AND BEHAVIOURAL BIASES

KEY FINDINGS

- 'Rational' consumers are expected to systematically search for and analyse information in the market before making a purchase and seek redress in the event of problems with the purchase.
- Empirical data suggest that actual consumer purchasing behaviour may be influenced by a number of behavioural biases, and as a result, may deviate from fully 'rational' consumer behaviour.
- Firms may have incentives to try to exploit behavioural biases for their own benefit (for instance by trying to encourage inertia or by making complaining or seeking redress seem very costly).
- As a result, the higher level of competition online compared to the offline market-place may not benefit consumers.

In order to gain a good understanding of the consumer in the digital economy, it is important to take account of the fact that the consumer may not always behave like the textbook prediction and that businesses may aim to benefit from such non-textbook consumer behaviour.

3.1. The "rational" consumer

A fundamental assumption in traditional economic theory is that individuals act as rational decision makers. The rational decision-maker weighs up the costs and benefits of different alternatives before choosing the alternative that maximises her/his utility. When doing so, the rational decision-maker makes use of all available information unless obtaining it is too costly.

At the core of our analysis of consumer behaviour in a digital environment is the rational purchasing process depicted in Figure 17[6].

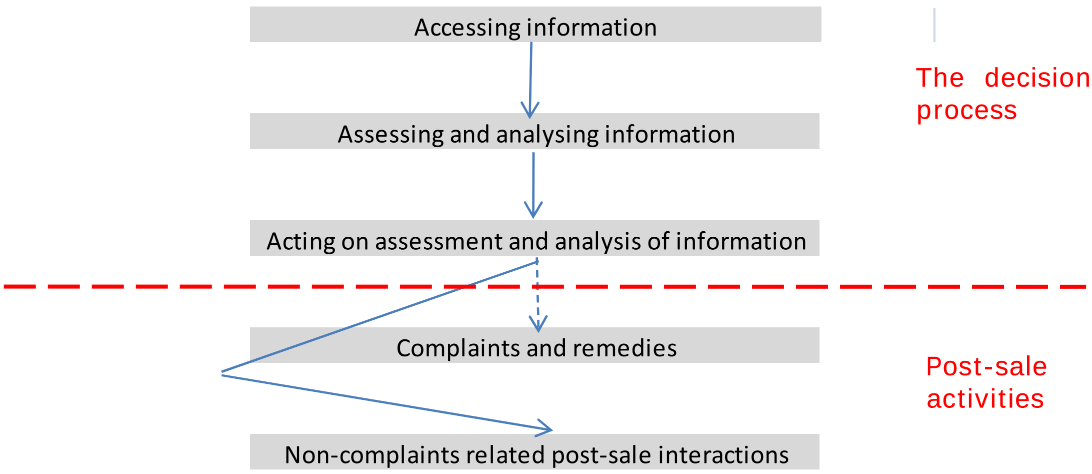
- Firstly, rational consumers would be expected to search for and access information.
- Consumers would then be expected to assess and analyse the information they have acquired.
- Thirdly, consumers would be expected to act on their assessment of the available information.
- After the purchase, there may be a problem and rational consumers would be expected to seek or consider seeking redress through a complaints process.
- Furthermore, additional post-sale non-complaint interactions may occur. Such interactions may in turn influence the consumer purchasing process for future purchases.

[6] The framework is an adaptation of the access-assess-act framework in OFT (2010c).

The different stages are shown in the figure overleaf.

Obviously, depending on the nature of the good or service, the importance of a particular stage and its duration will vary, however, even in the case of the simplest, most commonly bought products a similar process can be identified at least implicitly if not explicitly.

Figure 17: The consumer purchasing process



3.2. Deviations from the “rational” consumer and behavioural biases

While the figure above sets out the consumer purchasing process of a rational consumer, empirical studies suggest that consumers do not always behave in the manner assumed by the rational consumer model. For example, they may not make use of all the information at their disposal (Payne and Bettman, 2001; Bröder and Newell, 2008; Deshmuckh, Fatemi and Fooladi, 2008; Timmermans, 1993).

Behavioural economics is concerned with situations where human information processing and decision-making behaviour may not exactly follow the rational agent assumptions but instead exhibits behavioural biases. The behavioural economics literature has identified the following behavioural biases:

- **Cognitive limitations:** Consumers have limited ability to process information or select between large numbers of alternatives (see e.g. London Economics, 2010).
- **Default positions:** Consumers appear to be heavily biased in their decision-making by their endowment or default position, and as a result, may fail to properly consider alternatives to their default product or supplier (Kahneman and Taversky, 1979; Taversky and Kahneman, 1991).
- **Hyperbolic discounting:** If consumers have a choice between a large and a small payoff in a given time period, consumers will in general prefer the high payoff. However, this may not necessarily be the case if consumers have a choice between a small pay-off in the near future and a larger pay-off in the more distant future. Hyperbolic discounting would predict that consumers in this case prefer to receive the smaller payoff today rather than the large payoff in the future.

This implies that the consumer's preferences with respect to the two options are not constant across time, and as a result, consumers may, for instance, overspend today with the intention of saving tomorrow (DellaVigna and Malmendier 2004, 2006).

- **Loss aversion:** Consumers tend to put more weight on losses than on gains of equal size and consumers may be overly concerned about avoiding losses (Karle and Peitz 2009, 2010).
- **Framing of information:** The quality of consumer decision making is sensitive to the way information is presented to them (Office for Fair Trading, 2010b).

Such behavioural biases may impact the quality of the decisions consumers make and their ability to make well-informed and rational decisions. In particular, behavioural biases may impact the steps in the decision process presented in Figure 17:

- **Accessing information:** Behavioural biases may imply sub-optimal search effort. For example, cognitive limitations may imply that consumers search less and stop searching when they find a good-enough solution rather than continue to search to find the best solution. Default biases may also lead to reduced search effort.
- **Assessing and analysing information:** Behavioural biases may make it difficult for consumers to accurately assess their alternatives. Assessments may, for example, be influenced by reference points defined by consumers' default position, mis-predictions of future demand and an over-emphasis on possible losses. As a result consumers may overestimate the price they are willing to pay for a good or service, or the quality of a product or service. Cognitive limitations may also imply that consumers adopt *rules of thumb* to help them to assess information. Finally, consumers' assessment of information may be influenced by the way the information is presented to them.
- **Acting on information and analysis:** Behavioural biases may imply that consumers choose the wrong product or service, or alternatively, they fail to choose at all. For example, experiments have shown that consumers may fail to make a decision if there are too many alternatives available to them (Reeson and Dunstall, 2009) or if they are overconfident that they will make a decision in the future.
- **Complaints and remedies:** Consumers may place too much emphasis on potential losses associated with making a complaint and seeking redress and may therefore choose not to complain even if they have a legitimate complaint.

3.3. Business responses to behavioural bias

Firms may try to exploit behavioural biases at each step of the purchasing process, for example, through the way information is presented to consumers.

In some circumstances, firms may also be able to benefit from those who do not search the market properly or sell poor quality products or services to those who misjudge quality.

Firms' post-sale activities may also try to exploit behavioural biases, for example, by trying to create inertia or by making complaining seem very costly.

All else being equal, one would generally expect firms to be less able to exploit market imperfections when the market is highly competitive.

E-commerce would generally be associated with increased competition (i.e., e-commerce is likely to increase the number of firms facing a consumer in the market for a specific product/service) and improved transparency in the market. Thus, one would expect e-commerce to reduce the firms' capacity to exploit consumers' behavioural biases. However, this may not always be the case.

A recent literature review published by the UK Office for Fair Trading (OFT) shows that improved competition can improve outcomes for consumers if behavioural biases do not affect consumers' desire to find "better deals" (OFT, 2011). These include default positions, loss aversion and hyperbolic discounting. In these cases, an increase in the number of firms in the market can improve outcomes for consumers because these biases simply change the slope or position of the consumer's demand curve. However, consumers continue to behave as standard models of rational behaviour predict and they continue to exert demand-side competitive pressure on firms. Firms then compete given these adjusted demand curves (Heidues and Kozegi, 2008; Karle and Peitz 2009, 2010; Eliaz and Spiegler, 2006). Note that there may be allocative inefficiencies if consumers pay "too" high a price for some goods because what they are willing to pay for a given good is affected by their biases. However, competition still works such that there is an incentive for firms to compete for consumers.

On the other hand, when search effort is affected, the review concludes that market entry of additional firms can make consumers strictly worse off. This is because firms have no longer a clear incentive to offer "better deals". These situations include biases associated with cognitive limitations and framing of information because these biases affect the ability of consumers to search the market, make comparisons between products and thereby exert competitive pressure on firms.

In these cases the demand-side of competition does not work effectively and the introduction of more firms in the market does not necessarily improve outcomes for consumers (Piccione and Spiegler, 2009; Chioveanu and Zhou, 2009; Kalayci and Potters, 2010). In these cases, options such as standardisation of information to make information less complex can help consumers. Consumers may also learn that their choices have been affected by how information is framed (OFT, 2010b), and in markets which consumers enter frequently, the negative effects of their biases may dissipate over time.

4. FIRM BEHAVIOUR

KEY FINDINGS

- The internet has opened new opportunities for firms to reach consumers through new advertising and sales channels and made it easier for firms to bring their products to market, manage supply chains, reach new customers and build long term relationships with existing customers.

- Around 14% of EU enterprises sell goods or services online and this figure has remained relatively constant over the last 5 years; however, there are large sectoral differences in the use of e-commerce (44% and 6% of accommodation and construction operators, respectively, used the internet to sell their services)..

- There is significant variation across the EU-27 in terms of the use of the internet as a sales channel. In 8 Member States (CZ, IE, DE, LT, NL, SE, DK and BE), more than 20% of enterprises used the internet as a sales channel in 2010 while in 11 Member States, less than 10% of enterprises did so (BG, IT, LV, RO, CY, SK, HU, PL, EL, EE, SI)

- In an attempt to price differentiate, firms have found ways to identify themselves through brand promotion, advertising strategies and social networking and therefore continue to make profits in the highly competitive digital environment.

- Some firms may use a number of different pricing strategies to ease competitive pressures in the digital environment including drip-pricing, price-framing, making bundled offers, baiting, or dynamic pricing.

- While some intermediaries have almost disappeared due to the internet, there is significant evidence of re-intermediation with new intermediaries acting mostly as information and search channels.

- Barriers to e-commerce for businesses include the costs of developing and maintaining a website, fear of fraud and lack of skills.

- Due to the complexities involved, cross-border e-commerce raises a number of additional problems for firms including the additional costs of shipment, the variable operation of the postal markets, non-standardised payment means, dealing with post-purchase complaints and complying with non-harmonised regulation.

4.1. The impact of the digital environment on businesses

Business stakeholders have pointed out a number of advantages of the digital environment for businesses:

- The internet has opened new opportunities for firms to reach consumers through new advertising and sales channels and made it easier for firms to bring their products to the market and reach new customers.
- The internet has also made it easier to ensure good supply-chain management because sellers often know what they have sold before they need to deliver it. Hence sellers can serve existing consumers better.

- The digital environment also allows companies to display a narrative which is not possible in-store (e.g. show a video of the product), provide more information to consumers, and enable a forum for customer feedback.
- Strong brands can build and exploit brand loyalty because consumers generally are more loyal to brands in the digital environment as a result of trust concerns.

4.2. Online sellers

4.2.1. Business models

There exist several different business models that companies can adopt to try to sell their goods and services to consumers online (OFT, 2007a):

- Pure play
- Bricks and clicks
- Sales via a third party site

Pure play businesses sell purely online, or with a small number of physical sites that buyers can visit to pick-up or return products. Compared to offline retailers, they may face lower infrastructure, staff, and inventory costs. However, pure play online retailers may incur additional costs when attempting to establish brand loyalty and retain customers.

Firms that combine an online store and a network of physical stores are known as “bricks and clicks”. High street retailers use internet retailing to attract new and more customers, offer a wider range of products and for marketing purposes. Businesses say that shoppers often browse on the internet and buy offline. Moreover, benefits may accrue from the high street name which is often trusted more than purely online retailers. However, they may face higher costs from combining their existing distribution.

The final business model identified in the OFT study is third-party platforms. This includes online auctions and other electronic marketplaces. The report showed that 44% of online sellers in the UK had used a third party platform. These intermediaries allow businesses to reach customers they may not have been able to attract before. Small and young businesses are the most likely to sell via this platform.

4.2.2. The top internet retailers in Europe in 2008

The top ten internet retailers in Europe in 2008 were dominated by German, French, American and UK firms (Table 2) Of particular interest is the fact that this group of 10 represents a mixture of pure-plays (Amazon, Dell (at that time), Vente Directe, CDiscount) and bricks and clicks (Argos, Quelle, Otto, Neckerman, Tchibo and Fnac). Some of the latter retailers were already well-established catalogue retailers before the emergence of the internet as sales channel.

Table 2: Top internet retailers in Europe in 2008

Rank	Name	Headquarter	Total internet turnover (€)	Total company turnover (€)	% of sales via internet
1	Amazon	USA	13,006	13,006	100
2	Dell	USA	9,869	9,869	100
3	Argos	UK	1,103	5,494	21
4	Quelle*	Germany	1,100	4,300	25
5	Otto	Germany	875	1,667	50
6	Neckermann	Germany	800	1,400	57
7	Vente Privee	France	692	692	100
8	CDiscount	France	670	670	100
9	Tchibo	Germany	640	3,200	20
10	FNAC	France	560	4,690	12

Source: http://www.retail-index.com/HomeSearch/RetailersinEuropedatabaseEnglish/Top10InternetRetailersinEurope.aspx

4.2.3. Brick and click: Complementarity or cannibalisation of existing sales?

A potential issue for 'brick and click' sellers is that online sales may or may not add to overall sales. Avery, et al. (2009) studied the effects of broadening the ways in which retailers sell their products, by combining 'brick and mortar' stores with catalogue and online sales channels. The study tried to uncover whether adding these additional channels complement or cannibalise sales in the 'bricks and mortar' store.

The theory of cannibalisation is that sales may shift from existing channels to new channels without an incremental boast to sales, meaning that the different channels are competing with each other. Deleersnyder, et al. (2002) suggest that this is more likely to occur when channels closely duplicate each other and target the same customers.

The complementarity hypothesis suggests that alternative sales channels work side by side and increase the total sales achieved by firms. Customer heterogeneity is one factor that may cause this if some consumers prefer online sales whilst others prefer buying items in-store. Additionally, customers in general may feel that online sellers offer lower prices (Cotlier, 2001), although those with 'brick and mortar' stores as well as online stores are more trustworthy than those selling purely over the internet (Tang and Xing, 2001). It should be noted that the latter finding refers to 2001 and that it is now well-established that pure internet sellers may also enjoy high reputation and repeat custom. Furthermore, some studies have shown that retailers who offer multiple sales channels achieve higher customer loyalty and through this can become more profitable (Shankar, Smith and Rangaswamy, 2003; Wallance, Giese and Johnson, 2004). Stakeholders have also pointed out that businesses are developing business models linking online and offline sales, for example, by developing the potential to *increase* sales by sending customers from online stores to offline stores where they can pick up goods with the possibility of additional spend.

Another reason why multiple sales channels can increase total sales is because of the additional advertising effect that increases brand awareness (Ansari, Mela and Neslin, 2005). This explains why in the longer term, additional sales channels can complement existing sales channels and lead to increased sales.

The two contrasting hypothesis (cannibalisation vs. complementarity) suggest that firms may not always be able to expand sales by launching another sales channel (either introducing a physical store or by starting online sales). Avery, et al. (2009) show that cannibalisation and complementarity effects may vary over time, channel and type of consumer. In general, opening retail stores to accompany catalogue and online sales channels cannibalises short-term sales, however, there may be complementary effects in the longer term.

The use of multiple sales channels may not only affect sales but could also affect firm productivity, and as a result, costs. Konings and Roodhooft (2000) found that the introduction of an e-business strategy by firms in Belgium had no effect on the total productivity of small firms although it did have positive effects on the performance of larger firms.

4.3. Strategies used by sellers in the digital market

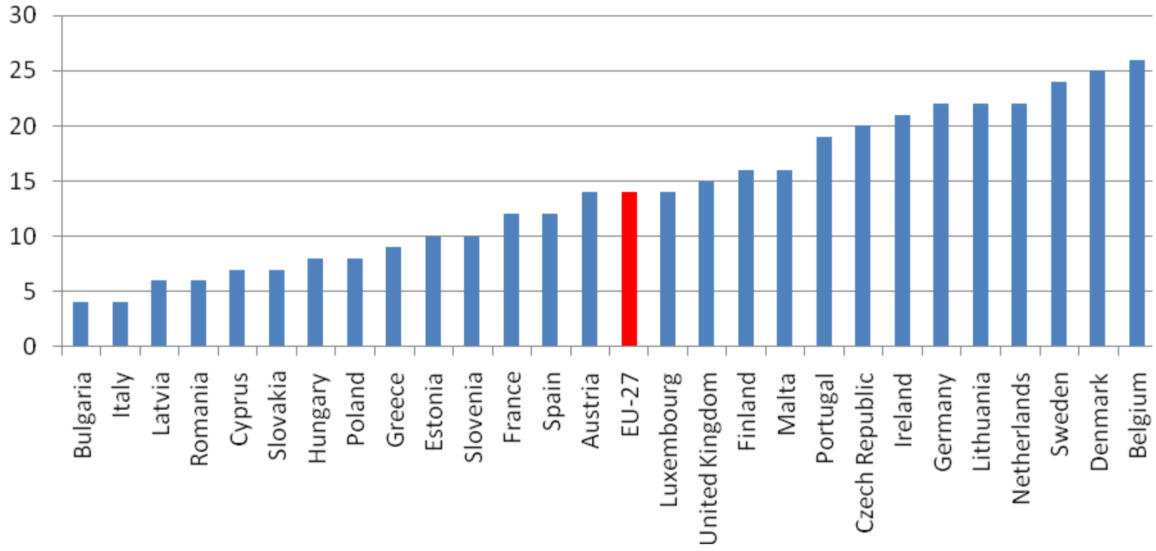
4.3.1. Businesses use of websites and social media

Overall, European businesses only use the internet as a sales channel to a very limited extent. According to the latest Eurostat data, only 14% of enterprises across the EU-27 sold goods or services via the internet or another network in 2010 and this figure has changed little over the last 5 years.

There are large sectoral differences in the use of e-commerce with 44% of accommodation providers using the internet to sell their services, and 22% of businesses in the information and communication sector using the internet as a sales channel. Eighteen per cent of wholesale and retail businesses use e-commerce.

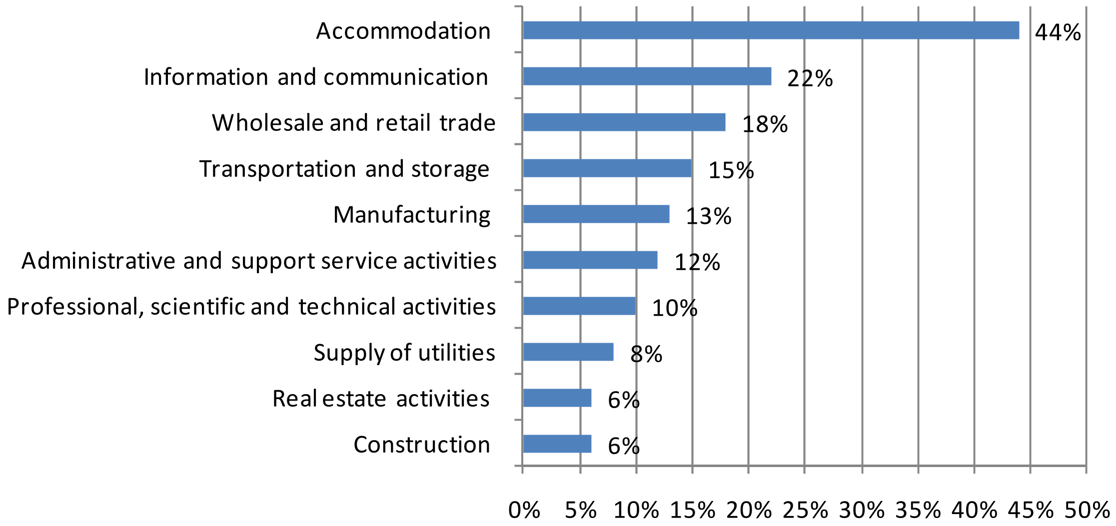
Moreover, there is significant variation across the EU-27 in terms of the use of the internet as a sales channel. In 8 Member States (Czech Republic, Ireland, Germany, Lithuania, Netherlands, Sweden, Denmark and Belgium), 20% or more of enterprises used the internet as a sales channel in 2010 while in 11 Member States, 10% or less of enterprises did so.

Figure 18: Enterprises selling online (% of all enterprises) in 2010



Source: Eurostat

Figure 19: Enterprises selling online in 2010 by sector (% of all enterprises)



Source: Eurostat (isoc_ec_eseln2) extracted 16 June 2011.

A survey of Danish businesses provides more detailed information on the use of internet as a sales channel by businesses. It showed that 88% of Danish businesses had a website in 2010, and while 48% had a website which provided product and price information only, 24% had a website that could facilitate online ordering, reservation or purchasing. It should be noted that although the website may not facilitate online shopping, businesses may take orders via e-mail. Furthermore, 7% of Danish businesses had an online service that consumers could use to track their order.

The survey also showed that 9% of Danish businesses deliver products in an online format and hence can deliver the product immediately after the purchase without using offline delivery channels.

Table 3: Use of own website by Danish businesses in 2010

	Percentage of Danish businesses
Have a website	88%
Have a website with price and product information	48%
Have a website with consumer service or post-sale support	26%
Have a website that can facilitate online ordering, reservation or purchasing	24%
Have a website with a personalised user interface	10%
Deliver products and services in an online format	9%
Have an order tracking service on their website	7%
Have a website with personalised products	5%
Have security certificates on their website	5%

Source: IT- og Telestyrelsen, 2011. *Det digitale samfund 2010*.

The results of the Danish survey are similar to those of a recent German survey of domestic small and medium sized enterprises (SMEs). The results suggest that 94.5% of German SMEs either have or plan to have their own website with the main aim of having a website being increased publicity followed by the acquisition of new customers and an improved image in the market-place.

The German survey also shows that 13% of German SMEs use web 2.0 tools such as social networks and platforms that encourage 'prosumer' activity (Bundesministerium für Wirtschaft und Technologie, 2009).

The use of social media seems to be closely associated with use of e-commerce more generally. A survey of Italian retailers operating online suggests that around two thirds of retailers with an online operation use social media (Casaleggio Associati, 2011). This could be by facilitating contact between consumers and consumer support on social media or by selling directly to consumers via social media.

4.3.2. Increased competitive pressures leading to lower prices

The creation of the internet was supposed to lead to a frictionless marketplace. For example, in 1997, The Economist (1997) noted `...industry titans such as Bill Gates, the boss of Microsoft, regale the world's leaders with the promise of "friction-free capitalism".

A similar point of view was expressed by an OFT study which concluded that the characteristics of e-commerce will tend to lower barriers to entry into the market, reducing the potential for suppliers to develop and utilise market power due to increased competition (OFT, 2000).

It was widely argued that the availability of low-cost information on pricing online, particularly on price comparison sites, would lead to a situation in which all internet retailers charged the same price for mass-produced physical goods. Price would fall towards marginal cost as no-one would be able to charge more for their product as consumers would simply buy the good elsewhere.

There is some empirical evidence that prices typically are lower online than offline (and as discussed in section 7.6 consumers also think that better deals are available online). Clay (2002) using data on book stores in the U.S confirmed the price-reducing effect of the internet. He found that the unit price for online stores was statistically significantly lower than for physical stores. Another similar price-reducing finding was found for the life insurance industry in the Brown and Goolsbee (2002) study. It concluded that the introduction of the internet, particularly search comparison sites, reduced term life prices by 8% to 15% and increased consumer surplus by $115-215 million/year.

Although there are also a few studies that find that prices online are higher than in comparable markets offline, in a review of the literature, the OFT (2007b) finds more studies suggesting that prices are lower online than the opposite.

Most empirical studies also appear to suggest that price variation is lower online than offline (OFT, 2007b). However, prices for a given product have not converged to a single price across all sellers, and although lower than offline, it is widely acknowledged that price dispersion persists in the digital environment despite the increased competitive pressures. This finding is to a large extent attributed to use of differentiation strategies by firms (see for example Ba, Stallaert and Zang, 2007).

4.3.3. Differentiation strategies

Economic theory suggests that given the large number of online sellers and the potentially large competitive pressures, businesses may attempt to differentiate themselves from their competitors. If they are successful at achieving this, they may be able to charge a price premium and subsequently increase profits.

A recent Italian survey of retailers operating online suggests that indeed only 5% do not have an online differentiation strategy.

The main differentiating factor identified by 41% of online retailers is brand credibility (Casaleggio Associati, 2011). Brand value can be built through advertising (online or through other media) and through customer review sites and social networking sites (Helsper, et al., 2010). We discuss the different advertising strategies in further detail below.

Other factors important in helping retailers differentiate themselves online include the development of their product range (indicated by 35% of Italian retailers operating online), customer retention techniques (indicated by 29%), and pricing strategies (indicated by 27%) (Casaleggio Associati, 2011). We discuss pricing strategies in further details below. The Italian study also suggests that 44% of short-term investments in e-commerce are devoted to marketing activities while 22% of resources are devoted to improving the online customer experience.

The online stores may also offer varying degrees of customer service to differentiate themselves from other sellers in the market-place. For instance, bookstores vary in the speed in which they can deliver a book to the customer. Other initiatives that bookstores used to differentiate themselves from the competition involve loyalty programmes and large advertising activities, which are likely to encourage repeat business from consumers (Clay, 2002).

Empirical results provided by Arce-Urriza and Cebollada (2008) suggest that firms are successful at differentiating themselves online with price sensitivity being lower online than offline and brand loyalty being higher online than offline.

4.3.4. Advertising strategies

Some industry stakeholders argue that a combination of offline and different online advertising strategies is most effective and necessary. However, other industry representatives argue that online advertising is more cost effective than offline advertising and that targeted online advertising is the more effective form of marketing (targeted online advertising is discussed in further detail in the next section).

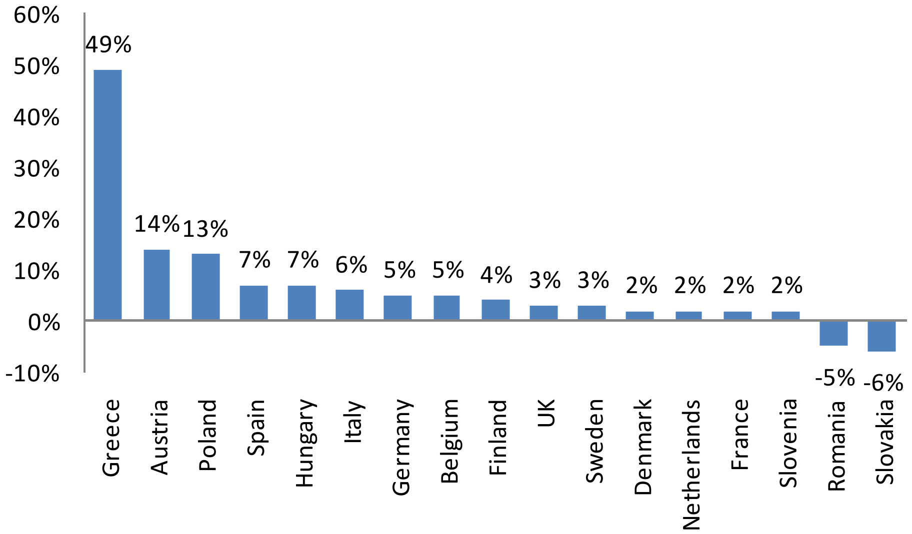
Payment for online advertisements is often directly linked to the degree of interaction resulting from an advertisement (e.g. the number of clicks or the number of purchases). Data on these interactions also provides information to sellers about what advertisement works and how and equivalent data is not available from offline advertising. This makes it difficult to assess the effectiveness of offline advertising relative to online advertising.

Traditionally, online advertising was viewed as a means to generate click-troughs to the seller website and result in sales more immediately than through most offline advertising channels (such as TV, radio, magazines, billboards, etc.). This was because online advertising is more interactive than offline advertising. However, online advertising is increasingly recognised for its ability to build brand value like traditional advertising.

It should be noted that content websites generally finance their services through advertising and so far micropayment systems for content sites (such as newspapers) have not gained widespread consumer acceptance (Helsper, et al., 2010). The wide use of advertising revenue to finance content websites implies that there is a large supply of advertising space and as a result that the price of advertising online is relatively low.

IAB Europe estimates the total value of online advertising expenditure in Europe in 2009 at €14.7bn[7]. This amounts to a like-for-like growth in online advertising expenditure of 4.5% between 2008 and 2009. The largest growth occurred in Greece (49%), however, in Romania and Slovakia, online advertising expenditure shrank between 2008 and 2009.

Figure 20: Growth in online marketing expenditure (% change from 2008 to 2009)

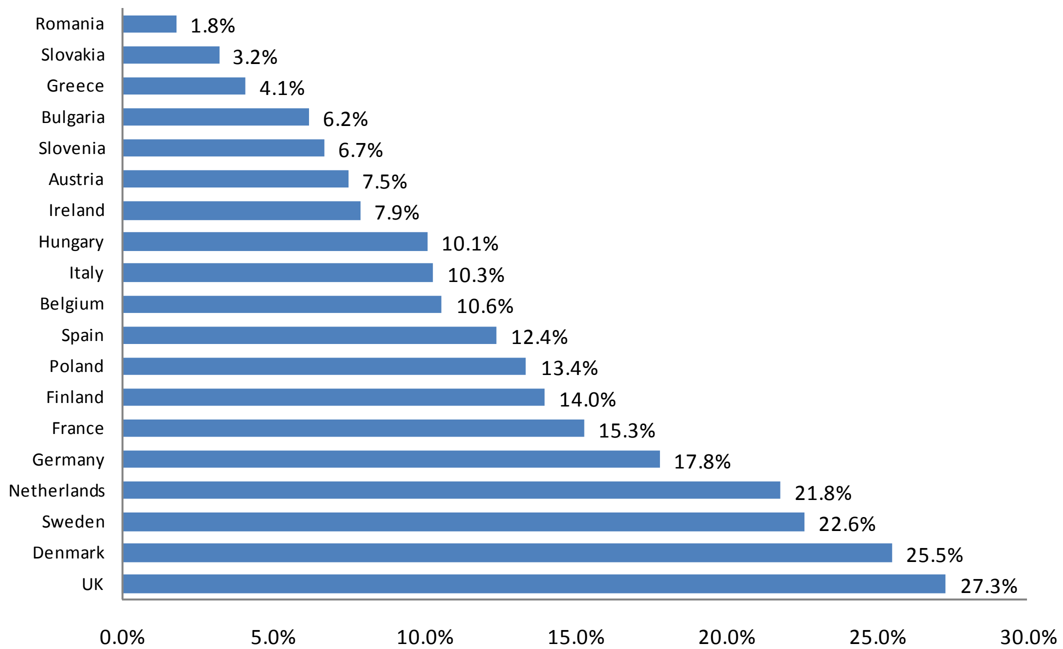


Source: IAB Europe, 2010b. *AdEx 2009*.

[7] This includes Russia (€514mn), Switzerland (€237mn), Turkey (€120mn) and Croatia (€15mn) but excludes Czech Republic, Cyprus, Estonia, Latvia, Lithuania, Luxembourg, Malta and Portugal.

However, online advertising is of varying importance in the EU countries. In New Member States, such as Romania, Slovakia, Bulgaria and Slovenia, online advertising amounted to less than 7% of the main media spend in 2009. In Greece, online advertising is also less than 7% of main media spend. In contrast, online advertising amounts to more than 20% of main media advertising expenditure in the Netherlands, Sweden, Denmark and the UK. This suggests that online advertising is closely linked to online uptake and the extent of e-commerce

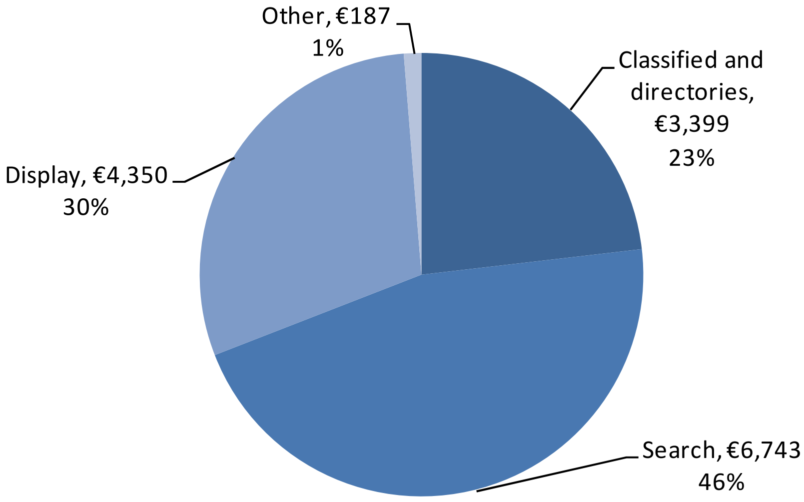
Figure 21: Expenditure on online marketing in 2009 (% of main media spend)



Note: Main media spend includes spend on newspapers, magazines, TV, radio, cinema and outdoor advertising.
Source: IAB Europe, 2010b. *AdEx 2009*.

Online advertising expenditure is split between different advertising formats. In particular IAB Europe distinguishes between search, display, classified and directories, and 'other'. The category "classified and directories", which accounted for 23% of online advertising expenditure in Europe, includes advertisements in online listings such as Craigslist, employment listings and real estate listings.

Figure 22: Split of expenditure on different formats in Europe in 2009



Source: IAB Europe/Screen Digest Issue 2

Display advertising includes banner advertisements and sponsorships where a company pays for space to display a text, image or multimedia advertisement on a website. This type of advertising has become very sophisticated and adverts are automatically targeted to users based on an analysis of the content of web pages (targeted advertising is discussed in further detail in the next section). The 'display' advertising format accounted for 30% of online advertising in Europe in 2009.

The largest share of online advertising expenditure is search-based advertising, where a company pays websites to link their site to specific search terms or keywords. Although there is a wealth of information online, the nature of searching online means that there is not complete price transparency (Jaworska and Sydow, 2008). When searching for something, items that appear higher up the list of results receive more visitors and there is a greater likelihood that visitors choose items high on the search list (see for example Reibstein, 2002). As a result, firms have an incentive to try to influence their position in search rankings through advertising and sponsored links.

Kumar, Lang and Peng (2005) found that online retailers offering more convenience, through topping search lists, may be able to charge a premium. As a result, even though search engines are free of charge for consumers, they may end up paying for the service through higher prices because sellers can pass on the cost of advertising to the end consumers.

4.3.5. Behavioural targeting

The internet has made it easier for firms to target advertising to specific consumer groups. Instead of spending large amounts on mass broadcasting, firms can pay for highly targeted activities for select groups of consumers. This activity has become known as "behavioural targeting" or "micro targeting". According to the online advertising industry, this is highly cost effective for businesses because advertisements are targeted at consumers who are most likely to respond to them. In the UK, two thirds of companies report that behavioural advertising performs better than other online advertising (IAB UK, 2011). As a result, the online advertising industry has observed a trend towards online advertising strategies that increase the relevance of advertisements to potential consumers and hence target ads.

The main techniques for targeting people through advertisements include:

1) **Rule based**: e.g. target toy offers at those with young children.
2) **Comparative filtering**: show related items based on user ratings – e.g. people who liked this, also liked...
3) **Behaviour targeting**: show items based on inferred behavioural grouping.

Due to the internet, traditional consumer groups defined using standard demographic variables have become less relevant, and at the same time consumers have become more unique in their preferences. In response, firms have adopted new strategies in order to take advantage of these changes.

By grouping people based on similar behaviour, rather than demographic characteristics, firms can target consumers collectively and identify content that is most relevant to them. For instance, if an individual purchases a DVD online, then the site may be able to suggest other films that have been bought by people who also bought that film. This works as it groups people together who appear to have similar tastes in films, and can lead to additional sales if the suggested films are also purchased by the new consumer.

This behaviour based targeting does not end once a consumer is on a seller's website; it is merely the first step in the process. On the seller website, consumers will be targeted by adverts for even more content that is likely to be relevant to them.

Behavioural advertising accounts for a non-trivial share of online advertising expenditure. For example, in Denmark, behavioural targeting is estimated to account for 7-15% of online advertising expenditure. This share is estimated to increase to 13-28% within two to three years (Konkurrence- og Forbrugerstyrelsen, 2011a). In the UK, 55% of companies use behavioural advertising (IAB UK, 2011).

Other information on advertising and online search engines is provided by SEMPO (2010), which includes the results of an online survey of almost 1,500 advertisers and agency respondents from 68 different countries internationally. The majority of responses come from the USA and Canada; however, there are more than 10 responses from each of the UK (82), Italy (16), Spain (15), the Netherlands (12) and France (10).

The analysis found that 90% of the responding companies undertake search engine optimisation, a figure which has been relatively stable since 2007. Some 81% of companies used paid search marketing (e.g. pay-per click or search engine advertising) with 72% of companies using social media marketing.

A recent empirical study analysed the click-through log of advertisements collected from a commercial search engine to identify how much behavioural targeting helps online advertising (Yan, et al., 2009). It found that users who clicked on the same advert can be over 90 times more similar than the users who clicked different adverts. This finding shows that behavioural targeting can truly help online advertising by segmenting users based on user behaviours. The authors also found that targeting behaviour based on "user search queries" can perform several times better than targeting based on "user clicked pages" and that tracking short-term behaviour is much more effective than tracking long-term user behaviour for targeted advert delivery.

4.3.6. Advertising through review sites and recommendations

Businesses may also try to influence consumer decision making through hidden advertisements. In the digital environment this may, for example, be in the form of online product reviews or recommendations paid for by the seller on review sites, blogs or websites such as YouTube.

Consumers may find it difficult to distinguish reviews and recommendations posted by other consumers from reviews and recommendations paid for by the seller. Although, such hidden advertisement is prohibited under the UCPD, enforcement agencies are reporting an increase in hidden advertising, especially through review sites, etc. (Civic Consulting, 2010a). However, given the fundamental nature of the issue, enforcement agencies may have the same difficulties as consumers in identifying and proving this type of hidden advertisement.

Issues of the importance of review sites for consumer decision making and consumer trust in review sites are discussed in greater detail in sections 5.6 and 6.3.1.

4.3.7. Pricing strategies used online

As discussed above there is some evidence that prices typically are lower online than offline, and in addition to advertising strategies, firms may use a number of different pricing strategies to ease competitive pressures in the digital environment.

There are several pricing techniques that are commonly used by firms online and some may be regarded as being to the detriment of the consumer (OFT, 2010d). Ancarani (2002) referred to the possibility of using different pricing strategies online as the “Pricer’s Paradise”.

It should be noted that while some pricing strategies involve price discrimination across different consumer groups, the Services Directive stipulates that service providers cannot price discriminate across Member States unless this can be objectively justified.

Drip-pricing

One such technique is drip-pricing, where consumers only see one element of the price upfront, and as they proceed through the purchasing process, they gradually discover that there are more costs that they will incur in order to purchase the desired product. Drip-pricing is particularly well-suited for online sales where consumers click through several screens before the purchase is complete. It is therefore possible to drip feed additional costs on different screens. Drip-pricing is particularly prevalent among airlines and to a lesser extent for other products such as mobile phone contracts and hotels (Civic Consulting, 2010a).

Drip pricing takes advantage of consumers’ loss aversion and the endowment effect associated with these situations (OFT, 2010b). If consumers are enticed to look at a website by a specific deal, they may already have decided that they wish to purchase the good or service at that price. They therefore shift their reference point and already imagine having the good or using the service. When they are then “hit” with additional charges further along the purchasing process, it is harder for them to give up the good that they already consider theirs. This may lead consumers to complete the purchase, even at the higher price and even if it is not optimal given other deals available in the market, etc.

Suboptimal decision making caused by drip-pricing is best avoided by requiring businesses to present the total inclusive price upfront. Given the fact that the full pricing information is not advertised upfront, drip-pricing can be viewed as engaging in misleading advertising and is prohibited under the UCPD. Similarly, for airlines, Regulation (EC) No. 1008/2008[8] stipulates that advertising must display the full amount payable. However, drip-pricing (including additional booking or credit card fees) remain common in the digital environment and there may be an argument for strengthening legislation in the area. A complete ban on drip-pricing may, however, not be desirable because drip-pricing is often associated with consumers being able to select and de-select ancillary services. If this practice is banned, some consumers may end up paying for ancillary services that they do not require.

Bundled offers
Firms may also use “Buy 1 get 1 free” and free “add-on” offers. This makes it more complicated for consumers to identify the true individual price that they are paying, although it appears that they will be making a large saving. It may be used as a method of creating friction in an otherwise very transparent online market and may enable firms to charge a price premium.

Reference prices
Another technique used by online firms to entice consumers to purchase their products is known as “reference pricing”. This is, for example, where firms show a comparison with a ‘before price’ to inform consumers about the savings they can make. There are examples of firms that artificially inflate the pre-sale price of an item in order to make the discount look more attractive. This is likely to attract more buyers if consumers believe that they are benefitting from a large cost reduction.

Another example of reference pricing involves comparisons with competitors’ prices. By comparing to competitors, companies may inform consumers of potential savings but only if all relevant information is included, such as differences in terms and conditions. Excluding relevant information from comparisons and inflating pre-sale prices is prohibited under the UCPD.

Dynamic pricing and baiting
Both time-limited offers and baiting sales rely on the same type of consumer behaviour; namely the urge to get a good deal before an offer ends. They work on the principle that consumers will be attracted by an offer, and the time limit will urge the consumer to make a fast decision about whether to buy the good or service, for example, without searching the market or considering alternatives before the sale is concluded. By influencing consumers to feel a kind of urgency, these pricing techniques play to consumers’ loss aversion. Consumers may feel that the product is theirs as soon as they see a good offer, and because they fear losing it by being too late, they may make a purchase too soon.

In the online environment sellers may, for example, try to put pressure on consumers to buy by indicating how many other consumers are browsing the site at the same time or displaying information about the number of items left at the same price. Such information may give consumers a sense of urgency; however, may in reality not be particularly informative because it does not provide consumers complete information. For example, relevant information about whether other people browsing the site are looking at the same product or information about what the price in the next price category is may be excluded.

[8] Regulation (EC) No. 1008/2008 of the European Parliament and the Council of 24.9.2008 on common rules for the operation of air services in the Community (Recast).

Some businesses also commonly use a form of dynamic posted pricing, in which the price that consumers pay for goods changes very frequently depending on the time of sale, demand information and supply availability of the good (Elmaghraby and Keskinocak, 2003). Again, this practice applies additional pressure on the consumer.

Finally, some firms will advertise discounts to attract visitors, but will have very few of the advertised products available, known as baiting sales. It is likely to lead to increased sales, as some of those that were attracted by the advertised discounts will go on to purchase the non-discounted goods.

4.4. Online intermediaries

4.4.1. Role of online intermediaries

It was initially believed that the internet would lead to what has become known as the Electronic Brokerage Effect (Malone, Yates and Benjamin, 1987). By connecting the consumer directly to the supplier, and thereby reducing the friction in transactions, the proponents of this effect argued that the internet would lead to dis-intermediation and the collapse of intermediary firms. Consumers were expected to increasingly serve themselves online and as a result to achieve lower prices.

However, this has not happened. While some intermediaries such as travel agents have almost disappeared, other intermediaries have appeared. Examples include price comparison sites, access and storage providers, marketplace exchanges, search engines, advertising networks and social networking sites.

An OFT study shows that a large percentage of online UK sellers use intermediaries to reach their consumers (OFT, 2007a). This is supported by some industry representatives in Europe who argue that very few companies sell directly to end-consumers. There are several reasons for this. First, intermediaries like eBay and Amazon are heavily used by consumers, and as a result, companies need to offer their products through the channels that consumers use. Secondly, companies are concerned and uncertain about the true costs associated with delivering the product, and by using intermediaries, this uncertainty can be reduced. Thirdly, SMEs may save significant resources using intermediary services because they then do not have to maintain websites. Additionally, small companies that sell through their own website are likely to have less traffic coming to and from the site than intermediaries do. As a result, consumers are more likely to find the individual company's products if they are sold through intermediaries. In addition, several stakeholders have pointed out that businesses and brands benefit from the consumer feedback and the review services that are provided by intermediaries.

Overall, it has been suggested that there is more evidence of re-intermediation and an increase in the number of intermediaries in digital markets rather than the opposite (Helsper, et al., 2010).

Among other things, new intermediaries act as information portals and help consumers process the vast amounts of information available online and reduce search costs and the risk of information overload. According to Perset (2010), the main functions of internet intermediaries are:

- to provide infrastructure;
- to collect, organise and evaluate dispersed information;
- to facilitate social communication and information exchange;
- to aggregate supply and demand;

- to facilitate market processes;
- to provide trust; and
- to take into account the needs of both buyers/users and sellers/advertisers.

It is worth noting that most of the new online intermediaries are generally US based companies (e.g. eBay, Facebook, Paypal, Travelocity and Amazon), and although US companies have also entered some European markets, the market for intermediaries has emerged more slowly in Europe. Furthermore, there has been a tendency that small European companies have been served later by global intermediaries (as argued by Helsper, et al., 2010). Notable exceptions of significant European intermediaries include online travel agents such as opodo.de and lastminute.com.

4.4.2. Online intermediaries' business models

Internet intermediaries operate using different business models (Perset, 2010), such as:

- **Advertising model**: Free intermediary services and content is provided to consumers alongside advertising or branding paid for by sellers.
- **Paid subscription/charging for premium services**: Users, consumers or businesses are charged a periodic fee to use an intermediary service. There are various ways in which this works including monthly subscriptions, usage charges and item charges.
- **Brokerage fees**: Operations such as eBay are examples of brokerage models. They bring buyers and sellers together and facilitate transactions. Fees can be earned through either a level of commission on each transaction or through the use of membership fees.
- **Voluntary contributions**: Website services and content is free but adverts are placed to encourage users to help the website continue running.

While some online intermediaries (such as Amazon) have large warehouses, intermediaries that only provide a sales platform bringing together sellers and buyers have the advantage of not having to manage stocks and warehouses. As a result sales platforms such as eBay are subject to less business risk.

It should be noted that the incentives of intermediaries may not reflect the interests of consumers. Depending on the business model applied, intermediaries may have incentives to promote the interests of companies that pay the most. For example, price comparison sites may have incentives to favour particular companies in their rankings and consumers may not be aware of these incentives (Civic Consulting, 2010a).

4.5. Barriers to e-commerce for businesses

Firms face a number of difficulties when attempting to sell their goods and services over the internet. A survey of SMEs in 2005 undertaken by the UK Federation of Small Businesses showed that the main reasons why, in general, UK businesses did not wish to sell their products on the internet were:

- **Lack of relevance**: 37% of SMEs believed that internet selling was inappropriate to their business;
- **Cost**: 24% cited high costs of developing and maintaining a web site;
- **Fear of fraud**: the perceived risk of card fraud was a factor cited by 19% of SMEs preventing them from selling online; and
- **Lack of IT skills**: cited by 18% as a barrier to selling.

Business stakeholders consulted for this study also argued that European companies still need to learn more about how to exploit the digital environment and develop skills to do so.

4.5.1. Cross-border online sales and barriers

Due to the complexities involved, cross-border e-commerce raises a number of further complications. According to Eurostat, the majority of companies send e-commerce orders within their own country, while over a quarter of all enterprises also send e-commerce orders to other EU countries, with large enterprises the most accomplished at doing this.

Table 4: Enterprises regularly sending e-commerce orders, EU-27 (% of enterprises sending e-commerce orders)

	In own country	To other EU countries	To the rest of the world
All enterprises	86	26	12
Small	85	23	11
Medium	87	33	16
Large	90	41	25

Source: Eurostat (Isoc_ec_ebuyn2), Figure 11

An OFT survey found that 37% of UK online businesses said their website was aimed at selling to individuals outside the UK (OFT, 2007a). The majority of these businesses were selling to the rest of the EU (91%), compared to the US (78%), and the rest of the world (84%). However, 63% of surveyed businesses had no intention of selling abroad.

A mystery shopping evaluation of cross-border e-commerce in the EU was recently undertaken for the European Commission in order to (among other things) test the extent to which it is possible for consumers to order cross-border (Meier-Pesti and Trübenbach, 2009).

It should be noted that the Services Directive stipulates that service providers may not discriminate against consumers based on nationality or place of residency unless it is objectively justified. However, Meier-Pesti and Trübenbach (2009) found that cross-border orders failed in this respect for 3 reasons: registration; shipment; and payment:

- Problems with registration for cross-border e-commerce related to failed registration, due to not having the required personal information (such as a National I.D. card) or most commonly because the representative country could not be chosen from the registration form.

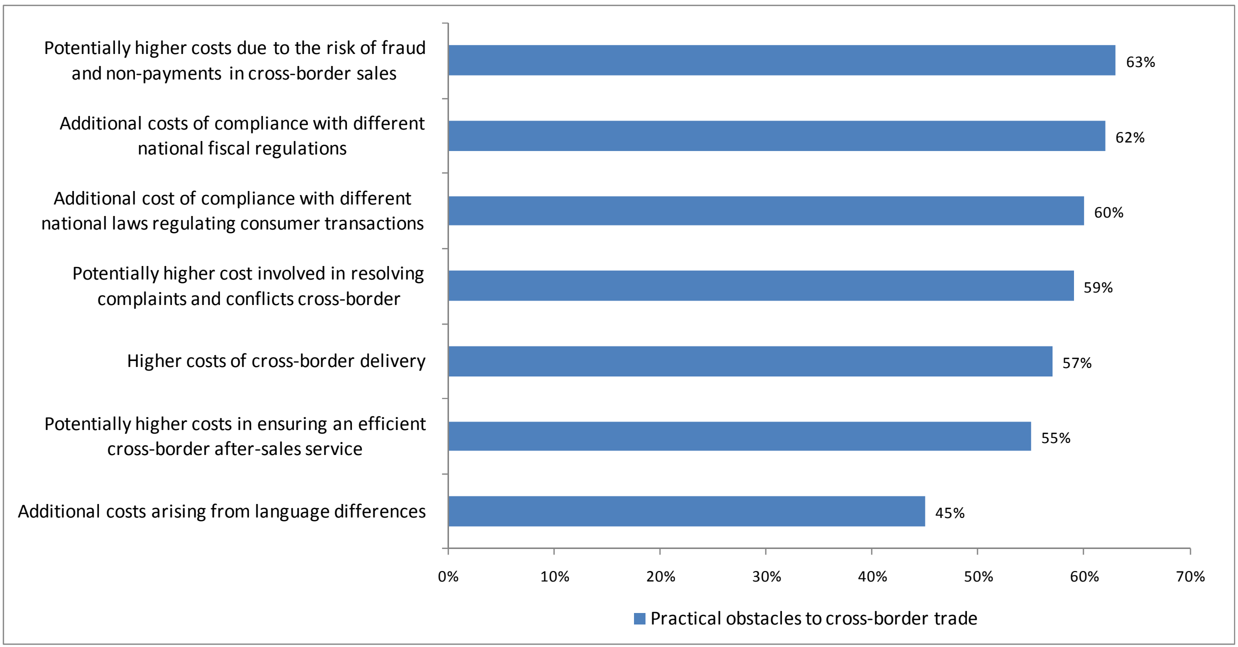
- While it was possible to receive shipment for 98% of domestic offers, only 48% of cross-border offers could be shipped. This lack of cross-border shipment was most acute in Bulgaria, Cyprus, Latvia and Romania. Austria, France and Spain had the most successful of cross-border shoppers.

- Not only did the possibility of cross-border shipment differ across countries within the EU, but the types of goods that they found that could be shipped cross-border also varied. Computer hardware (30%) and household appliances (33%) were the worst affected, while books (79%) were the least affected by problems with cross-border shipment.

- The final reason why cross-border orders were found to be unsuccessful related to problems with payment, as the authors discovered that direct debit as a form of payment is accepted to a much greater extent for domestic offers (61%) than for cross-border offers (42%).

Overall the results of the mystery shopping exercise suggests that there are a number of practical problems associated with cross-border e-commerce such as additional costs of shipment, and sellers ability to accept different payment means, etc. These findings are confirmed by a recent Eurobarometer survey analysing barriers to e-commerce for businesses in Europe. The practical obstacles to cross-border trade that were generally rated as very important or fairly important by managers of EU retail enterprises are shown in Figure 23.

Figure 23: Barriers to e-commerce in the EU-27 (% of managers who think it is an important barrier)



Source: Gallup Organisation, 2008b. *Flash Eurobarometer 224: Business attitudes towards cross-border sales and consumer protection*

Business stakeholders highlighted similar barriers to cross-border e-commerce and provided further insights:

- **Legal fragmentation across the EU** with respect to consumer rights, taxation, advertising laws, product liability, guarantees and warranties, and product labelling requirements. A business stakeholder argued that the biggest challenge for e-commerce is that the Consumer Rights Directive does not ensure harmonisation. Other studies involving stakeholder consultations have also pointed to issues with differences in VAT and labelling rules, differences in national technical regulations (e.g. electrical plugs and sockets), and national rules on disposal of waste (European Commission, 2009). Problems with legal fragmentation are particularly important for small retailers who have fewer resources to devote to compliance with national laws.

  The fragmentation of the EU consumer regulatory framework is a significant source of costs (see discussion in section on the legal and regulatory framework for the digital environment and Annex II), due to the need to comply with several different regulations for traders wishing to trade in several Member States.

Therefore, retailers would be much more willing to trade cross-border if the risks of failing to comply with various national regulations could be removed by creating EU-level rules. The estimated total administrative cost imposed by EU consumer law on distance sellers trading domestically is €5,526 per company. This increases to €9,276 per compnay for distance sellers wanting to sell in one or two other EU countries, with an estimated cost of €70,526 per company for a business wishing to sell in all 27 Member States (European Commission, 2009). We note that these estimates are the total costs per company and not annual figures.

- **Delivery costs.** While logistical issue do not arise for purely online transactions, it may be an important barrier when goods need to be physically delivered to the customer. This is particularly the case for physically large and heavy products and for perishable products (such as food). In addition, some stakeholders argued that European postal companies are too inefficient, and as a result, timely delivery may be too costly.
- **Language barriers**. This is important both for businesses wishing to comply with legal requirements and for selling products to consumers in other countries. Multilanguage websites and packaging can ease the latter problem but are costly.
- **Technical search limitations**. Due to the design of search engines, consumers may not find all relevant sellers. For example, when using Google, the search algorithm often focuses search results on companies close to the location of the potential consumer, and as a result, consumers may miss sellers in other countries.
- **Lack of trust in non-domestic consumers.** Some businesses are worried that consumers in other countries may not behave as well as domestic consumers.
- **Non-unified means of payment across the EU**. Consumers may be charged a surcharge by non-domestic firms because the payment method selected by the consumer is not standard for the seller. The fact that there is no standardised payment system may also explain why businesses are concerned about non-payment (see Figure 23).

Overall, business stakeholders have called for the harmonisation of the pan-European legal framework to reduce the costs of compliance and improve the standardisation of payment methods in order to increase trust in cross-border transactions from the point of view of businesses. They have also suggested the provision of technical and legal guidelines to businesses in more languages to assist businesses overcome language barriers. A business stakeholder suggested that payment methods could be standardised through a pan-European debit card system.

5. THE CONSUMER PURCHASING PROCESS - ACCESSING INFORMATION

KEY FINDINGS

- Improved access to information about products, services and prices has been shown to have positive benefits for consumers, however, some consumers may find the volume of information available overwhelming.
- However, it is not costless for consumers to obtain information even in a digital environment, and frictions in the search process may allow some firms to charge price premiums.
- Supplier and manufacturer websites, comparison websites, discussion forums and advertisements are all methods consumers use to identify products and services; but search engines are the main tools used by consumers to find online sellers.
- Advertisements may influence consumers' searching and information retrieval processes (and associated costs). Despite the privacy concerns and potential annoyance of online advertising, advertisements are also an important source of funding for free content and other web services in the digital environment.
- In the digital environment, consumers are affected by social influence from online reviews and online social networks, as well as from offline sources. The digital environment allows consumers to tap into recommendations and information from a much wider group of consumers, including people they do not know personally.

5.1. Accessing information: the first step of the purchasing process

When a consumer starts thinking about purchasing a product or service, it may be initiated by a need or desire for a particular product or service or for certain attributes or aspects of a product or service. The consumer may begin by reflecting on what his or her needs and desires are, and assuming that consumers are rational decision makers, traditional economic theory would then predict that the consumer uses all available information to make the purchasing decision. Additionally, if search costs are not too high, consumers would be expected to search for information to guide their decision.

However, the cost of obtaining information may be high; particularly if information is asymmetric meaning that sellers have better access to information about the quality of the product in question compared to consumers. The importance of asymmetric information depends on the market in question. Goods can be categorised in terms of how difficult it is for a consumer to gather information about their quality.

In this respect one can distinguish between 'search goods', 'experience goods' and 'credence goods'. The first group includes goods whose quality can be searched or inspected before a purchase. On the other hand, experience goods are goods whose quality can only be known after using them. This is often the case with most durable goods. As for credence goods, their complete quality attributes will remain unknown to the consumer even well after use. This may be the case with pharmaceutical products for example.

Based on this classification of goods, markets with a high level of repeat purchases would tend to suffer less from problems of asymmetric information because consumers gain experience and collect information from their repeat purchases. For the same reason, one might expect consumers to search less when making repeat purchases.

In other cases, the consumer will typically tap a much wider range of information sources, including friends, social networks, third-party assessments (reviews on the web, consumer sections in newspapers and magazines, consumer magazines, etc.).

5.2. Searching for information online

The internet has made much more information available to consumers at a much lower cost (Bakos, 1997; Malone, et al., 1987; Spink, 2002). This has been shown to have some positive benefits for consumers (Kumar, Lang and Peng, 2005; Smith, et al., 1999). Consumers are better able to identify the cheapest offer, and as a result, online consumers tend to be more sensitive to price changes. This in turn has resulted in, generally, lower prices online. However, despite lower search costs in the digital world, studies have found the prices for the same product continue to be different on different websites. If searching was costless for consumers, such price differences would not persist.

However, it is not costless for consumers to obtain information even in a digital environment. Consumers still have to spend time searching and accessing information. This involves non-trivial navigation between websites, and to cope with the large amounts of information available, consumers adopt different search strategies. Online search strategies for example include choice of search engine, query formulation tactics, stopping and filtering rules, etc. (Kumar, Lang and Peng, 2005).

Consumers may rationally choose to stop searching even if they have not considered all available information because the search costs involved makes it too costly. In addition, consumers may limit search effort *because* of the large amounts of information available online and instead apply rule-of-thumb decision-making as suggested by the behavioural economics literature on cognitive limitations. For example, a 1998 study showed that large online stores were less effective in terms of turning site traffic into sales because consumers had difficulties finding the products they were looking for (Lohse and Spiller, 1998). Chiang (2006), cited by OFT (2007a), also found that the difficulty of processing all the information available limited consumer search.

In order to deal with information overload, consumers may choose to rely more heavily on brand names (Helsper, et al., 2010). Ward and Lee (2000) find that consumers with a low level of digital literacy spend less time searching online and rely more on brand names as a signal of quality than consumers who are more familiar with the internet[9]. There is also evidence that more active online shoppers search across more sites (Johnson, et al., 2004). This may be either because less active online shoppers have higher search costs or because they find it more difficult to cope with the large amounts of information available online.

Whatever the reason, reduced search effort can, at least in part, explain why price differences persist online even if consumers have access to large amounts of information. We note that there are also a number of other reasons why price differences persist. For example, consumers tend to be willing to pay a premium to shop with suppliers they trust or find more convenient (Smith, et al., 1999).

[9] Similar conclusions are reached by Solomon et al (1999).

In addition, as discussed in the section on firm behaviour, price differences may be caused by successful firm differentiation and advertising strategies.

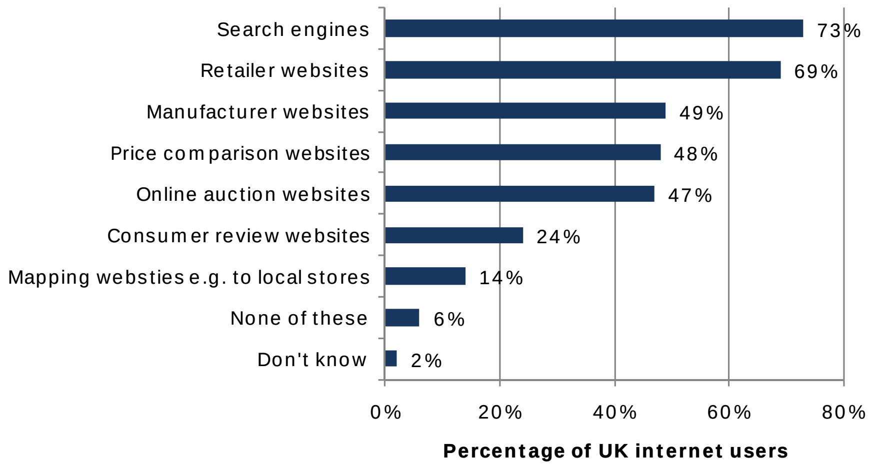
5.3. Take-up of different search tools

The difficulty of accessing information on the internet is directly and indirectly recognised by the number of different tools available to help consumers navigate the sea of information. These tools include search engines such as Google and Bing, supplier and manufacturer websites, comparison websites, discussion forums and advertisements.

Researchers have described a so-called Googlisation of online search with Google and the internet being essentially the same thing for many consumers (Helsper et al., 2010). The OFT(2007) found that 94% of UK internet shoppers at some point in their search process used a search engine to choose which website to buy from and search engines accounted for 35-36% of visits to retailers in the period October 2006 to February 2007. A survey undertaken for Google (2008) supports these results and finds that search engines are the most popular type of website used by UK online consumers to find information about products online (73%)[10]. This is closely followed by retailer websites (69%). Manufacturer websites are used less frequently (by just under half of the online UK consumers).

Intermediary websites such as price comparison sites and online auction sites are also used to research purchases by just under half of all online consumers in the UK. Finally, it is worth noting that customer review websites also have a non-negligible role, with 24% of consumers visiting consumer review websites to research a product.

Figure 24: Percentage of UK consumers that use different websites when researching purchases



Note: Based on survey of UK internet users aged 16+
Source: Consumer snapshot of online research and purchasing behaviour, Google (2008)

Similar results have been found for consumers in Sweden, where 90% of the people who have searched for information about products or services online have used a search engine. Seller websites are in second place and price comparison websites and newspaper websites are also common sources of information.

[10] Similar results are obtained by other studies in other EU countries. In Germany, 84% of Internet users who participated in the Deutsche Bank (2009) ARD/ZDF online survey used a search engine at least once a week. In addition, 54% searched for 'specific product offerings'.

A third of Swedish consumers who had searched for information about products and services online had looked for information on government or public authority websites while a fifth on consumer organisation websites (Konsumentverket, 2009). In Portugal, 79% of respondents to a survey in 2009 identified the internet as the preferred source of information, ahead of family and friends and TV (76% each). Interestingly, blogs were viewed by 24% of survey participants as being information sources of no or little value (Obercom, 2009).

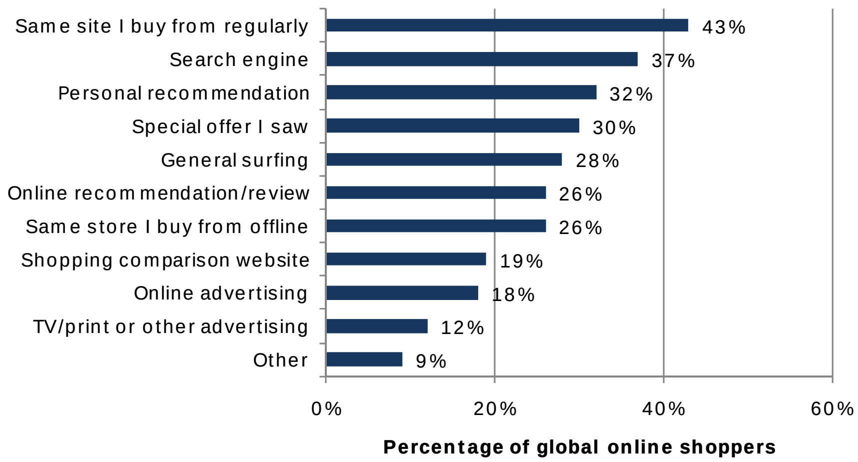
Nielsen (2008) frames the question slightly differently, and rather than analysing which sites are used to research a product, they ask consumers what sources of information helped them choose where to buy online.

The global data illustrate that 43% of online shoppers globally simply chose a site that they bought from regularly (Figure 25). This suggests that customer loyalty online is quite high and that search effort for repeat purchases may be less than optimal. Ekeha (2010) reaches similar conclusions and finds evidence that consumers search more if they do not have brand preferences prior to the search.

Figure 25 also shows that search engines play a crucial role for consumers searching for information online. Thirty-seven per cent of online consumers globally say that search engines have helped them choose where to shop online.

Personal recommendations (32%) and online recommendations and reviews (26%) are other important sources of information for consumers choosing where to shop online. In comparison, online advertising only helps 18% of online shoppers to choose an online shopping site, while print or TV advertising only helps 12% of consumers decide where to shop. Special offers are nevertheless quite effective and 30% of consumers worldwide use this information to decide where to shop online.

Figure 25: What helps consumers decide which site to use for shopping online? Global average.



Source: Nielsen, 2008. *Trends in online shopping*. Note multiple responses are possible.

In the sections below we discuss how these tools and information sources may impact the way in which consumers search and access information. The discussion also considers impacts on search costs.

5.4. Advertising and surfing

Prior to undertaking an active search for a product or service online consumers may have already been influenced by advertisements and other information they have found online on previous visits. Advertisements and other information found online may influence both the decision to initiate the purchasing process and the set of brands and online retailers considered. Ultimately, online advertisements may influence the decision of whether and what to purchase. These various points are discussed in detail below.

5.4.1. General advertisements

If advertisements are informative and not misleading, they may help consumers navigate through the information they find online and reduce their search costs. However, advertisements only provide information about one retailer or one product/service, so advertisements do not necessarily help consumers make a 'better' choice or 'the right' choice. This would require that consumers search for alternatives to ensure that the offer in the advertisement is 'the best' offer.

However, consumer research in the UK suggests that 30% of UK internet users dislike online advertising and only 1% say that they like online ads most of the time (IAB UK, 2009). Notably, there is a strong tendency that whether online advertisements are liked or disliked is associated with the underpinning relevance of the advertising. Consumers who feel they are exposed to relevant advertising are more likely to have a positive attitude towards online advertising.

5.4.2. Targeted advertisements

Targeted advertising may lead to reduced search costs for consumers who are generally exposed to advertisements that are more relevant to them. At the same time sellers may achieve increased effectiveness of advertising and this increased cost effectiveness may, to some extent, be passed to consumers through lower prices. However, there may also be a number of concerns associated with behavioural advertising such as privacy concerns, the misuse of data that is collected, and the possibility of inappropriate advertising being shown. In addition, that targeted advertising may create an imbalance in the market because it provides sellers and marketers with better information (Dwyer, 2009).

The OFT (2010a) carried out consumer research on behavioural advertising and found that UK consumers' views on behavioural advertising are mixed. Forty per cent of consumers had neutral views on online targeted advertising, while 28% disliked it and 24% welcomed it. A study carried out by IAB UK in 2009 found similar results and showed that 72% of UK internet users find behavioural advertising unappealing because they find it too invasive. Other concerns are related to the storage of personal data (55%) and the collection of personal data by companies (49%). IAB UK argue that this is in part due to misperceptions about how much data is actually collected and stored and illustrate that approval rates for behavioural advertising increase significantly when consumers are informed that personal data is protected by law, and that personal data in most cases is not collected and stored for behavioural advertising purposes.

It is also worth noting that 49% of the individuals who find behavioural advertising unappealing find all types of online advertising unappealing (IAB UK, 2009). The OFT (2010a) also found that consumers concerns decreased when they have the option to opt out of tracking and behavioural advertising.

In addition, the study found that 40% of consumers would actively try to prevent behavioural advertising, while the majority (60%) would not alter their online behaviour[11].

A study on behavioural advertising in Denmark yields similar results (Konkurrence- og Forbrugerstyrelsen, 2011a). Fifty-four percent of Danish consumers have a negative attitude towards behavioural advertisements and only 8% have a positive attitude. Furthermore, although 32% are highly or very highly aware of behavioural advertising, there is little evidence that awareness has impacted consumer behaviour. A third of Danish consumers have not changed their behaviour at all and a third of consumers have only changed their behaviour slightly. Older consumers are more likely to have changed their behaviour.

The study also shows that Danish consumers are not well informed about what they can do to avoid targeted advertisements and although 26% of Danish consumers would have a more positive attitude towards behavioural targeting if they knew which adverts were targeted, 10% would have a more negative attitude. Almost half of Danish consumers would be more positive towards behavioural targeting if there were guidelines in place for how personal information could be used and if it was clear that these guidelines were being followed. Another study on behavioural advertising has suggested that 48% of Danish consumers think that behavioural targeting should be banned (Forbrugerrådet, 2009).

Across the EU, 40% of consumers are concerned about online tracking and 54% are uncomfortable with profiling in return for free content. However, a non-negligible share of consumers (39%) says they are comfortable with tracking in return for free online content (TNS Opinion and Social, 2011).

We note that there is a legal framework in place to protect consumers' personal data (in particular the DPD, the PECD and national data protection laws). The DPD is currently under revision to ensure that it is fit for purpose, even in the light of new emerging technologies such as tracking technologies, and as of 25 May 2011, the new PECD had to be implemented in all Member States. The PECD among other things stipulates that consumers must opt-in (rather than opt-out) before cookies and other tracking technologies can be used. We conjecture that in the light of the status-quo bias found in the behavioural economics literature, most consumers are likely not to opt-in, despite the fact that some cookies and other tracking technologies may also be used to benefit the consumer.

5.4.3. Consumer benefits from advertisements

It should be noted that despite the costs to consumers of advertisements resulting from privacy concerns and annoyance, the advertisements are also an important source of funding for free content and other web services in the digital environment (such as e-mails, social networks, etc.). It is estimated that for every Euro spent on online advertising in the EU and the US, users get three Euros worth of free services (after taking into account the costs to consumers associated with privacy concerns and annoyance from advertisements)[12].

[11] McDonald and Cranor (2010) also look at consumers views on behavioural advertising but this time in America. They find that approximately 20% of the participants in interviews would like the benefits from behavioural advertising. However, 54% find it intrusive and 40% would actively change their online behaviour if advertisers were collecting data.

[12] According to calculations by McKinsey & Company for IAB Europe (2010a).

There is also evidence that the vast majority of consumers value the free content higher than the value of privacy. Only 1% of internet users in the EU and US value privacy higher than free content. Similarly, the consumer benefits of access to free content are much higher than their willingness to pay to avoid online advertisements (IAB Europe, 2010a). As a result, if advertisements were banned and free content sites had to bring in the same revenues by charging for their services as they currently do, 40% of current users in the EU and US would stop using the internet. Notably, this would have the greatest impact on those users for whom privacy is hardly important.

5.5. Search engines and price comparison sites

Consumers who have decided to initiate a purchasing process (perhaps in response to an advertisement) often use a search engine as part of their search (see Figure 25). Search engines significantly reduce search costs for consumers by not requiring consumers to know which sites they want to visit before they start the search. Instead users can enter key words and search terms that the website can use to filter internet pages. A UK survey has shown that 77% of UK consumers agree that search engines help them find websites they would not have been able to find otherwise (Google, 2008). Moreover, search engines were seen by 72% of UK consumers as a quick way to find relevant sellers.

However, despite reduced search costs for consumers, a small scale experiment from 2005 shows that consumers may still have difficulties and incur some search costs when they use search engines. The experiment showed that consumers often have to refine search queries to get more relevant results, thus suggesting that search engines have difficulties understanding the context of a search query (Kumar, Lang and Peng, 2005).

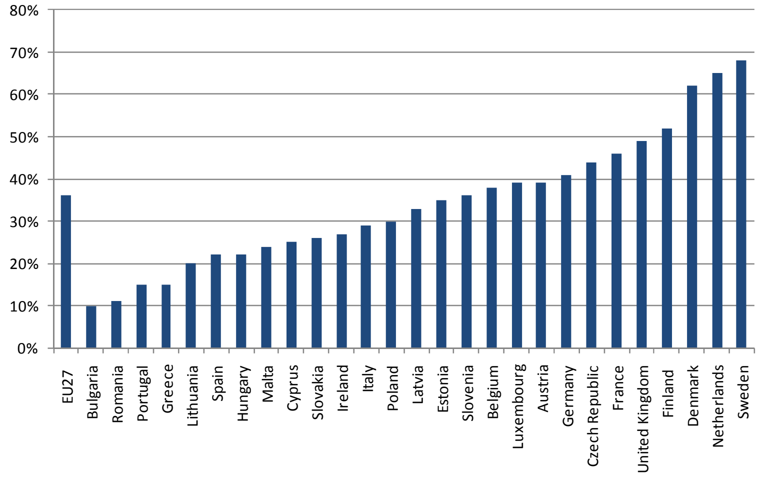
During the search, consumers may also be influenced by advertisements or sponsored links displayed on search sites. Google found that 81% of UK consumers who use search engines notice sponsored links (Google, 2008). Moreover, 4% of consumers always click on these sponsored links when researching their products, with another 64% either regularly or sometimes clicking.

Like search engines, price comparison sites can be used by consumers to filter online content and compare goods and services from different sellers. Whereas search engines typically sort sites by relevance and include information from sellers as well as other information providers, comparison websites include only information from sellers, and consumers can use different search metrics to sort the results. For instance, for a comparison of car insurance, consumers may, for example, sort search results by price, insurance coverage and the size of the excess.

Across the European Union, 36% of consumers used the internet to compare goods and services from different sellers in 2008 by visiting a price comparison website (Figure 26). The internet was most widely used to compare different sellers in the Scandinavian countries, in the Netherlands and in the UK.[13] The internet is least used to compare sellers in Eastern and Southern European countries like Bulgaria, Romania, Portugal and Greece.

[13] The OFT (2007a) showed that 47% of Internet shoppers in the UK had used a price comparison website in 2007. This suggests that there is a high correlation between 'use of Internet to compare…different sellers' and 'use of price comparison sites'.

Figure 26: Percentage of consumers who used the internet to compare goods or services from different sellers in the last 12 months (2008)



Source: TNS Opinion and Social, 2008. *Special Eurobarometer 298: Consumer protection in the internal market*

5.6. Social influence

Like advertisements, social influence may lead to the identification of new desires and needs, and subsequent initiation of the purchasing process[14]. A consumer may, for example, hear about a product or service from a friend or relative and then decide to purchase it. Social influence may also impact what information consumers search for and access. For example, consumers may base their choice of which websites to visit on recommendations. In addition, consumers may limit their search to certain products or sellers based on recommendations from others.

In the digital environment, consumers are affected by social influence from online reviews and online social networks as well as from offline sources. The digital environment allows consumers to tap into recommendations and information from a much wider group of consumers, including people they do not know personally.

Recommendations from other consumers may reduce search costs for consumers because more experienced users may be able to pass on knowledge to other consumers about which websites to use and which products to search for. Additionally, recommendations help consumers identify the quality of websites, sellers, products and services. Without recommendations from others online, consumers would need to spend more time searching for information about quality.

In addition to reviews and recommendations found on social networking sites, other third-party websites may also provide discussion forums and sellers may have their own review and ranking systems in place. Review systems on seller websites may take many different forms including “tell-a-friend” recommendations, customer review forums, rankings and systems for customers to review other customer reviews.

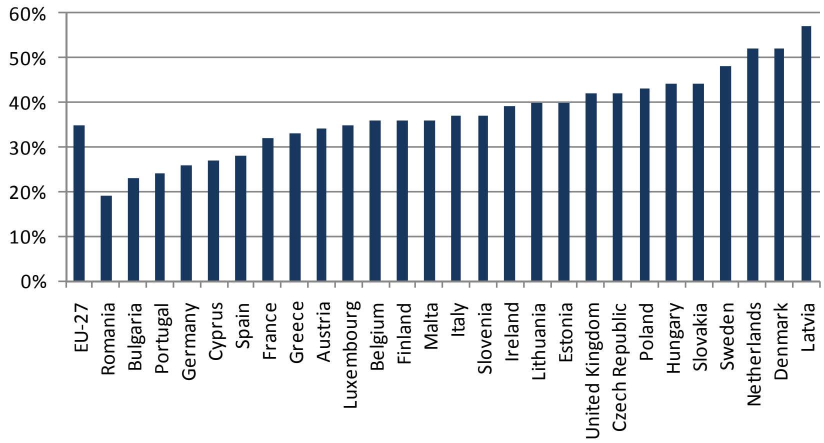
In this regard, it is interesting to note that consumers remain split. A 2009 French survey shows that while 43% of internet users never searched for other consumers’ views and comments on the internet (and 13% did so on rarely), 14% did so regularly and 30% did it occasionally (Lehuédé, 2009).

[14] See, for example, Kim and Srivastava (2007) for a discussion of the impact of social influence.

5.6.1. Social networking sites

Social networks such as Facebook, MySpace and Twitter are used by 35% of EU citizens (Figure 27). Latvia, the Netherlands and Denmark show the highest levels of usage with more than 50% of using social networking sites. Social networking sites are used much less popular in Romania, Bulgaria, Portugal and Germany.

Figure 27: Use of social networking sites such as Facebook, MySpace and Twitter (2010)



Source: TNS Opinion and Social, 2010. *Special Eurobarometer 335: E-communications household survey*.

A social network provides a forum for consumers to ask for and give advice to friends in their network. In this respect, the social networking sites resemble other online discussion forums; although in social networks consumers can seek information from trusted friends and relatives in their network. Consumers may be more likely to trust information from people they know and may therefore put greater weight on information achieved via social networks rather than on information from other online reviews. Swamynathan, et al. (2008) analyse data from Overstock Auctions, an auction site where users can also create social networks. The analysis shows that while users perform few transactions with friends in their network, transactions between friends result in significantly higher user satisfaction.

In addition, sellers may advertise to consumers on networking sites. This may be through targeted advertisements or through their own profiles that consumers can follow. A report published by Experian Hitwise (2010) showed that the top two reasons why consumers sign-up to company profiles are to find out about special offers (24%) and to see consumer reviews (23%).

There is also evidence that traffic from social media sites to online retailers is increasing. In particular, over the last year, this form of traffic in the UK increased by 13%. However, social networks still account for just 9% of traffic to online retailers in the UK and adverts on social networks such as Facebook and LinkedIn appear to be less effective than other types of online advertisement (Experian Hitwise, 2010). According to a survey by the Affliate Network at LinkShare (2010), only 3% of UK consumers found adverts on social networking sites helpful when purchasing[15]. In comparison 50% found online promotions and offers helpful and 22% found direct email advertising helpful.

[15] In addition, only 2% found adverts on professional social networking sites, such as LinkedIn, useful.

6. THE CONSUMER PURCHASING PROCESS - ASSESSMENT AND ANALYSIS

KEY FINDINGS

- Consumers do not utilise online search and filtering tools fully and only consider websites that appear among the top search results. Consumers form reference points during the search process and the first product or seller viewed as part of the search process is likely to serve as the consumer's reference point for the remainder of the search. Consumers compare subsequent search results to this reference point, they may require relatively large improvements in product attributes or reductions in price to choose another product or seller than the reference point.

- Trust in suppliers and the information they provide is one of the major issues in the digital environment. Online consumers trust well-known brands and, as a result, established brands are gaining market share.

- The perceived trustworthiness of different sources of information gives an indication of the perceived quality of the information provided through different sources, and also provides an indication of the relative weight consumers are likely to give to different sources of information. Recommendations and consumer reviews are highly trusted sources of information that have been shown to influence consumer behaviour.

- Consumer trust in advertising information is relatively low. However, advertising and framing of information have nonetheless been shown to have a significant impact on decision making.

Based on the information gathered and assimilated during the first stage of the consumers purchasing process (described in chapter 5 and section 3.1), and given her/his preferences, the consumer then engages in a more narrow consideration of which type of product or service to buy and from which seller. Brand, quality perception, price, ease of access, reputation, and speed of accessibility, etc. are important factors that the consumer may consider at this stage.

In practice, the assessment and analysis stage may be closely interlinked with both the 'access information' stage and the 'act on assessment and analysis stage'. This section focuses on consumers' ability to objectively assess and analyse information gathered in the digital environment. Arguably consumers have to filter through much larger amounts of information in the digital environment because the production of information content has shifted from a scarcity based 'filter then publish' paradigm to a 'publish then filter' paradigm (Helsper, et al., 2010).

6.1. Assessment and analysis: general considerations

Standard economic theory predicts that rational consumers take all the information they have gathered into account when making their decision (provided that it is not too time-consuming to do so) and that they are able to perfectly analyse the information available to them.

However, as already noted earlier, the behavioural economics literature argues that consumers' ability to assess and analyse information may be affected by cognitive limitations (i.e. consumers struggle with large amounts of information and many choices). In addition, their assessment may be biased by too strong an attachment to their default position or reference point (i.e. the product or seller they already know). Finally, advertising and the framing of information and prices may have large impact on consumers and may bias their analysis of the information they have gathered.

6.2. Analysing and filtering information online

The initial filtering of search results and the *order* of the filtered results is very important for the subsequent analysis and ultimate decision on whether to purchase or not, what to purchase and from which seller. The OFT (2007a) note that although consumers use search engines, these tools are not necessarily used in depth.

Consumers often pick the first or second results on the first page, and rarely look at results beyond that. As a general rule, consumers access sites and purchase from sites on Google's first results page (Helsper, et al., 2010). Reibstein (2002) use data on consumer behaviour collected from over 1 million customers that visited a website and searched for a specific product. This analysis illustrated that the product, brand and site that were listed first in the search results were chosen by most commonly by consumers. This may reflect that results on the first search page are actually the most relevant results to consumers, however, it may also be a result of the search process. Consumers may rationally have a desire to minimise search costs making results on the first page more convenient choices.

In addition, some authors in the behavioural economics literature have suggested that consumers form reference points during the search process and that the first product or seller viewed as part of the search process serves as the consumer's reference point for the remainder of the search (Zhou, 2008). When consumers compare subsequent search results to their reference point, they may require relatively large improvements in product attributes or reductions in price to choose another product or seller rather than the reference point.

For example, a recent empirical study by the OFT (2010b) showed that consumers pay higher prices and search less when the first seller they visit uses drip pricing (i.e. shows a low initial price and then at later stages reveal additional charges). Although consumers are free to choose other sellers even when the additional charges are revealed, the study concludes that consumers have a tendency to pick the first seller because this has become a reference point for them, and as a result, they think about the good as already being theirs.

Reibstein (2002) shows that most consumers use price to sort online information with when they purchase online. This is the case even if consumers have access to more complicated filtering metrics that allow them to filter simultaneously on several different parameters (for example price *and* time of delivery). The second most important sorting metric was 'on-time delivery'. Reibstein (2002) also finds that while price is most important attribute for consumers when they buy for themselves, for gifts, product representation followed by 'on-time-delivery' were the most important attributes. Price in this case is only fifth in importance. More mature consumers also tend to be less focused on price and instead (in most cases) sort alternatives by product representation.

6.3. Assessing the quality of online information

While the internet offers consumers access to large volumes of detailed information, information on some product attributes is not available. Consumers are not able to touch and smell products before they purchase. Therefore, in some ways, shopping online is like shopping through a paper catalogue or other forms of distance selling (Park and Kim, 2003). This may imply that it is more difficult for consumers to assess the information they find online about product quality.

Similarly consumers may find it harder to assess the quality and trustworthiness of sellers because there is no personal contact with a sales representative or the seller. However, seller trustworthiness may be more important to online consumers because purchase and delivery of the product more often than not occurs at different points in time.

The lack of personal contact, and the separation of the purchase from delivery, may also imply that there is greater scope or a perception of a greater scope for fraud and scams online than in the offline environment. For example, there are very frequent problems with scams in Austria and Germany (Der Internet Ombudsmann, 2010; eCommerce-Verbindungsstelle, 2009).

Trust in suppliers and the information they provide is therefore possibly one of the major issues in the digital environment. Consumer protection legislation and EC Directives should to some degree reassure consumers that their interests are being protected. The UCPD, for example, stipulates that information provided by sellers in the market-place cannot be misleading; the DSD provides consumers with cancellation and return rights; while the CSD sets out consumer rights in relation to poor quality goods. Additional regulatory and self-regulatory initiatives may also enhance the levels of trust in sellers and information provided online. Stakeholders have pointed out that the development of self-regulatory schemes in Europe has been slow and is not pan-European. There are some examples of efficient national regulatory schemes. For example, Austria has an internet Ombudsman and Germany has TrustedShops initiative that helps protect consumers. For example, it provides consumers with insurance, so that if they are not happy with their purchase then they will get their money back.

In addition, sellers may try to enhance consumer trust themselves. Stakeholders consulted for this project and Smith, et al. (1999) argue that retailers can signal trust through:

- use of trademarks and quality labels;
- use of recognised and trusted payment methods;
- online communities and reviews;
- professional looking websites;
- links on trusted sites;
- unbiased product information; and
- use of an existing (offline) brand name.

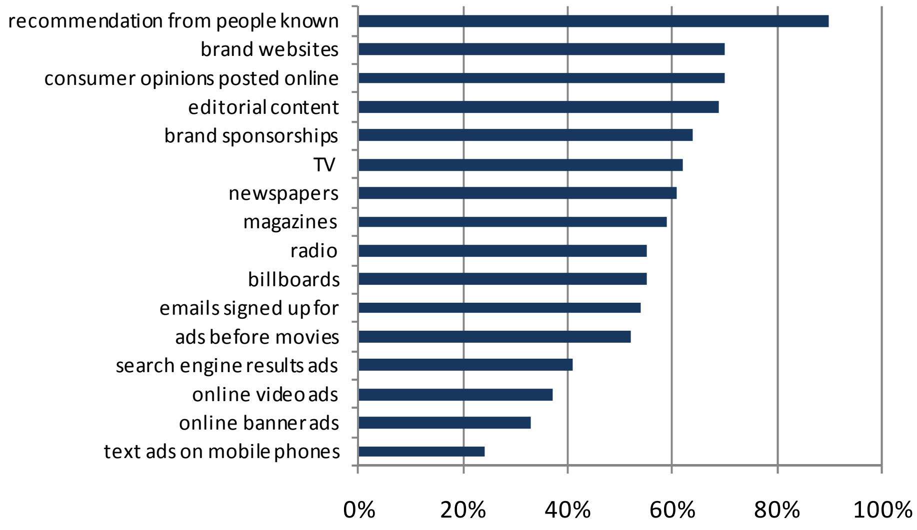
Furthermore, Helsper, et al. (2010) argue that there is evidence for a consolidation of power in the hands of the most well-established producers and well-known brands, while Arze-Urriza and Cebollada (2008) show that brand loyalty is greater online than offline. Business stakeholders consulted for this project also expressed this view and argued that brands are more important online than offline. Consumers have more trust in well-known brands and are more likely to make a purchase online if they see a trusted brand.

Choosing well-known brands and producers may also be a way for consumers to deal with information overload.

Romanian consumer research also supports the argument that consumers value seeing trusted brands and trust-enhancing certificates on online shopping sites (Radu, et al., 2008). However, stakeholders argue that guarantees and warranties are of relatively little importance for promoting the level of trust because the assumption amongst consumers is that guarantees and warranties will have loopholes.

The results of Nielsen's Global Online Consumer Survey 2009 also show that recommendations and brand names can be used to build trust. The survey of 25,000 internet consumers from 50 countries show that consumers trust information from other consumers, either from personal acquaintances (90%) or opinions posted by consumers online (70%), which is greater than levels of trust associated with information provided by any other means. The study also showed that trust in online advertising (i.e. email ads, search engine ads, online video ads and online banner ads) is notably lower than the level of trust in TV and newspapers advertisements.

Figure 28: Trust in different sources of information (2009)



Source: Nielsen Online Consumer Survey 2009

The perceived trustworthiness of different sources of information gives an indication of the perceived quality of the information provided through different sources, and may also provide an indication of the relative weight consumers are likely to give to different sources of information when they analyse information. Below, we discuss the impact of some of the most common sources of information in the online environment.

6.3.1. Online reviews and herding behaviour

There is clear indication that consumers use and trust information provided in recommendations (e.g. in online reviews). A German study suggests that 88% of German internet users have read a review by another user and 55% have been dissuaded from buying something by a user review (Bundesministerium für Wirtshaft und Technologie, 2010).

In addition, Kim and Srivastava (2007) argue that consumers are more likely to trust recommendations from people they know, for example, recommendations provided through social networks. In this context, it is also worth noting that the role of professional critics has diminished (Helsper, et al., 2010). Empirical evidence consistently shows that there is a link between online reviews and product sales (Godes and Mayzlin, 2004; Chevalier and Mayzlin, 2006). For example, Yayli and Bayram (2009) find that the number of reviews for a product or seller has a significant effect on buyers' purchasing decision because of the increased perceived popularity of the product. In addition, consistency and timeliness of reviews, as well as the reliability of the website, influence consumers purchasing decision.

It is a general observation that consumers tend to follow the decisions of other consumers. This is often referred to as herding behaviour. Such behaviour may be perfectly rational and optimal if, for example, consumers prefer products and services that other consumers also use (Becker, 1991) or if there are network externalities (Katz and Shapiro, 1985), meaning that the product is better or more useful the larger the user base. Herding behaviour may also be information motivated (Banerjee, 1992; Bikhchandani, et al., 1992). If early adopters have better information about product and supplier quality, consumers may optimally choose to follow the decision of early adopters (for example, by attaching a large weight to information found through online reviews and ratings). In the models by Banerjee (1992) and Bikhchandani et al. (1992) early adopters (such as reviewers) and later adopters share preferences, so in this setting, rational decision makers should follow the decisions of early adopters.

However, online reviews may fail to provide good information about quality of the review itself. Firstly, firms may have an incentive to manipulate reviews to create artificially high ratings. This was a concern expressed by consumer stakeholders consulted for this project. Secondly, reviewers' opinions and preferences may not match the preferences and opinions of consumers who read the reviews. In addition, opinions and preferences may change over time and, as a result, the views of early product adopters may differ from the broad group of consumers (Li and Hitt, 2008). In these cases, herding behaviour may not be optimal but instead can be seen as a rule-of-thumb decision rule resulting from consumers' limited capacity to deal with large amount of information or a large number of choices.

6.3.2. Price comparison sites

Although price comparison sites are quite widely used, several UK studies have indicated that trust in the sites is limited. Which? (2009) find that most UK consumers do not trust them to find the best deal and over two thirds of people think that price comparison websites will only list the products that bring in the most commission. Of those that chose not to use comparison websites, 21% cited a lack of trust as the key reason for non-use. Other concerns by consumers include competitiveness of the quotes found on comparison websites, with 12% unhappy with the quotes they are given and one quarter finding cheaper quotes elsewhere. In general, the major problem that consumers had with comparison websites was that they worry about the sites not being comprehensive or competitive enough because no one site in the UK covers the entire market.

Moreover, GfK (2009) show that even though 37% of UK consumers said they were likely to use financial price comparison websites in the future, only 27% trust them. This suggests that consumers weigh the ease and convenience of price comparison websites more highly than their lack of trust in the websites.

6.4. Framing and advertising

As shown above, trust in online advertising information is low. This may be because the information is obviously biased by the interests of the seller or it may be because consumers have experienced some cases of unclear or misleading advertising information.

6.4.1. Misleading and unclear information

Civic Consulting (2010a) identified a number of ways in which advertising information may be misleading.

Firstly, information relating to the quality of the good or service may be misleading (for example, the misuse of trusted quality labels, the use of false test results or use of self-created quality labels). Secondly, pricing information in advertisements may also be misleading, for example, if companies use drip-pricing or scams where consumers are not informed properly of the total cost.

In a 2007 analysis the OFT (2007a) assessed the clarity of information provided online. They found significant differences between the initial and final prices on some websites (for example, due to delivery charges, booking fees and credit card charges), and in over half the cases, the additional charge had been made at the point of confirming the purchase . In 25% of the cases, the additional charge was levied at the point when the payment method was selected. The study also found that the clarity of non-price information may be compromised when important details are omitted, such as whether an item is out of stock.

6.4.2. Impact of advertising on decision making

There is clear evidence that the framing and clarity of advertisements affect consumers' ability to analyse the information presented to them. The OFT (2010) recently conducted a controlled experiment testing the effect of different price frames. The analysis showed that drip-pricing, time-limited offers, baiting and complex pricing all impact consumer decision making. Drip-pricing and time-limited offers were found to be most frequently associated with decision errors and generated the greatest welfare losses for consumers. The most prevalent decision error associated with these types of pricing strategies was that consumers bought too early and should have continued searching.

Manchanda, et al. (2005) also find that exposure to advertising, diversity of adverts and individual browsing variables have an effect on the consumer's decision to purchase. The more a consumer is exposed to advertising, the higher the probability of purchase. On the other hand, greater exposure to many different adverts in a week decreases the probability of purchase. This is because consumers are more likely to learn and retain advertisement content if the same message is repeated several times. Finally, if the consumer is exposed to an advertisement on several websites and pages, compared to just one page, there is a higher probability they will purchase the product.

A study by Martin, et al. (2003) shows that advertisements may not always lead to website activity. They showed almost counter intuitively that consumers are *less* likely to visit a company's website after they receive an email advertisement if the email is perceived as useful. This may be because the email provides sufficient information for the consumer, and so the need to visit the website for further information is diminished. The study also showed that the more emails a consumer receives, the less likely she/he is to visit the website. However, more emails may lead to a greater likelihood of the consumer visiting a 'brick-and-mortar' store.

Finally, Martin, et al. (2003) show that consumers value special sales offers or promotions, and information about new products and competitions more than other types of email advertising.

6.4.3. Impact of advertising on consumer perception of seller trustworthiness

Advertisements may also impact consumer views on sellers and advertisements. A survey by Burst Media (2010) asked 1,600 US adults about their experience of internet advertising and how it impacts brand perceptions. The results showed that 17.4% of respondents had a better impression of the company or product after they had experienced targeted behavioural advertising, while 10.4% had a worse opinion. Just over one-third of respondent's perceptions remained unchanged. Choi and Rifon (2002) showed that the credibility of the seller matters more than the credibility of the advertiser. They analysed information on consumers responding to banner advertisements and found that consumers valued the credibility of the company that sells the advertised product more than the credibility of the website the advertisement is placed on. Moreover, research suggests that users are almost twice as likely to trust advertising that is on content sites rather than social networking sites (GfK NOP, 2010).

7. THE CONSUMER PURCHASING PROCESS - ACTING ON ASSESSMENT AND ANALYSIS

KEY FINDINGS

- Consumers benefit from e-commerce through the opportunity to pay lower prices, access to wider variety of goods and sellers, increased ease of comparing product specifications and prices, greater convenience of online shopping and greater ability to share/receive consumer information on consumer forums. Consumers who shop online also generally feel that they benefit when they shop online.

- Of those services purchase online, consumers most commonly buy clothes and travel related goods and services. Computer and electronic goods are the least likely to be bought online, which may reflect the high value associated with these goods.

- Convenience and the potential to save money by purchasing online are the main motivators for consumers to buy online. However, there is still a large share of consumers who indicate they prefer to shop in person or that they feel they have no need to shop online.

- Consumers consistently mention the perceived risks associated with using the internet. Across the EU, 63% of consumers believe that there is an additional risk of online fraud, while 56% believe that there is a risk of others gaining access to personal information. However, there is evidence that consumers continue to use the internet despite privacy concerns.

- The perceived risks may act as a barrier for e-commerce in Europe, particularly for cross-border e-commerce. Evidence suggests that of the consumers that have not made a cross-border distance purchase, 62% said the fear of fraud had stopped them; 59% were worried about what to do if they encountered a problem; and 49% thought delivery may be an issue. Uncertainty about consumer rights caused 44% of these consumers to abstain from participating in cross-border e-commerce.

- Concerns related to redress, complaints and consumer rights are much more important for consumers in cross-border transactions than in transactions with domestic sellers and may be related to the fact that European consumer protection regulation and enforcement is not harmonised. Consumers may be confused and uncertain about the implications of the national differences in consumer law and practices.

This section looks at the stage of the purchase process where the consumer acts on the assessment of information and makes the actual purchase online. Purchasing in the digital environment may be more convenient for consumers, especially if they suffer from time or geographic constraints. However, some barriers to e-commerce exist that may discourage consumers from buying online, such as privacy or security concerns.

7.1. Acting on assessment and analysis – general considerations

In standard economic theory consumers make consistent and fully rational decisions based on full information. Therefore, consumers buy a product that maximises their utility.

However, in the process of actually purchasing the product, consumers may choose the wrong product or service, or fail to choose at all, due to behavioural biases. One such bias relates to loss aversion, where people weigh potential losses to a greater extent than potential gains (Kahneman and Tversky 1984). This can lead to purchase of a product that may not maximise a consumers' utility. For example, if a retailer displays messages such as 'last in stock' or 'only two hotel rooms remaining', the consumer may act too soon and purchase the product because they fear losing it, even if there are better deals available elsewhere.

In addition, experiments have shown that consumers may fail to make a decision if there are too many alternatives available to them (Reeson and Dunstall, 2009). This may be because increasing choice results in greater complexity. Iyengar and Lepper (2000) conducted an experiment in a food shop whereby either 6 or 24 different jams were on display. The results found that while people liked the idea of more choice (more people went over to the 24 jam display), they were less likely to purchase when there was more choice. A 1998 study also showed that large online stores were less effective in terms of turning site traffic into sales because consumers had difficulties finding the product they were looking for (Lohse and Spiller, 1998).

If consumers are overconfident about their decisions in the future, they may not buy the product today. An example in the behavioural literature is hyperbolic discounting where people put off sacrifices such as exercising or saving money because they are overconfident that they will 'do it tomorrow'. In the case of e-commerce, it could be the case that consumers do not buy a product today because they believe that it may be cheaper tomorrow (for example in the case of aeroplane tickets).

7.2. Objects of e-commerce

Eurostat data on online purchases show that the most common items bought over the internet are clothes and travel-related goods and services (Table 5). Computer and electronic goods are the least likely to be bought online, which may be due to the fact that there is a higher perceived risk associated with these goods. This risk originates from the relatively high value of the goods. Consequently, consumers may wish to see the product before purchasing it.

Table 5: Goods or services bought or ordered over the internet

	% of individuals buying or ordering over the internet
Travel	51
Clothes	46
Household goods	37
Tickets for events	35
Books and magazines	33
Films	32
Computer software	29
Electronics	26
Computer	18

Source: Eurostat (isoc_ec_ibuy)

7.3. Drivers of e-commerce

As was shown in Section 2, one of the main drivers of e-commerce relates to the extent of internet access (unsurprisingly). However, other factors are also at play.

For example, convenience related factors have also been shown to be some of the main drivers of e-commerce for consumers with internet access. A survey of Danish consumers who use e-supermarkets show that 39% buy their groceries online to save time and 37% shop online because it is convenient (Konkurrence- og Forbrugerstyrelsen, 2011b). This is supported by the findings of a Swedish study, which shows that consumers consider not having to travel to the physical shop and the ease and speed of product delivery as some of the main benefits of online shopping (Konsumentverket, 2009).

Both the Danish and the Swedish studies have shown that the opportunity to obtain the same products or services at lower cost is also potentially important for the up-take of e-commerce.

7.4. Barriers to e-commerce

Many consumers still hesitate to shop online. Data from Eurostat show that the most common reason for not shopping online is that consumers prefer to shop in person (62%) or say they have no need (52%). These results are largely mirrored by the results of a recent Danish study that found that, although the barriers to buying goods online differed by the type of product, Danish consumers generally said that they did not shop online because they wanted the physical experience and personal contact only available from brick-and-mortar shops (London Economics 2010).

The Eurostat data also suggests that security, privacy and trust concerns are relatively common barriers to e-commerce for many consumers, and that concerns over the risk of problems (e.g. delivery problems) and complaints handling and redress mechanisms may also be an important barrier. Such concerns were also identified by stakeholders as important barriers to e-commerce. In particular, some stakeholders argued that consumers may attach negative connotations to online shopping because of stories they may have heard about online scams or non-delivery of items purchased online. Consumers want to know that if they have problems with a purchase, they will be able to communicate with the trader and that they will be able to return problem items under some kind of returns policy. Actual problems and complaint handling is discussed in further detail in the next chapter.

As for businesses, there also appear to be some practical barriers to the full engagement of consumer online, such as the lack of skills, the lack of suitable means of payment, and delivery issues. However, we note that practical issues appear to be less important obstacles for consumers than for businesses.

It is also worth noting that only 8% of consumers mentioned that the lack of product information prevented them from ordering goods and services online. This suggests that consumers feel relatively confident that they are able to find good quality information about product and services prior to the purchase.

Table 6: Reasons for not using the internet to order goods or services in the last 12 months (EU-27, 2009)

	% of individuals not buying or ordering over the internet
Prefer to shop in person	62
Have no need	52
Payment security concerns	35
Privacy concerns	29
Trust concerns, complaint or redress concerns	26
Lack of skill	16
Do not have a payment card	12
Other reasons	11
Delivery	10
Lack of information about products	8
Speed of internet connection is too slow	3

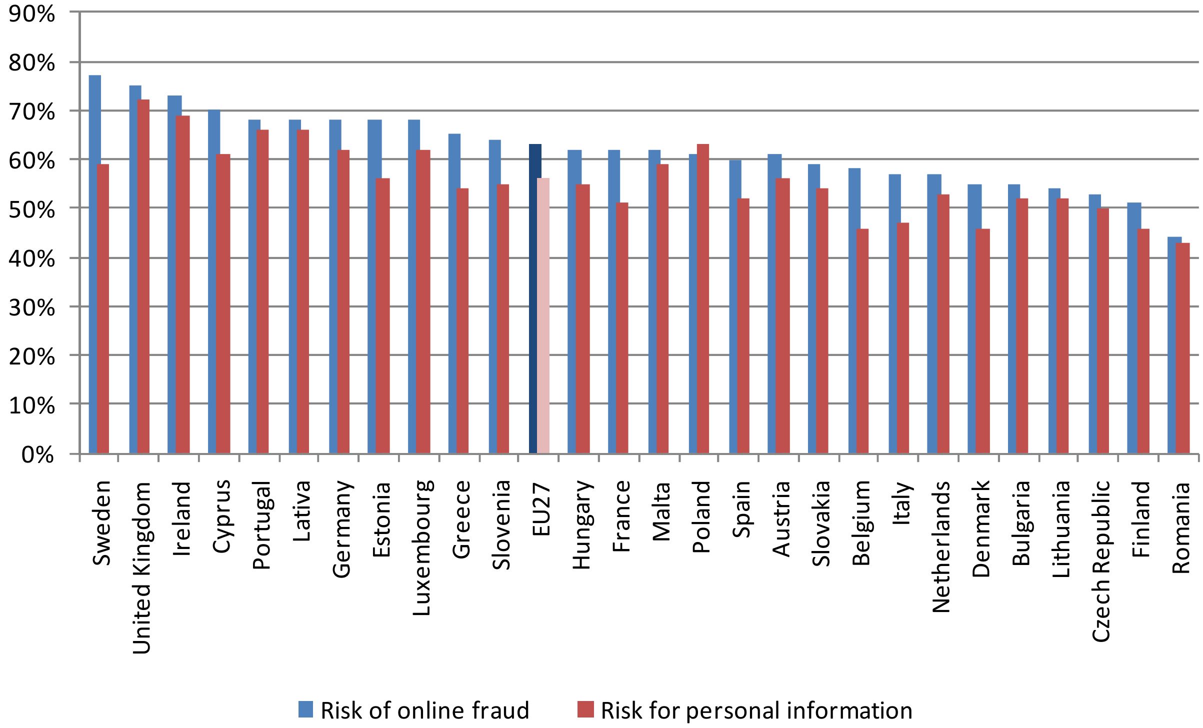
Source: Eurostat (isoc_ec_inb)

Like the Eurostat study, other studies have also highlighted the role of additional risks associated with e-commerce as important barriers for consumers. Anckar (2003) finds that shopping limitations and financial risks are the two main inhibitors to the adoption of transaction based e-commerce among non-adopters. Other reasons why non-adopters do not shop online include privacy and security, lack of customer service and lack of social interaction (Ahuya, et al., 2003). In addition, adopters of internet shopping also believe that privacy and security concerns act as barriers to e-commerce (Udo, 2001).

These risks are typically associated with consumers providing personal details to sellers as part of the purchasing process. Nine out of ten EU consumers who have shopped online have provided their name and 89% have provided details of their address. Forty-five per cent have provided their mobile phone number, 35% details of their nationality and 33% have provided financial information such as credit card details. It is worth noting that for many online transactions, the provision of the consumer’s name and address (at least) will be necessary for the product or service to be delivered correctly and 79% of consumers who purchase online and disclose personal information, disclose it in order to obtain access to a service (TNS Opinion and Social, 2011).

The results of a 2008 Flash Eurobarometer survey illustrate the perceived risks associated with using the internet. Across the EU, 63% of consumers believe that there is an additional risk of online fraud associated with using the internet and 56% believe that there is a risk of others gaining access to personal information. In general, it is the case that the perceived risk associated with online fraud is bigger than the perceived risk related to personal information. It is also worth noting that consumers in the United Kingdom and Ireland perceive the risks as higher than consumers in other countries, with the exception of consumers in Sweden, who identify a high risk associated with online fraud.

Figure 29: Perceived risks: percentage who agree that people who do not use the internet take less risk because they avoid risks associated with online fraud and others gaining access to their personal information (2008)



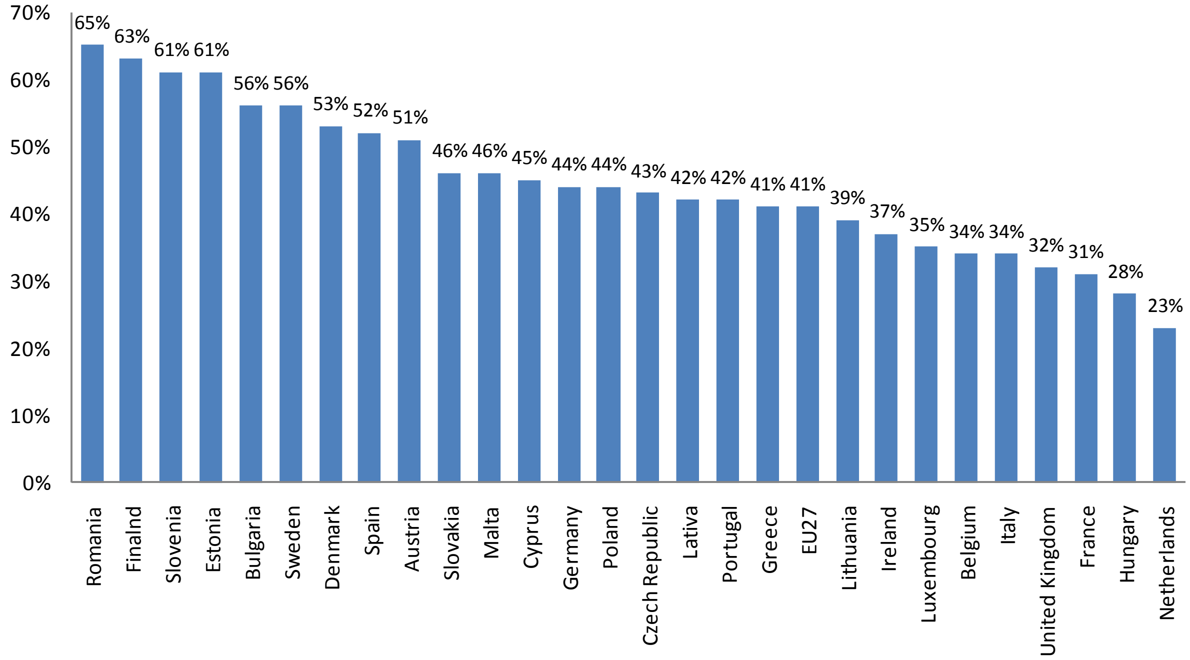
Source: London Economics' analysis based on Flash Eurobarometer 241.

More specifically in terms of the risks associated with disclosure of personal information online, the risk of fraud is perceived as one of the most important risks by 55% of online shoppers. Online consumers are also worried that the information will be used without their knowledge (43%), that it will be shared with third parties without their consent (43%), and that they will be victims of identity theft (35%) (TNS Opinion and Social, 2011).

It should be noted that by becoming sellers as well as consumers, individual consumers may be exposing themselves to additional risks of financial fraud and identity theft (Helsper, et al. 2010).

As seen above, concern about privacy is potentially one of the most prevalent barriers found in the data and literature. However, there appears to be a discrepancy between consumers stated preferences about privacy and their actual behaviour (Berendt, et al. 2005). For example, consumers often express privacy concerns, however, do not purchase privacy protection software and sometimes reveal personal information. There is also evidence that many consumers use the internet despite concerns about privacy (
Figure 30). Across the EU Member States, 41% of consumers with privacy concerns say that this is the case.

Figure 30: Percentage of consumers who use websites despite concerns about protection of privacy (2008)

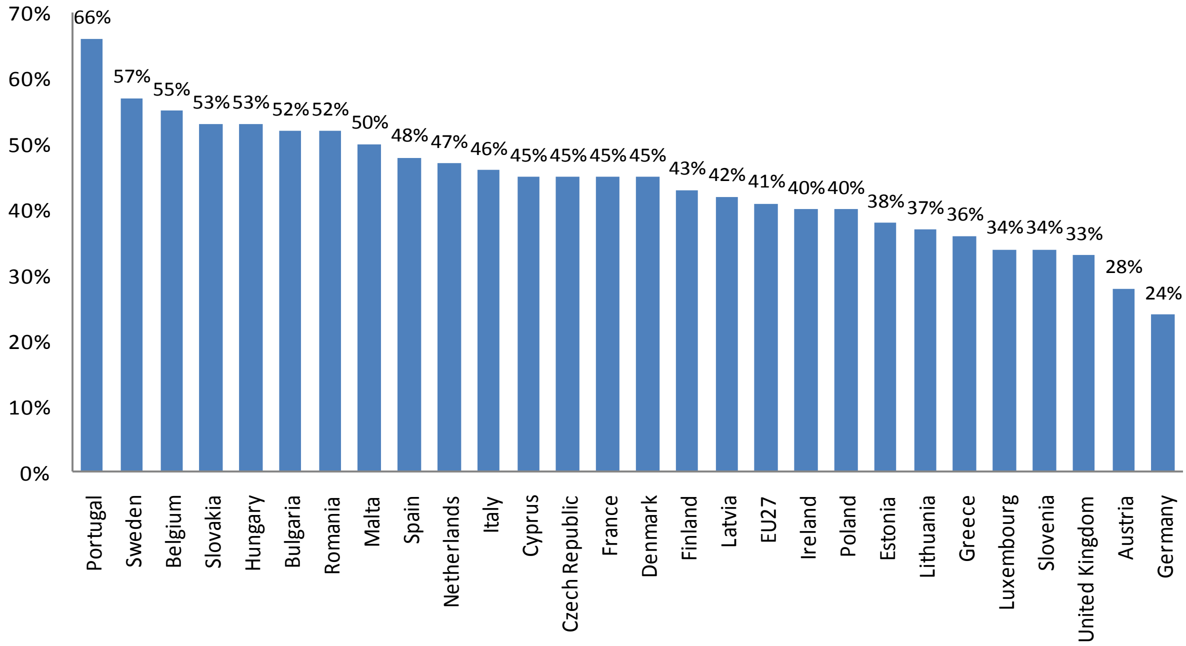


Source: London Economics' analysis based on Flash Eurobarometer 282.

This discrepancy between stated concerns and actual behaviour occurs despite the fact that 44% of online consumers feel that they themselves have the main responsibility for ensuring that personal information is stored and exchanged safely. In comparison, 39% say that the seller has the main responsibility.

Although many consumers with privacy concerns continue to use the internet, there is also some evidence that consumers that use the internet, on average, are more trusting than consumers who do not use the internet (Helsper, et al., 2010). For example, survey results show that 68% of online consumers feel that they have control over the data they provide (TNS Opinion and Social, 2011). This confidence may also explain why many online consumers do not read privacy notices on websites. Across the EU, 41% of internet users say they never read privacy notices on websites. In addition, women are less likely than men to read privacy notices on websites.

Figure 31: Percentage of consumers who have never read privacy notices on websites (2008)



Source: London Economics' analysis based on Flash Eurobarometer 282.

The hypotheses advanced to explain this discrepancy include limited information, hyperbolic discounting and underinsurance (Acquisti and Grossklags, 2003)[16]. If individuals have incomplete information about security risks or are unable to calculate the risks and benefits of buying privacy protection software, they may not take out privacy protection, even if they are worried about their privacy.

Hyperbolic discounting occurs in privacy sensitive situations when individuals under-discount long term risks and losses. For example, if benefits or discounts are offered in exchange for information revelation, then consumers choose to reveal personal information because they over-value these benefits and under-value the long-term risks of revealing personal data. In addition, identity theft is a future loss that might occur with a relatively low probability but is associated with a high impact. Given the inability to assess the expected future loss (i.e. the probability of the event occurring multiplied by the size of the loss in the future), consumers may a propensity to underinsure against it.

The existence of more information may not change consumer behaviour. Berendt, et al. (2005) found that privacy statements do not appear to have any effect on users' behaviour and when consumers are aware that legal protection is in place, they choose not to monitor or control their actions sufficiently. Survey results suggest that across the EU, 41% of consumers who do not read privacy statements say that knowing that the site has a privacy statement is sufficient (TNS Opinion and Social, 2011). In other words, consumers free-ride on the fact that they have legal protection and thus choose to exert less effort in protecting their personal data.

[16] Another hypothesis is bounded rationality. Bounded rationality is when consumers make decisions, they are bounded by the amount of information they have, the time they have to process it and cognitive limitations when processing it.

Furthermore, as argued by consumer stakeholders, these findings suggest that consumers who use the internet to shop online have weighed up the costs and benefits associated with providing personal information and decided that it is worth the risk.

7.4.1. Barriers to cross-border e-commerce

Consumers can also purchase goods from abroad using the online channel. Not surprisingly, this type of purchasing is particularly prevalent in geographically smaller countries (Flash Eurobarometer 299, 2011). For example, 38-39% of consumers in Luxembourg and Malta made at least one cross-border purchase over the internet between October 2009 and October 2010, whereas only 12% and 7% of consumers in these two countries had been involved in domestic e-commerce. Cyprus and Ireland also show more cross border e-commerce than domestic e-commerce.

In Bulgaria, Portugal, Italy and Romania, the levels of both cross-border and domestic e-commerce were low. For example, in Portugal, 12% of consumers had purchased online from a domestic seller while 5% had purchased from sellers in other EU countries.

Austria was the only country where the extent of domestic and cross-border e-commerce was more or less equal; 30% of consumers had made a cross-border purchase, while 32% had made a purchase from a domestic online retailer. In some countries, such as Sweden[17], the UK, the Netherlands and Denmark, the proportion of consumers that purchased online from domestic sellers was considerably higher (47%-54%) than cross-border e-commerce (6%-13%).

Compared to domestic purchases, consumers face different barriers when buying goods or services across EU borders. Stakeholders have pointed out that language and cultural barriers may exacerbate the barriers that consumers experience in relation to domestic e-commerce.

The European Commission report (2011) shows that of the consumers that have not made a cross-border distance purchase, 62% said the fear of fraud had stopped them; 59% were worried about what to do if they encountered a problem; and 49% thought delivery may be an issue. Uncertainty about consumer rights caused 44% of these consumers to abstain from participating in cross-border e-commerce.

This suggests that concerns related to redress, complaints and consumer rights are much more important for consumers in cross-border transactions than in transactions with domestic sellers. This finding may be related to the fact that European consumer protection regulation and enforcement is not harmonised. Although the consumer is protected by his or her local consumer protection legislation, consumers may be confused and uncertain about the implications of the national differences in consumer law and practices (for a further discussion of the legal framework see Annex II). According to a 2011 Special Eurobarometer survey, 90% of EU consumers find it important that data protection rights are the same in all EU countries (TNS Opinion and Social, 2011).

Language difficulties may also serve as a barrier to cross-border e-commerce. Survey results suggest that 42% of EU companies that use distance selling channels such as the internet only are capable of doing transactions in one language.

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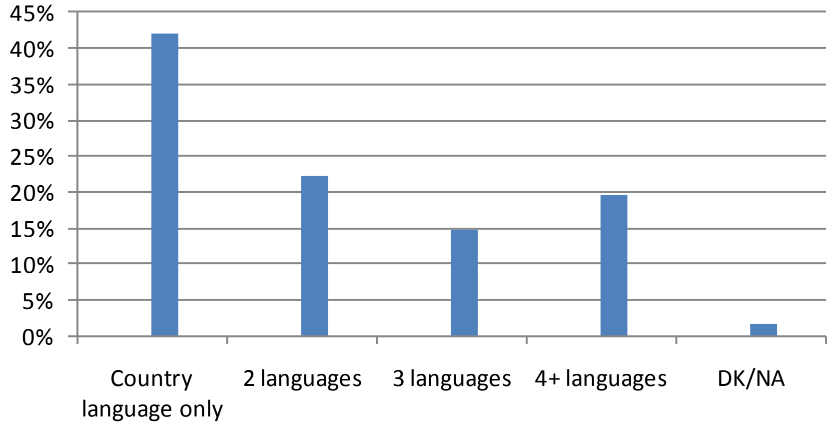
[17] Nevertheless, a Swedish consumer study concludes that cross-border shopping in Sweden is more prevalent through the online purchasing channel than in general (Konsumentverket, 2010)

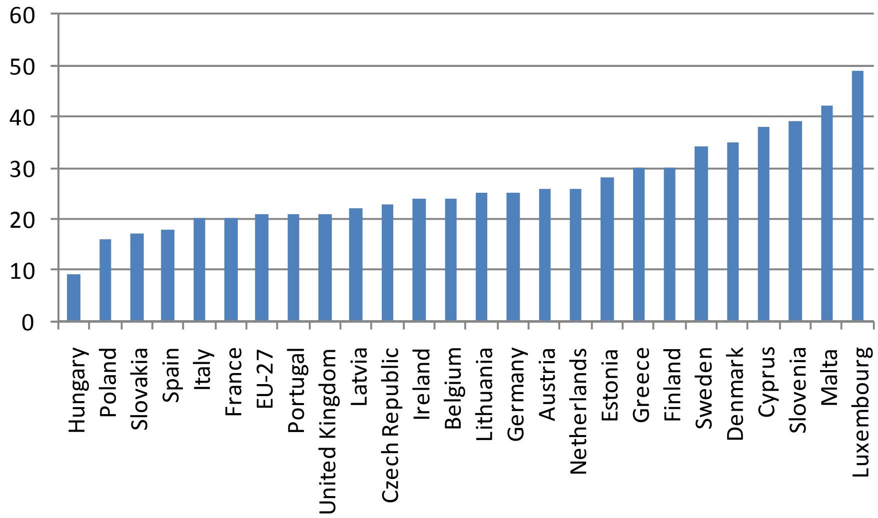
Figure 32: Number of EU languages that can be used to carry out transactions with consumers including only companies that use distance selling (2010)



Source: Flash Eurobarometer 300

According to results from the Special Eurobarometer 298 (Figure 33), only 21% of EU citizens (on average) know where to get information and advice about cross border shopping in the EU. Respondents from New Member States tend to be less knowledgeable about where to get information from, with only 9% of Hungarians knowing where to get information. On the other hand, 49% of Luxembourg citizens know where to access this information.

Figure 33: You know where to get information and advice about cross-border shopping in the EU (% of respondents that tend to agree) (2008)

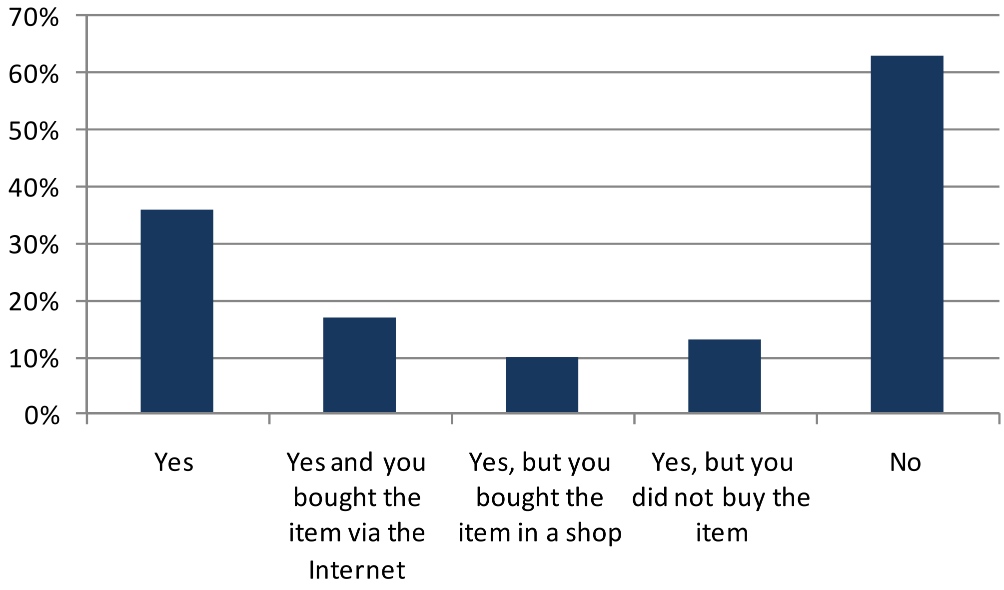


Source: Special Eurobarometer 298

7.5. Search and purchase through different channels

These barriers to e-commerce may lead consumers to search, but not purchase, online. The European Commission (2009) found that 36% of Europeans made price comparisons online with 17% subsequently purchasing the product online. However, 10% went on to purchase the product in a physical shop, while 13% made no purchase at all.

Figure 34: Have you used the internet to compare goods or services from different sellers/providers? (EU-27, 2008)



Source: Special Eurobarometer 298 (2008)

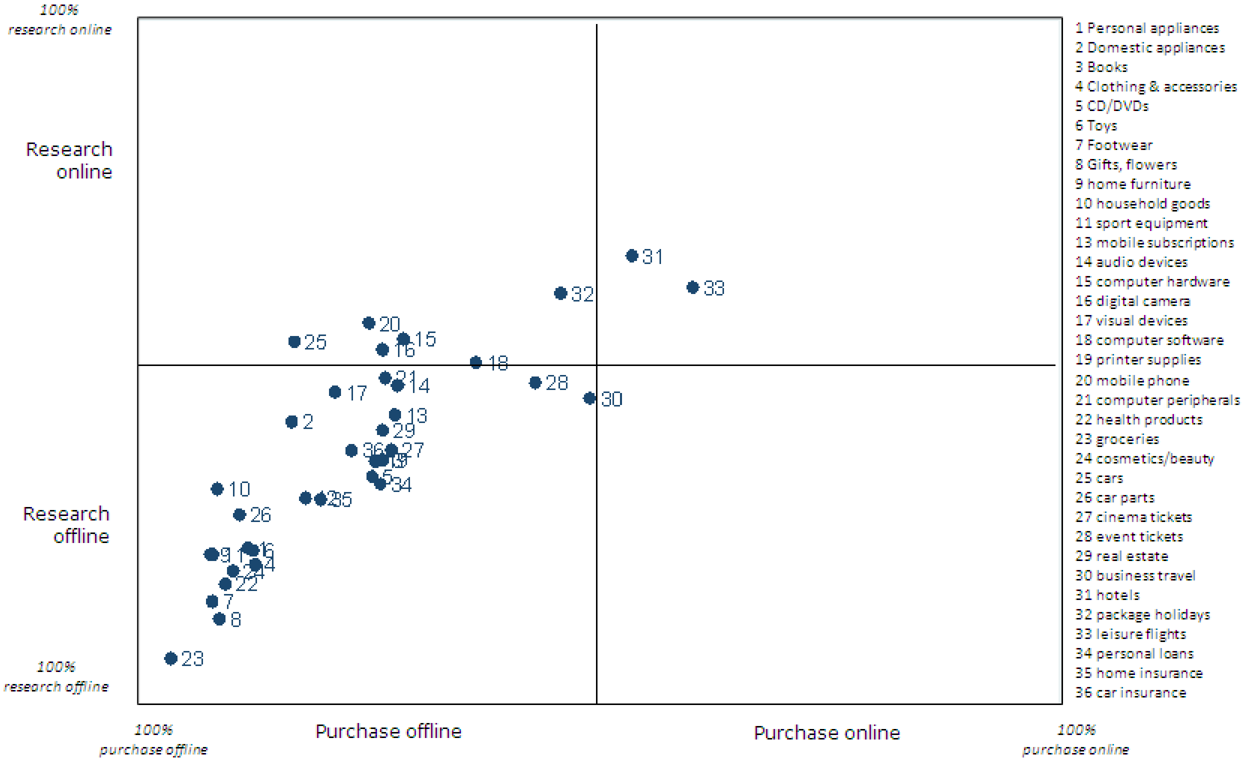
An analysis of data from the Consumer Commerce Barometer shows how the search and purchase behaviour of EU consumers depends on the product or service they are intending to buy (Figure 35). Travel related products and services are the most likely to be researched and purchased online. Cars, mobile phones, computer hardware and digital cameras are often researched online and then purchased offline. However, groceries are the least likely to be researched or purchased online.

There are also significant regional differences in online research and purchase behaviour (Figure 36). Consumers in Northern European countries (for our purposes Northern Europe includes Denmark, Sweden, Finland, UK and Ireland) generally research and/or purchase many more products online than consumers in other EU Member States. The only exception is Ireland where consumers are much less likely to research products online. Research in Sweden also shows that the internet is the second most used source of information for Swedish consumers searching for deals across a number of different markets, including markets where purchases are typically made offline. Only direct contact to sellers was used slightly more frequently as a source of information (Konsumentverket, 2010).

Consumers in Western Europe (for our purposes Western Europe is defined as Germany, Austria, France, Belgium and the Netherlands) use the internet much less to purchase products; however, many products are researched online and purchased offline. Belgium and the Netherlands are exceptions where relatively few products are researched online. Furthermore, Dutch consumers purchase many products online while Belgian consumers also do not purchase many products online. However, we would recommend interpreting the Dutch results with some caution as the data seems to suggest that no products are only researched online. This is contrary to the results for all other countries in the analysis.

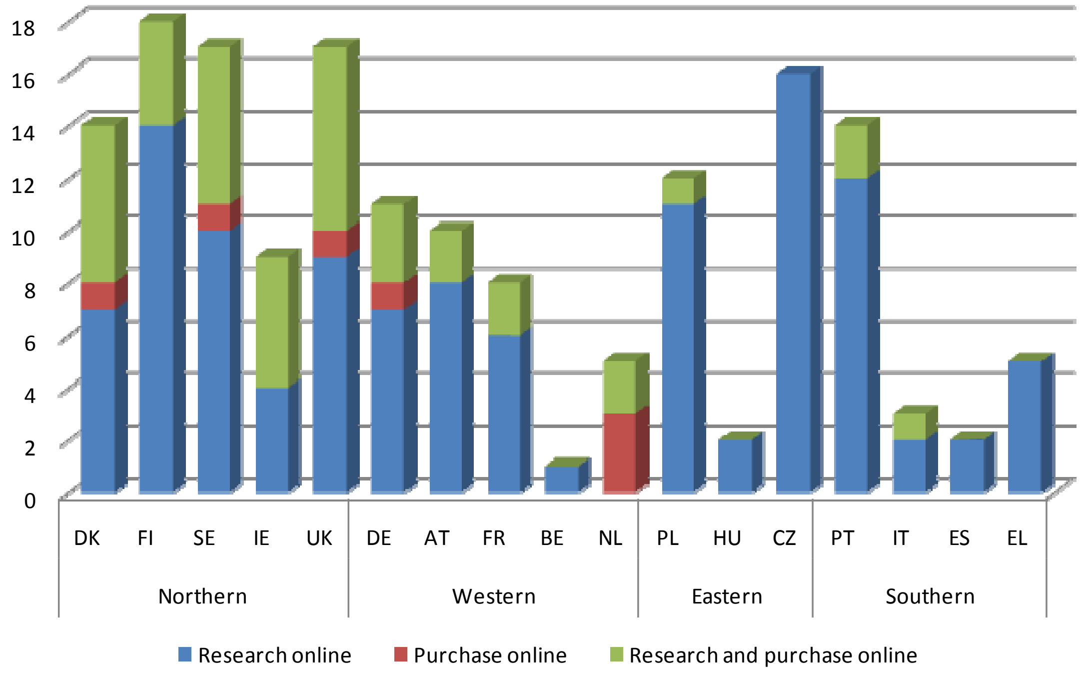
In Southern and Eastern Europe there are much larger variations in behaviour but generally, the internet is used much more for research than for purchasing.

Figure 35: Search and purchase behaviour of consumers in the EU, by category (2009)



Source: London Economics' analysis of data from the Consumer Commerce Barometer (2009). This sample excludes Austria.

Figure 36: Number of products and services searched and purchased online (2009)



Source: London Economics' analysis of data from ROPO Scattercharts, Consumer Commerce Barometer, (2009).

Changchit and Cutshall (2008) explored why consumers who have the intention of completing a purchase online decide to leave the website and not purchase anything. The top five reasons for leaving a website without purchasing were that consumers wanted to see the actual product before buying; they were not sure that the site provided the best price; they found shipping costs too high; they did not like having to register before purchasing the product; and they did not find the desired product.

There may also be other reasons why consumers decide to purchase the good through a different channel. For example, the alternative channel may offer a better deal to the consumer: results suggest that 40% of internet users mostly search for product information online and offline and then buy the product wherever they can get the best deal (OFT and FDS 2010).

Google (2008) also find that the channel through which a product is purchased may depend on the nature of the product. For example, for automotive products and technology products, online research is likely to result in offline purchases for a large proportion of consumers. However, travel and financial products are more likely to be purchased online if they have been researched online.

Consumers do not always carry out their research online. In a survey conducted by the OFT (2007a), some businesses noted how shoppers go into offline stores to receive face to face advice before buying the item at a lower cost online.

Nevertheless, recent research suggests that information gathered online does impact purchasing behaviour. In particular, 55% of European consumers changed their mind on which brand to buy after researching online (EIAA, 2010)

7.6. Benefits of shopping in the digital environment

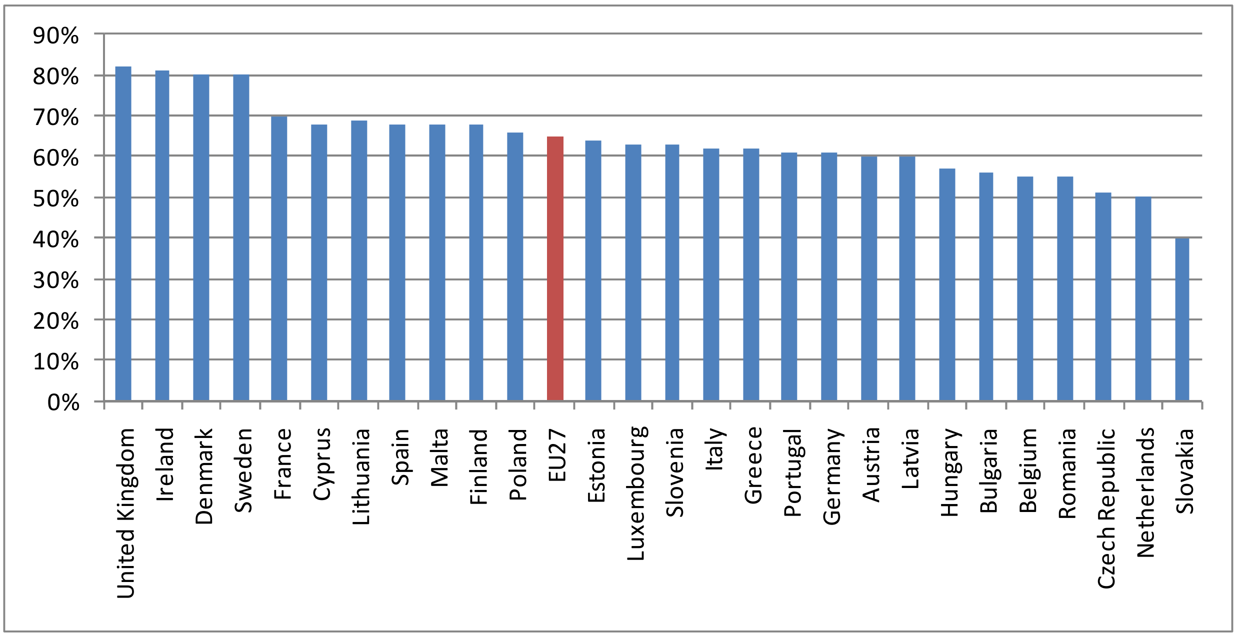
Stakeholders consulted for this study have pointed out a number of ways in which consumers benefit from e-commerce:

- Opportunity to pay lower prices.
- Access to wider variety of goods and sellers. This is particularly, important in remote areas poorly served by 'bricks-and-mortar' retailers.
- Increased ease of comparing product specifications and prices.
- Greater convenience of online shopping.
- Ability to share/receive consumer information on consumer forums.

Consumers who shop online also generally feel that they benefit when they shop online. Eurobaromter survey results show that 65% of EU consumers think that consumers who do not use the internet miss out on good bargains. This figure is 74% among EU internet users and only 46% among non-users.

Consumers in Anglo-Saxon and Nordic countries are generally more likely to view online shopping as a way of achieving good value for money. This may be partially because they use the internet more and engage more in e-commerce and therefore have built experience in finding good deals. Another reason for this finding may be that these are countries with relatively high price levels and therefore there may be more to gain by shopping online (e.g. purchasing from traders in other countries).

Figure 37: Percentage of consumers who agree consumers who do not use the internet miss out on good bargains (2008)



Source: London Economics' analysis based on data from Flash Eurobarometer 241

Consumers may feel they have access to better deals if they have experience that of finding the same product at a lower price online than offline, either because of better access to cross-border traders; because transaction costs are lower online (Helsper, et al., 2010); or because of increased competitive pressures.

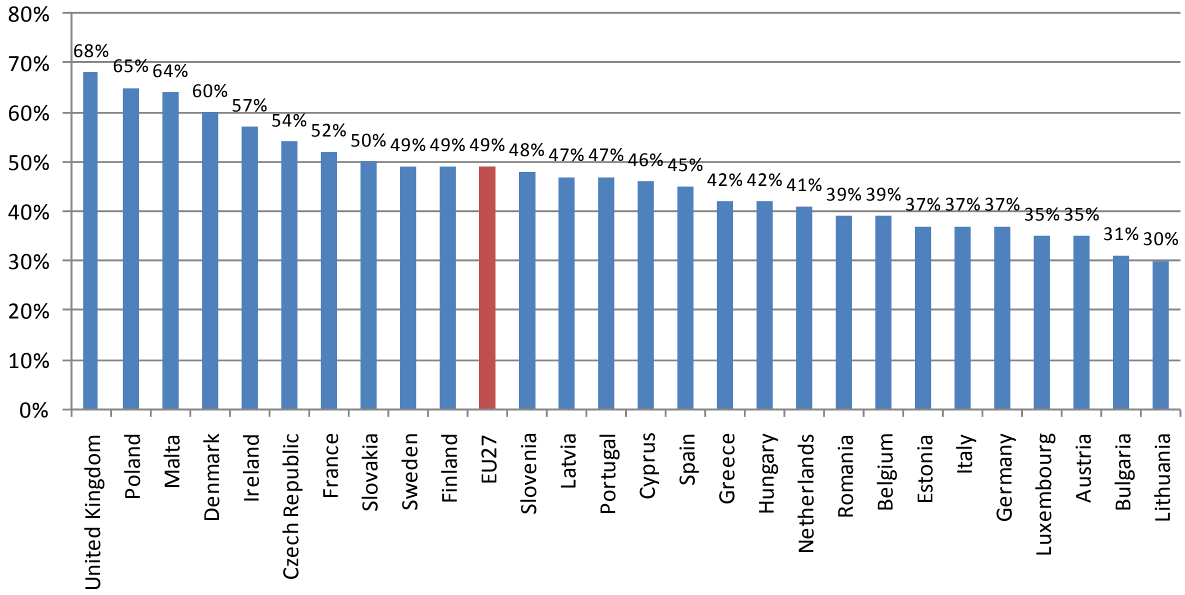
We note that transaction and distribution costs are likely to be considerably lower in the online environment than in the offline environment for purely digital products and services for which physical delivery is not required.

In addition, consumers may feel they can find better deals because they have access to a larger variety of products online than offline and hence are able to find a product that more closely matches their preferences. Recent survey results suggest that 50% of European consumers feel more empowered online because they have access to better product and service choice online (EIAA, 2010). Brynjolfsson, et al. (2003) find that the most important consumer welfare gains in the online book market arise from increased product variety rather than increased competition and lower prices.

Similar findings were obtained in a recent French survey from 2010 which indicated that 71% of participants had engaged in distance buying, of which more than ¾ had done so exclusively over the internet or in a combination of internet and mail/telephone. 49% of these consumers used distance buying because it was faster than the alternative with 43% indicating that it was because it was considered easier to compare offers and prices (Hébel and Lehuédé, 2010).

Another benefit for consumers is associated with e-shopping is a better shopping experience. According to a Flash Eurobarometer survey from 2008, 49% of consumers in EU-27 think that the internet has improved the way they shop and in the UK, Poland, Malta, Denmark, Ireland, the Czech Republic and France, more than 50% of consumers think so. However, there are still many consumers who do not feel that the internet has improved their shopping experience.

Figure 38: Percentage of consumers who agree that the internet has improved the way they shop (2008)



Source: London Economics based on data from Flash Eurobarometer 241

8. THE CONSUMER PURCHASING PROCESS - COMPLAINTS AND REDRESS MECHANISMS

KEY FINDINGS

- When consumers purchase in the digital environment they may experience a change in the type of problem incurred compared to purchasing offline. Most typically, problems with e-commerce are related to delivery or the quality of the product or service.
- In some countries, problems with online scams are also very common.
- However, shoppers' common fears of online shopping do not always translate into actual problems. 38% of non-online shoppers were afraid of giving card details online, however only 1% of shoppers actually had problems in this area.
- In total, of those consumers who have experienced problems with online purchasing, approximately three times as many consumers complained compared to those who did not. There are, however, regional differences with the propensity to complain being much lower in most New Member States compared to Old Member States
- According to stakeholders, the main frustration for complaining online customers is the poor communication levels they may encounter with online traders. A common problem appears to be that online traders choose not to answer e-mails or respond to phone calls, which leaves consumer in a poor position in terms of obtaining redress.
- Although consumers often think that problems with online purchases are difficult to resolve, the majority of consumers are happy with the outcome of their complaint.

8.1. Complaints and redress mechanisms- general considerations

This stage applies only when the consumer has a problem with the good or service and complains to the seller. The purchasing process in the digital market place differs from the one used offline. Consequently, when consumers purchase in the digital environment they may experience a change in the type and magnitude of problem incurred compared to purchasing offline. A consumer's propensity to complain may change when they order a good online as opposed to buying the same good in a bricks and mortar store. There are a number of reasons for this, such as the ease of complaint procedure; how introverted the consumer is; and the success rates of previous complaints.

A rational consumer would complain to the seller or consumer authority if they experienced a problem with their good or service. However, in reality not all consumers choose to complain. Behavioural economics suggests that this may be because consumers place too much emphasis on potential losses associated with making a complaint and seeking redress.

8.2. Problems faced by consumers online

According to representatives from ECC-Net, problems experienced by consumers online are typically related to:

- non-delivery or late delivery of goods;
- goods not as described;
- problems with guarantees;
- problems with the 'cooling off period' rule; and
- prices, hidden costs or incorrect display of prices.

Often these problems are due to miscommunication or insufficient language skills and some problems arise because of consumers' lack of knowledge about the terms of the contract they enter into. This could be improved by more transparent contract terms. ECC-Net also points out that in some cases consumers are not even aware that they have entered into a contract.

However, shoppers' common fears of online shopping do not always translate into actual problems. For example, 38% of non-online shoppers were afraid of giving card details online, however only 1% of shoppers actually had problems in this area (European Commission, 2009).

It is also worth noting that ECC-Net assess that the majority of problems relate to initial purchases from online traders. Consumer complaints are rarely about online traders from whom consumers have previously bought products.

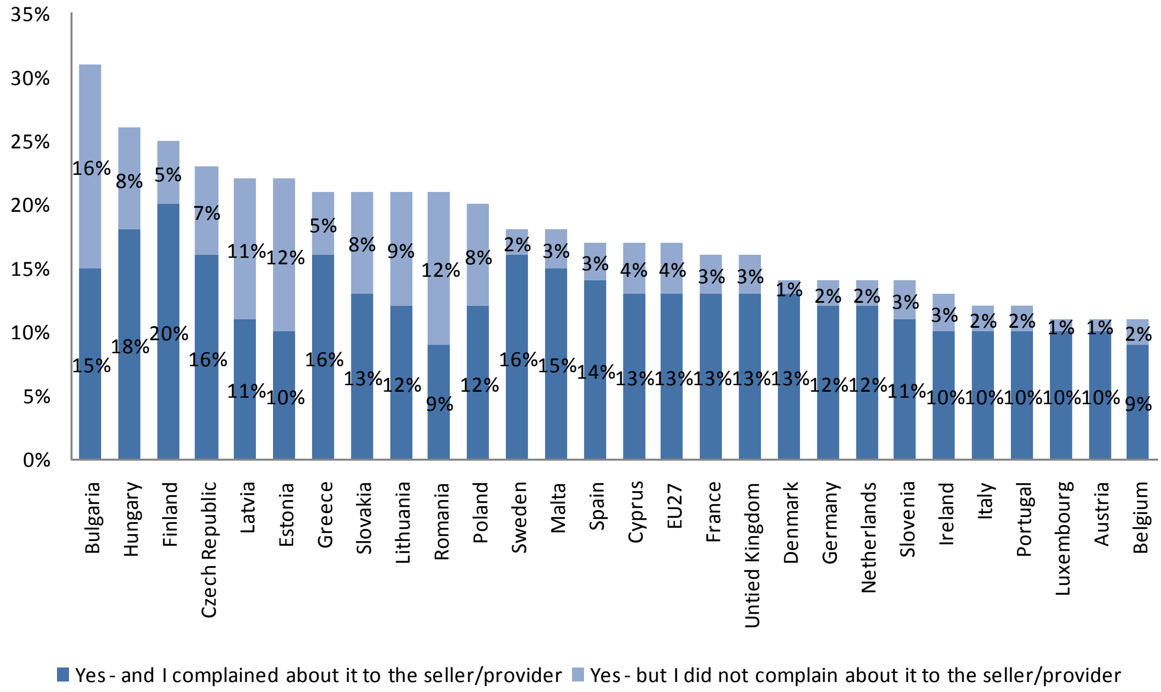
8.2.1. General problems with distance selling

In many ways e-commerce is similar to other forms of distance selling. According to the OFT (2007a), online consumers in the UK experience issues that are typical when buying over a distance. Forty-eight percent of online shoppers in the UK who had a problem in the previous 12 months said their most recent problem was delivery and 14% had issues communicating with the trader. These issues are unlikely to arise when buying the good offline, except if the good requires delivery (for example furniture).

Across the EU, e-commerce accounted for 37% of distance selling in 2010 and 17% of consumers who purchased from a distance experienced a problem (Figure 33).

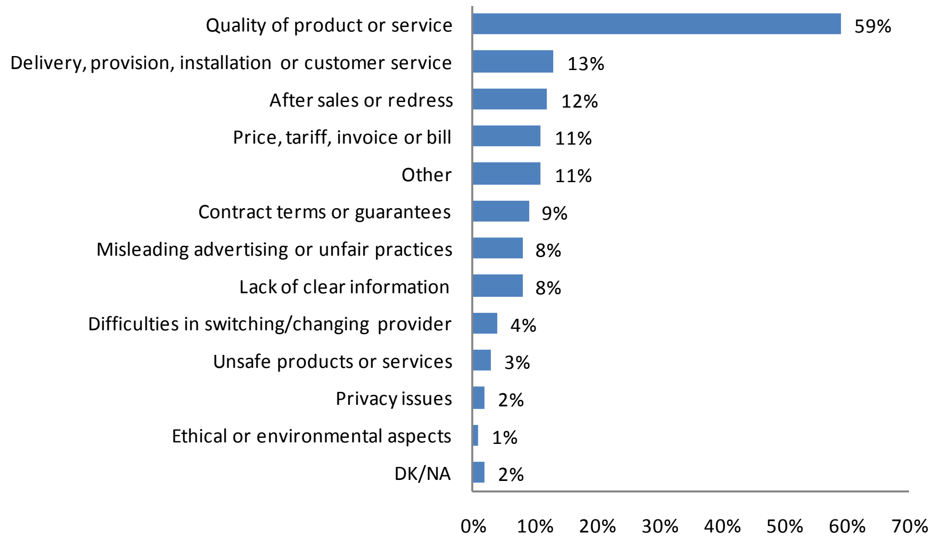
The most common problems with distance selling relate to the quality of the product or service (59% of problems). Problems related to delivery are also relatively common and accounted for 13% of complaints to sellers in 2009 (Figure 34).

Figure 39: Distance selling: percentage of consumers who have experienced a problem (2010)



Source: London Economics' analysis based on data from Flash Eurobarometer 299.

Figure 40: Main reason for most recent complaint (2009)



Source: London Economics' analysis based on data from Flash Eurobarometer 282.

8.2.2. Online scams

To our knowledge, there are no statistics comparing the extent of online and offline consumer scams and fraud. However, stakeholders consulted for the project spoke of anecdotal evidence of more fraud and scams in the digital environment.

So-called 'Subscription traps' (or free/gratis offers) are, for example, common problems in a number of countries including Austria, Germany, the UK, Finland, the Netherlands, Spain and Italy (European Commission, 2010a). 'Subscription traps' are websites that offer services that are free (sometimes imitating the appearance of well-known free websites), but contain hidden or difficult to find clauses that constitute a purchase contract/subscription that comes into effect when the user provides personal information such as name and address to the website (eCommerce-Verbindungsstelle, 2009). Data from the Austrian Internet Ombudsman suggest that only 25% of consumers who use such a website actually pay for the subscription when the website requires it (Der Internet Ombudsmann, 2010). Thirty-eight percent of all inquiries to the German eCommerce-Verbindungsstelle and 72% of all complaints to the Austrian Internet Ombudsman relate to subscription traps.

Stakeholders have also pointed out that fraud may also involve the sale of counterfeit goods if consumers are under the perception that they are purchasing genuine brands.

Currently, scams like those discussed in this section are banned in business-to-consumer transactions under the UCPD. However, we note that SMEs may also be victims of scams and other unfair commercial practices although currently they are much less protected. This brings into question the definition of the 'consumer' in consumer protection laws.

Similarly, there are examples of consumers receiving what appears to be personal messages and are asked to enter personal details (e.g. date of birth) to find out who sent them. By doing so consumers, however, later found out that they had entered into a contract (Civic Consulting, 2010).

8.3. Propensity to complain

Across the EU, a relatively large share of consumers who have purchased from distance sellers and experienced a problem complained about the problem. In total, 13% of consumers complained, compared to 4% who did not. There are, however, regional differences. Most notably, the propensity to complain is much lower in most New Member States than in the most Old Member States (Figure 34).

Information from the OFT relating to UK businesses finds that the level of complaints from online transactions was no greater than the number from traditional sales channels. Of those businesses that were able to compare online to offline complaints, 78% said that online complaints were the same or lower than offline.

In addition, the volume of consumer complaints from purchases made on the internet is not unusual compared to other distance selling channels such as via telephone or mail order. This is illustrated by data on complaints by UK consumers provided by the OFT (Table 7). Nevertheless, the proportion of complaints relating to internet purchases has been rising in line with the increase in sales to households.

Table 7: Consumer complaints by purchase mode (2006)

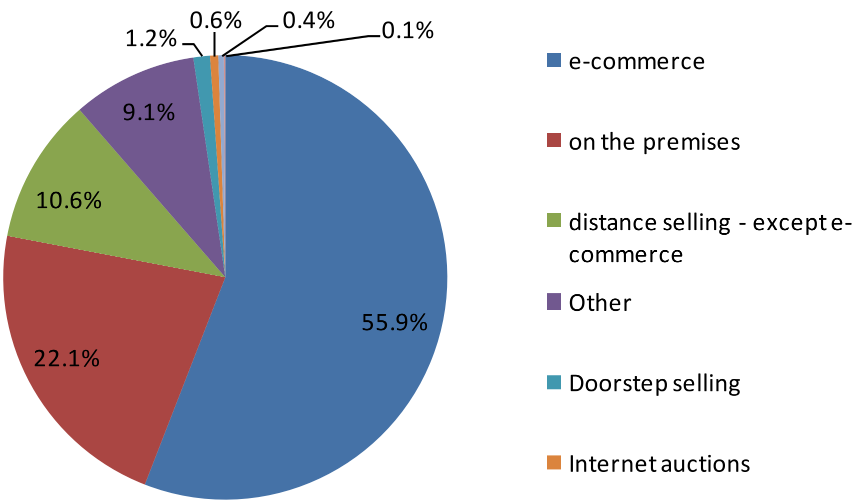
Purchase mode	% of all complaints to Consumer Direct where purchase mode is known
Trader premises	58.1
Telephone	9.1
Internet	7.9
Doorstep invited	5.9
Unsolicited postal	2.9
Mail order	2.3

Source: OFT (2007a)

EC level co-operation ensures a legal framework and institutions to deal with cross-border complaints within the European Union. The European Consumer Centres Network (ECC-Net) co-ordinates complaints and disputes between Member States and the Regulation on Consumer Protection Coordination obliges Member States to co-ordinate enforcement efforts.

E-commerce represents approximately 56% of all complaints received by the ECC-Net in 2009 (Figure 35). However, this apparent overrepresentation reflects that ECC-Net focuses on cross-border complaints only and that online sales may account for a relatively large share of cross-border sales.

Figure 41: Complaints per type of transaction



Source: ECC-Net (2009) 'The Fifth anniversary report of the ECC network'. Includes Iceland and Norway.

Representatives from ECC-Net have suggested that consumers are equally likely to complain regardless of whether they have purchased the good online or offline. However, Cho, et al. (2001) find that compared to offline customers, online customers are less likely to complain. They find this to hold even if, in a similar situation, they express greater dissatisfaction with their purchase than offline customers. However, online customers are more sensitive to the benefits and costs of making a complaint. This means that given a level of benefit (cost), they are more (less) likely to complain than offline customers. In addition, they are more sensitive to delays by the seller in responding to their complaint.

In general, the propensity to complain is dependent on a number of factors. For example, it may depend upon a consumer's perception about the value of complaining and likelihood of success (Kim, et al. 2003), as well as a belief that they can lodge their complaint effectively with an appropriate authority who will handle their complaint well (Ong and Singh, 2009). Other factors which affect a consumer's propensity to complain include consumer characteristics and the type of sector or market of the product/service.

- For example, consumers are more likely to complain if they have experience of a product or service or if they have a higher purchase frequency. This is because they are more likely to have a good knowledge of the product and therefore able to detect a problem (Wall, Dickey and Talarzyk, 1977).
- In addition, consumers who are "conscientious" about consumption and willing to expend non-monetary resource in obtaining products and redress, such as time and effort, have a higher propensity to complain than less conscientious consumers (Parker, et al. 1993).
- Generally, consumers exhibit a greater dissatisfaction with services compared to goods, with many complaints relating to the quality of the service received. This is also the case for online consumers and Cho, et al. (2002) found that a significant number of online customer complaints are generated from unsatisfactory service quality.
- Consumers are also more likely to complain about a durable good, which is essential to daily life, than a non-durable good.
- In addition, if the product sits in a perfectly competitive market, then substitutes exist and consumers can easily switch if they are dissatisfied. However, if the market is a monopoly, the consumer is more likely to stay silently loyal or spread negative opinions because they have no alternatives to switch to. In addition, the company knows this and therefore does not have an incentive to respond to complaints in an appropriate manner.

The channel by which complaints are lodged may change when the purchase environment changes (Lee and Cude, 2011). Their results suggest that consumers who purchased goods online were more likely to complain online than those who had made their purchase offline and this was confirmed by business stakeholders. There may be a number of reasons for this, such as consumers wishing to use only one channel for all stages of the purchase process, or the fact that online consumers may possess more introverted personality traits that can lead to lower demand for face-to-face interactions. Unsurprisingly, complaints made online by online purchasers increased with the degree of dissatisfaction.

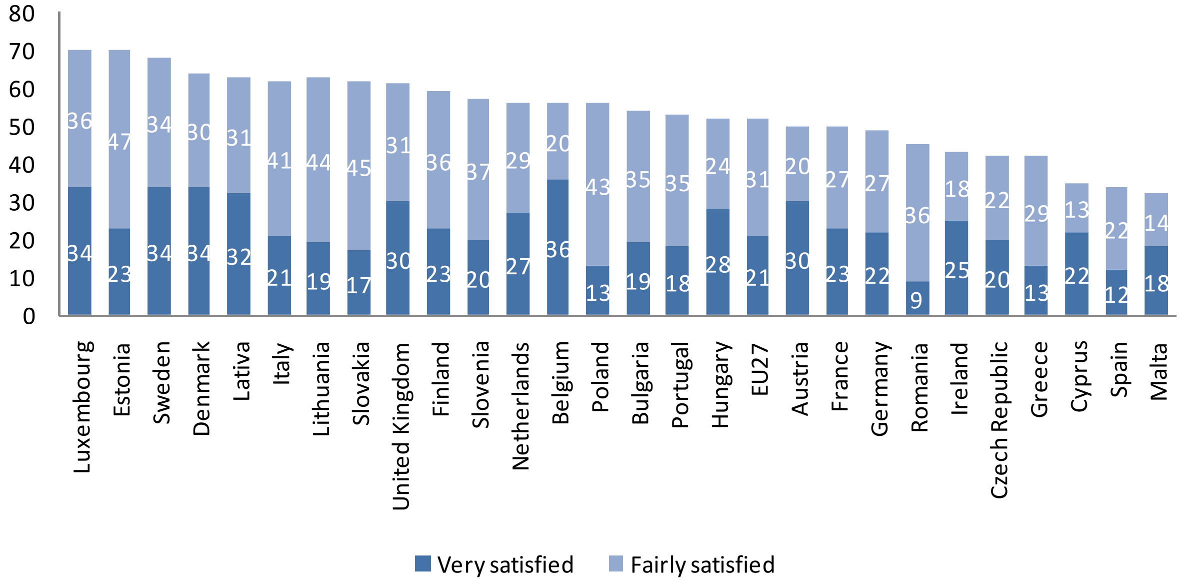
8.4. Outcome of complaints

The main difference between online and offline purchases in the context of complaining is that consumers can go to a physical sales outlet to complain and speak directly to an employee when they have purchased offline. According to consumer stakeholders, the main frustration for complaining online customers is the poor communication levels they may encounter with online traders. A common problem appears to be that online traders choose not to answer e-mails or respond to phone calls, which leaves consumer in a poor position in terms of obtaining redress.

The OFT found that 72% of UK internet users thought that problems were harder to resolve when shopping online than offline. However, 65% of UK online shoppers that had complained to the seller received a satisfactory response.

Across EU-27 as a whole, 52% of consumers who complained about distance selling problems to the seller in 2010 were very or fairly satisfied with the way the complaint was dealt with. There are significant country differences with 70% of consumers in Luxembourg saying that they are very or fairly satisfied but only 32% in Malta.

Figure 42: Distance selling: Percentage of consumers who were very of fairly satisfied with the way their complaint was dealt with (2010)



Source: London Economics' analysis based on data from Flash Eurobarometer 299.

8.5. Post complaint behaviour

Complaint handling is the organisational response to a complaint after the decision to complain has already been made and carried out.

Complaint handling procedures can be judged by complaining consumers according to three different areas of perceived justice: distributive, procedural and interactional. Distributive justice relates to the specific outcome of the recovery effort; procedural justice looks at the set of policies, procedures and criteria that are used to arrive at an outcome; and interactional justice is the way people are treated during the recovery effort.

Davidow (2003) notes that there are six dimensions to the complaint handling response of an organisation. These are: timeliness; facilitation; redress; apology; credibility; and attentiveness. Timeliness is the speed in which an organisation responds or handles a complaint. Many studies find that there is a positive relationship between perceived response speed and complaint behaviour. However, some find that speed interacts with other factors, such as redress, non-monetary complaints and the reasonableness of the delay. For example, if a complaint involves a monetary loss, then reimbursement takes precedence whereas timeliness (and other factors) take precedence if the complaint is non-monetary.

The policies and procedures put in place to deal with complaints can be defined as facilitation. For example, Halstead, et al. (1993), cited by Davidow (2003), find that warranty expectations and the extent to which complaint handing meets prior expectations are significant predictors of the level of satisfaction with complaint handling.

In general, studies have found that facilitation has a positive impact on post complaint behaviour by consumers.

Redress is the compensation received by the consumer after they have made a complaint. In general, redress has an impact on customer satisfaction, repurchase intent, and word of mouth. However, different types of compensation may have different effects on post complaint behaviour. In addition, redress may interact with attentiveness. Blodgett et al (1997), cited by Davidow (2003), found that the effect of redress was only significant on repurchase intent when attentiveness was high. In other words, if a consumer receives compensation but experienced a rude response from the company, they are less likely to repurchase than those that receive partial compensation but a good service.

An apology is a form of psychological compensation. It was found that an apology may have different effects on consumers' behaviour. Moreover, it may interact with redress: if a consumer receives an apology with redress, they are more likely to be satisfied than if they do not receive redress. A consumer wants to know that a company's response to their complaint is credible. Some studies find that, if a company has accepted responsibility for the problem, customer satisfaction may increase.

Attentiveness is the care and attention the customer receives from a company and can include respect, effort, empathy and a willingness to listen. Davidow (2000) found that attentiveness has the greatest impact on satisfaction and repurchase. In addition, Sparks and McColl-Kennedy (1998), cited by Davidow (2003), found that a neutral response from a company has a negative effect on customer satisfaction. This may be because consumers want to know that extra effort has been incurred by the company to resolve their complaint.

Importantly, the internet has made it easier for consumers to interact with other consumers and everyone can evaluate and publish evaluations of company and product performance. Therefore, the role of professional critics, as well as consumer groups, has diminished (Helsper, et al., 2010). Stakeholders have also pointed out that there is a tendency in the offline marketplace for consumers believe and trust the opinions of professional 'experts', while in the online marketplace, consumers believe and trust the opinions of peer groups.

9. THE CONSUMER PURCHASING PROCESS - POST-SALE SERVICE AND OTHER POST-SALE INTERACTIONS

KEY FINDINGS

- Businesses can encourage repeat purchases through e-mail advertising. Post-sale e-mails may be used to both cultivate consumers and provide customer care. A large share of e-commerce sellers sends at least one post-sale e-mail to customers.
- Post-sale advertising may increase e-loyalty; particularly if the consumer has opted into the e-mail service.
- Guarantees, transparent return policies and order fulfilment have also been shown to increase the likelihood that consumers return to the retail website.

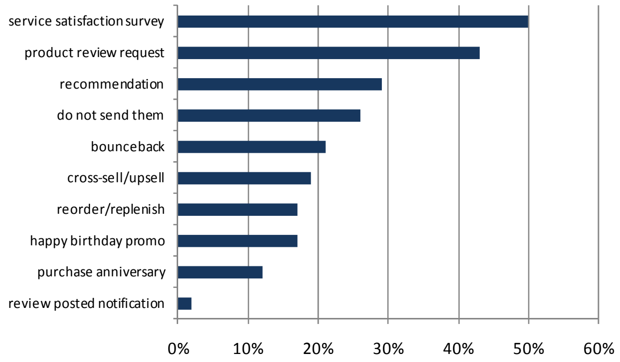
9.1. Post purchase advertising in the e-environment

Businesses can encourage repurchases through e-mail advertising. Post-sale e-mails may be used to both cultivate consumers and provide customer care. With cultivation, online retailers provide the customer with relevant information and encourage the customer to return. Customer care occurs where the retailer pays the customer attention after the purchase to encourage an immediate and long term relationship. If firms encourage cultivation and care of consumers post-purchase, then consumers are more likely to repurchase (Srinivasan, et al., 2002).

Therefore, the use of post-purchase interactions with consumers may trigger a new purchasing process and it has been shown in these circumstances that consumers search for less information or they already have a preferred online retailer. For example, an e-mail from an e-retailer may encourage a consumer to purchase from that firm again, rather than a competitor.

In September 2010, 43 retailers and e-commerce companies were surveyed by SilverPop about the use of pre- and post-purchase triggered emails. Results found that almost three quarters of respondents send at least one type of post-purchase e-mail, with the most popular type including a service satisfaction survey (50%). In addition, there has been a recent trend in the use of reviews by customers. Consequently, many marketing professionals are now sending post-purchase emails to encourage customers to undertake a product review (43%).

Figure 43: Post-Purchase e-mails sent by Retail Marketers, by type (% of respondents)



Source: SilverPop (2010)

E-mail advertising may be either opt-in/consent based or unsolicited. After consumers have purchased a product from an online retailer, they may be asked to opt-in to receive post-purchase e-mails that may or may not be targeted to the customers' preferences.

Hasouneh and Alqeed (2010) find that permission based e-mails are more effective at building a relationship with a customer base because customers have self-selected themselves to receive e-mails and therefore are signalling to companies that they are a 'more loyal and more profitable customer overall'.

However, some retailers may not allow consumers to opt-in or opt-out of emails, or may pass on their e-mail address to third parties. This potentially leads to unwanted e-mails for the consumer. Sending e-mails without permission can be anti-social (Sullivan and DeLeeuw 2003), annoying and time consuming (Park, et al. 2007), and conditions under which post sale marketing communications may legally be sent to consumers without prior consent are stipulated by the PECD. As a general rule the seller may send post-sale marketing communication to existing consumers provided that it is about similar products and provided that the consumer has the option to opt-out (discussed further in Annex II).

Over half of the e-mails sent by companies researched in the UK Spam Report (Spam Ratings, 2010) were not explicitly asked for by consumers. There exists a fine line between sending consumers' e-mails with targeted offers perceived as useful, and sending e-mails perceived as an intrusion of privacy (Jacobsson and Carlsson, 2004). If consumers believe they have a lack of control over personal privacy, they are less likely to provide businesses with reliable data. In addition, consumers may demonstrate both active and passive reactions when they face privacy concerns. For example, they both reduce e-mail usage[18] (passive) and report spam or use protection programs (active) (Park, et al., 2007).

9.2. Other strategies

In addition, Constantinides (2004) finds that other post-purchase strategies can increase firm credibility and consumers' willingness to revisit the website. Guarantees, transparent return policies and compensation procedures can increase consumers' trust and retailer credibility thereby reducing consumers' online transaction anxiety. In addition, order fulfilment by online retailers, such as following up orders and delivering products, can have an impact on the willingness of customers to order and return to websites.

[18] A reduction in email usage was also found by Konow (2005) when e-mail users had less trust in their e-mails.

Stakeholders also point out that successful transactions may help sellers build trust among consumers and that consumer trust varies depending on the stage of development of the e-commerce market. For example, UK consumers show higher levels of trust than consumers in Estonia, which has a much less developed e-commerce market.

10. CONCLUSIONS AND RECOMMENDATIONS

The internet and the development of e-commerce have opened many opportunities for consumers and businesses. Businesses can benefit from better access to larger markets and to markets in other countries. Consumers benefit from access to a wider variety of goods and sellers, greater convenience, improved possibilities to compare products and prices, and in some instances, lower prices. In addition, all users potentially benefit from better access to content and information, lower transaction costs, reduced environmental costs and wider benefits such as improved learning, innovation and creativity.

There seems to be particular scope for benefits to arise for purely digital products and services for which no delivery is necessary. The digital environment leads to lower transaction, storage and delivery costs; particularly for digital products and services. In addition, purely digital products and services overcome the most common problem with e-commerce for consumers: non-delivery or the late delivery of products.

However, despite the potential benefits of e-commerce and the potential for the digital environment to deliver a more integrated internal market a number of barriers remain.

The main barriers for businesses' engagement in e-commerce are the costs associated with trading online:

- **Start-up costs:** Both businesses and business stakeholders suggest that many businesses lack the IT and practical skills to engage efficiently in e-commerce. There may be significant fixed start-up costs for businesses wishing to exploit the opportunities in the digital environment.
- **Operational costs:** For businesses operating in the domestic market, there are considerable costs associated with developing and maintaining a website.

  For businesses operating in multiple countries there are additional costs associated with developing and maintaining multilingual websites; provision of good quality after sales services (including complaint handling) to consumers in different countries; increased transaction costs for payments from different countries; and additional costs associated with delivery (unless the products and services are purely digital).
- **Legal and compliance costs:** Compliance costs appear to be an important barrier to cross-border e-commerce. Legal fragmentation across the EU with respect to consumer rights, taxation, advertising laws, product liability, guarantees and warranties, and product labelling requirements is consistently mentioned by businesses and business stakeholders as a barrier to cross-border e-commerce. There are also costs associated with different national fiscal regulations, technical regulations (e.g. different plugs) and environmental regulation. Finally, the fragmentation of the collection societies for copyrights has been identified as an obstacle for the cross-border sale of digital information products.
- **Uncertainty about costs:** Businesses are worried about fraud and lack trust in consumers when trading online. This is a more important issue in cross-border transactions than in transactions with domestic consumers. Some of the perceived risks are associated with risk of fraudulent payments.

Most of these costs apply to all online transactions but are more important for cross-border transactions. For example operational costs and legal and compliance costs are larger for sellers accepting orders from consumers in multiple countries. As a result, sellers may have an incentive to restrict non-domestic consumers' ability to place orders on their websites. Most frequently cross-border transactions fail because consumers have problems registering on the seller's website, because sellers do not offer shipment to the destination country or because of non-standardised payment means.

In the interaction between consumers and businesses online there may be an issue of information overload. Consumers are unable to search and analyse all relevant information available online and use search and filtering tools to identify the most relevant information. However, empirical evidence suggests that these tools are not sufficiently exploited by consumers, and in addition, advertisements and search engine algorithms may result in certain websites getting preference over other websites making it difficult for non-local and small companies to reach consumers. Empirical evidence suggests that consumers mostly pick a seller among the top two or three search results and rarely look at results beyond the first page.

The study has identified the following barriers for consumer take-up of e-commerce:

- **Lack of access and skills**: E-commerce is facilitated by access to the internet and skills to use the internet. However, some consumers, particularly in Eastern Europe, do not have internet access and some feel that they lack the skills and confidence to shop online.
- **Security and privacy concerns**: Consumers list privacy concerns and concerns related to fraud and payment security as important barriers to e-commerce. This suggests that measures should be taken to improve trust in sellers and the digital environment. However, it should also be noted that although consumers have privacy concerns there is little evidence that they change online behaviour as a result.
- **Risk of problems (such as delivery problems), complaint handling and redress mechanisms**: The evidence suggests that consumers have trust problems when purchasing online. Consumers want to know that if they have problems with a purchase, they will be able to communicate with the trader and that they will be able to return items under some kind of returns policy. Despite the concerns, empirical evidence suggests that most online consumers are satisfied with the way their complaint is handled and resolved.
- **Uncertainty about legal rights:** In cross-border transactions, uncertainty about consumer rights is an important barrier. This may be related to fragmentation of consumer protection laws.
- **Language and cultural barriers:** Language and cultural differences may exacerbate other barriers to e-commerce. In addition, many problems arise because of miscommunication.

We note that even if barriers to e-commerce for consumers and businesses are removed, it is unlikely that all consumers and all businesses will engage in e-commerce. Many businesses argue that e-commerce is inappropriate for their business and a significant share of consumers prefers to shop in person. Therefore, e-commerce is likely to continue to be a supplement to offline trade.

10.1. Recommendations

Our review and analysis has a number of policy implications and gives rise to several specific policy recommendations. Before implementing any of these recommendations, a full impact assessment should be undertaken considering both the direct and indirect impacts on consumers, businesses and other stakeholders. This should be done in order to minimise possible unintended consequences.

For example, if policy makers were to consider a ban on cookies, it would be necessary to take into account that this could address privacy concerns, however, it might also reduce users' access to free online content because targeted advertisements rely on cookies and is a major source of funding for free online content.

In order to support development of e-commerce and in particular cross-border e-commerce we recommend:

1) Reforming EU provisions concerning intellectual property, and in particular copyrights, with the aim of eliminating inefficiencies arising from fragmentation of the Single Market. This could be done by harmonising copyright legislation further to create a more integrated European Digital Single Market.

2) Improving legal access to digital content in order to reduce consumers' incentives to access content illegally. For example, by developing a general system of payment for streamed content which is based on actual use (this could be based on the concept of computation as utility or pay-per-click) or alternatively by basing the system on ownership rather than actual use thus legalising transfer of legally purchased content between different devices owned by the consumer.

3) Increasing the harmonisation of the legal framework for e-commerce in order to reduce compliance costs for businesses and increase consumers' and businesses' trust in cross-border transactions. In particular we suggest:

    a) Reducing the extent of legal fragmentation across the EU with respect to consumer rights, taxation, advertising laws, product liability, guarantees and warranties and product labelling.

    b) Updating the definition of 'consumer' in consumer protection legislation to account for the fact that the distinction between consumers and businesses has become less obvious online.

4) Improving consumer awareness of current consumer protection in place in order to strengthen the level of trust in domestic and cross-border online transactions. Although the consumer is generally protected by his or her local consumer protection legislation, consumers may be confused and uncertain about the implications of differences in national consumer law and practices.

5) Enhancing dispute resolution processes by building online dispute resolution systems that allow for remote out-of-court settlements on an online platform, and integrate these systems with the existing network of European Consumer Centres.

6) Enhancing the level of trust in online traders e.g. by establishing regulated (pan-European) trustmarks for online traders; strengthening the *Trusted Shops* initiative; and increasing awareness of current EU level and national level initiatives.

7) Strengthening the support provided to businesses and individuals wishing to develop the skills necessary to use the internet confidently and to participate more fully in e-commerce.

8) Reducing practical barriers to cross-border e-commerce orders within the EU e.g. by adopting regulation limiting businesses' ability to refuse non-domestic orders from EU consumers at the point of registration, shipment or payment.

9) Restricting potentially abusive pricing practices which have been shown to adversely affect consumer decision making. Most importantly restrictions should seek to reduce adverse effects of so-called drip-pricing, for example, by regulating the number of screens that consumers must click through to determine the final cost or by restricting the size of additional costs (e.g. payment charges) that are not presented to the customer upfront.

10) Enhancing the level of trust in the search results generated by search engines and price comparison sites, by either

    a) adopting regulations either preventing payments from suppliers to search engines and price comparisons sites aimed at influencing the order in which the search results are presented, or

    b) ensuring that users of such sites are clearly and transparently informed by the sites that the order in which the search results are presented may have been influenced by special arrangements between the sites and suppliers.

11) Supporting and strengthening pan-European payment systems such as the Single Euro Payments Area (SEPA) with the aim of reducing transaction costs and improving trust in online payments. We note that it is still too early to assess the impact of SEPA and further initiatives may be necessary to ensure that payment methods are both secure (and therefore can be trusted) and widely available to consumers and sellers across Europe.

12) Supporting initiatives to improve the functioning of national postal markets as a well-functioning postal and parcel service which is an essential infrastructure for e-commerce. Some stakeholders argued that European postal companies are too inefficient and as a result timely delivery may be too costly.

13) Ensuring the provision of national level legal and technical guidance in multiple languages to reduce compliance costs for businesses and help businesses overcome language barriers.

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ANNEX I: STAKEHOLDER CONSULATIONS

As part of the study London Economics consulted a number of industry and consumer stakeholders to get their views on the issues discussed in this report and the main challenges for consumers and sellers in the digital environment.

The consultations were undertaken as semi-structured interviews and ahead of the interviews, stakeholders were provided with an interview guide outlining the research and the topics we wished to cover during the interview. The interview guides were tailored to each of the stakeholders and the interviews were carried out as open discussions either face-to-face or over the telephone.

Table 8: Stakeholders interviewed

Stakeholder organisation	Description
BEUC	European Consumer Organisation. Represents 44 national consumer organisations and defends the interests of Europe's consumers.
ECC-net	European Consumer Centre's Network. National centres that deal with cross-border shopping problems.
EDRi	European Digital Rights. Defends civil right of users in the information society.
Eurochambres	European Association of Chambers of Commerce and Industry.
EuroISPA	European Association of Internet Service Providers.
GESAC	European group of societies of authors and composers.
eBay	Online retailer
ANEC	European consumer voice in standardisation.
ESTI	European telecommunications standards institute. Produces globally applicable standards for ICT.
CEN-CENELEC	European Committee for Standardisation.
ERRT	European Retail Round Table.
AIM	European Brands Association.
IAB Europe	European trade association of the digital and interactive marketing industry.

Source: London Economics

The stakeholder interviews were carried out in May 2011 and after the interview stakeholders were sent a summary of the interview for their approval.

ANNEX II: THE LEGAL AND REGULATORY ENVIRONMENT FOR E-COMMERCE IN THE EU-27[19]

This section gives a brief overview of the current legal and regulatory environment for e-commerce in the European Union. It focuses on the main Directives regulating the digital environment and discusses the interplay with national regulation as well as areas that are addressed in the current European regulatory framework. Some of the Directives reviewed below address directly issues arising from internet use by consumers while others related to consumer protection more generally. They include:

- the Data Protection Directive (95/46/EC))
- the Privacy in Electronic Communications Directive (2002/58/EC as amended by Directive 2009/136/EC)
- the E-commerce Directive (2000/31/EC)
- the Distance Selling Directive (1997/7/EC)
- the Distance marketing of Financial services Directive (2002/65/EC)
- the Consumer Sales Directive (1999/44/EC)
- the Unfair Contract Terms Directive (93/13/EEC)
- the Unfair Commercial Practice Directive (2005/29/EC)
- the Consumer Rights Directive.

The review of each Directive provides first an overview of the Directive. Next, it reviews the interplay of the Directive with national rules. Finally, it discusses the current status of the Directive.

Data Protection Directive

Overview

The Data Protection Directive[20] (DPD), 95/46/EC and Article 8 of the EU Charter of Fundamental Rights, which contains a right to the protection of personal data, are the main instruments for data protection, offline and online. The DPD imposes legal obligations on persons (including e-commerce providers) who determine how data is processed. Processing is widely defined to include almost any operation of electronic processing (Art. 2 (b)) and personal data is 'any information relating to an identified or identifiable individual' (Art. 2 (a)). The person responsible for data processing must notify its national data protection authority (Art. 18).

The purpose of the DPD is to protect the privacy of consumers (and other data subjects) and to give them some control over how their personal data is handled. This is particularly important in the digital environment. However, the DPD does not introduce a general right

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[20] Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data. Official Journal L 281 of 23/11/1995 p. 31.

to privacy, but introduces the following specific obligations on those responsible for data processing:

- Fair & lawful processing (Art. 6 (1) (a))
- Collected for specified, explicit and lawful purposes and must not be processed for any other purpose (Art. 6 (1) (b)). Hence, an e-commerce provider must not tell a consumer that they are collecting her/his personal details for the purpose of processing the transaction and then subsequently sell this information to another company for marketing purposes. Likewise, a social networking website would have to tell the consumer that it is passing on his or her personal profile data to application providers and who can access the consumer's profile (profile settings).
- Only so much data as is needed for the stated purpose must be collected - data must be adequate, relevant and not excessive (Art. 6 (1) (c)).
- Personal data must be accurate and kept-up-to-date (Art. 6 (1) (d)).
- Personal data must not be stored for any longer than necessary (Art. 6 (1) (e)).
- Personal data must be kept secure (Art. 17).
- Personal data must not be transferred to a country with less than adequate standards of data protection, Arts 25 and 26. This obligation causes particular problems for internet use. However, the Court of Justice of the European Union has held that posting information on an internet website does not amount to an international transfer of personal data[21].

It is important to note that the person responsible need not always obtain the individual's consent before processing personal data. The DPD lists grounds justifying processing without consent in Art. 7. For example, processing is justified if it is necessary for the performance of a contract (such as processing payment card details in an e-commerce transaction) or in the legitimate interests of the provider.

The DPD establishes a higher standard of protection for particularly sensitive data. For the processing of sensitive data, explicit consent will be needed in most cases (Art. 8 (2)). This includes data related to racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership or data related to health or sex life (Art. 8 (1)). Arguably a photograph of a person may contain personal data as to that person's racial or ethnic origin. Hence a person uploading a photograph on a social networking website would need the individual's explicit consent.

Individuals are given certain rights such as the right to gain access to their personal data and correction of inaccurate data (Art. 12) and the right to object to processing for direct marketing purposes (Art. 14 (b)). Individuals must be given a judicial remedy (such as a claim for damages) in addition to administrative enforcement of the DPD (Arts 22 and 23).

Interplay with national rules

The DPD only establishes a general framework and does not harmonise data protection law in the Member States. For example, Member States are allowed to provide that sensitive personal data must not be processed, even with the data subject's explicit consent (Art. 8 (2) (a)) and may provide additional exceptions to the prohibition on the processing of sensitive data (Art. 8 (4)).

[21] C-101/01 Lindqist

As a consequence, the implementation legislation, the interpretation of the DPD and actual enforcement practice vary considerably between Member States. Hence it is still appropriate to speak of national data protection laws. For example, there exist significant differences concerning liability and the possibility for individuals to recover compensation for stress and other emotional damage (immaterial damages).

The exceptions to the data protection obligations in Art. 3 (2) (processing for purely private and household purposes is excepted) and Art. 9 (exceptions created to ensure freedom of expression: processing for journalistic, literary and artistic purposes) have also been differently interpreted by the Member States.

However, it is important to remember that the Court of Justice of the European Union, through its interpretation, fills some of these gaps and eliminates consistencies. For example, in the Judgment C-73/07 the Court harmonised the interpretation of what are journalistic purposes by ruling that:

- this exception could apply to everyone processing data, not merely established journalists;
- the exception does not only apply to traditional media so that it can apply to a text messaging enquiry service which allows members of the public to find out the earnings of individuals from their public tax records;
- the exception applies to both commercial and non-commercial activities. Hence, a blogger may benefit from the exception with the consequence that data protection law does not apply to certain (journalistic) blogging activities.

The particular characteristic of this case was that, in Finland, tax records are in the public domain (which is not the case in most other Member States). Thus, the meaning of the exceptions to the DPD will vary from Member State to Member State, depending on socio-cultural context.

Status

The Commission is currently reviewing the EU legal framework on data protection.[22] This review has the following three main objectives:

1. modernising the Directive 1995/46/EC in view of globalisation and technological developments such as cloud computing and social networking sites;
2. reducing the administrative formalities and strengthening individuals' protection; and
3. improving clarity and coherence of data protection rules.

The main challenge is that users need more protection for their personal data on the internet, as new technologies such as profiling and tracking technologies, cloud computing and social networking sites make personal data more vulnerable to exploitation and abuse, but by the same token, globalisation and the increased need for international data transfers mean that data protection laws create barriers hindering economic activity and innovation.

[22]See COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS A comprehensive approach on personal data protection in the European Union, Brussels, 4.11.2010, COM(2010) 609 final.

The Commission is considering the introduction of the following elements in the forthcoming draft:

- special obligations in respect of children;
- principle of 'transparent processing';
- standard privacy information notices - standardising the way the information is presented to the consumer;
- general obligation to notify data security breaches (not just imposed on communication providers);
- strengthening the principle of data minimisation and the 'right to be forgotten' (which is the right to have data deleted once no longer needed);
- awareness-raising activities on data protection;
- clarifying the existing rules on consent;
- including genetic data into the category of sensitive data;
- revising the rules under which Member States' law applies;
- introducing an accountability principle; and
- introducing the principle of privacy by design.

Privacy in Electronic Communications

Overview

The Privacy in Electronic Communications Directive (PECD) 2002/58/EC[23] as amended by Directive 2009/136/EC[24] applies specifically to communications over public electronic networks. In the context of the digital environment, the most important provisions are the provisions on a) spam, b) cookies, spyware and similar technologies, c)data breach notifications; and d) confidentiality of electronic communications. The PECD focuses on public electronic communication networks and does not apply to private networks, closed user groups and corporate networks (intranets).

Spam and direct marketing

Direct marketing communications (emails) may only be sent where the recipient consumer has given his or her prior consent (opt-in), as a matter of principle (Art. 13 (1)). However, by way of exception, Art. 13 (2) stipulates that a provider may send marketing communications to customers if the provider obtained the customer's contact details in the context of a sale of goods or a service. These marketing communications must be about similar products.

[23] Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications). Official Journal L201 of 31/7/2002 p.37.

[24] Directive 2009/136/EC of the European Parliament and of the Council of 25 November 2009 amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services, Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector and Regulation (EC) No 2006/2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws. Official Journal L337 of 18/12/2009 p.11.

However, for this ‘existing customer’ exception to apply, the provider must give the customer the opportunity to object to such direct marketing (opt-out). This opportunity to object must be given at the time the contact details are collected and with each marketing communication.

Cookies

This provision applies when a provider is storing information on the user’s computer and/or accesses information on the user’s computer remotely, for example, in the form of cookies[25]. Cookies may be beneficial (for example, storing a user’s searches of a database or a list of items she/he has purchased) and cookies are necessary for browsing many websites. However, cookies are also used for profiling purposes, an activity which some users regard as an invasion of their privacy.

The provision applies also to other technologies for storing or accessing information on a user’s computer, such as device fingerprinting[26] or spyware[27]. Device fingerprinting is used in similar ways to cookies for tracking and profiling purposes. Spyware may be malicious or legitimate. For example, spyware may be used for legitimate surveillance purposes in an employment or security context.

Article 5 (3) of PECD (as amended) provides that storing information on the user’s computer is only allowed if the user has given his or her *informed prior consent* before such technology is installed and used. In other words, consumers have to be given an opt-in choice before accepting cookies, device fingerprinting, spyware and similar technology. The opt-in requirement was introduced by the 2009 revision of PECD. Previously, under the 2002, version the user had to be offered the option to refuse cookies, etc.

Informed consent means that the user has been given clear and comprehensive information about the purpose of the technology. The user’s consent may be expressed by her or his browser settings (Recital 66). However, it should be noted that most browser settings support html cookies but not other type of cookies such as flash cookies. Therefore, consent in respect of flash cookies (and device fingerprinting) cannot be expressed through browser settings.

This consent rule applies no matter how the technology is distributed to the consumer, by internet, CDs, USB keys, etc. There are two narrow exceptions to this rule:

- where the storage of or access to information is for the sole purpose of transmission of a communication (like caching); and
- if it is strictly necessary for the provision of a service requested by the user.

Obligation to notify data breaches

The 2009 version of PECD, Directive 2009/136/EC, has introduced a new obligation on communication service providers to notify security breaches to the competent national authority (Art. 4 (3)). If the breach adversely affects the user/consumer she or he also has to be notified.

[25] Cookies are text files on a user’s computer containing information about previous access to a website and enable the provider to build a picture of the user’s browsing habits.
[26] Fingerprinting is when the computer is transmitting pieces of information about properties and settings, which are aggregated to form a unique and persistent fingerprint of that computer.
[27] Spyware is software secretly installed on a user’s computer that monitors and reports information such as passwords or other aspects of user behaviour such as copyright infringement.

Interplay with national rules

The Directive gives Member States discretion in implementation, for example, in respect of which type of marketing communications (SMS, MMS) the provisions on spam apply, whether the protection only applies to natural persons or also to companies, the methods for expressing consent to the installation of cookies, and enforcement and remedies.

Status

The new rules in Directive 2009/136/EC have to be implemented by 25. May 2011. The revised PECD has not yet been implemented in all the Member States.

Core consumer directives and the Consumer Rights Directive

Overview

Distance Selling Directive[28] and Distance Marketing of Financial Services Directive[29]

The Distance Selling Directive (DSD) 97/7/EC applies to contracts for goods and services under an organised scheme where the contract is concluded remotely, i.e. without the presence of the business and consumer in the same place (Art. 2 (h)).

The DSD provides that certain important information has to be given to the consumer before the contract is concluded (Art. 4). This information must then be confirmed in writing or another durable medium (Art. 5). The term 'durable medium' is defined in the Distance Marketing of Financial Services Directive (DMFS) 2002/65/EC as any instrument which enables the consumer to store information personally addressed to her/him and make it accessible for future reference (Art. 2 (f)).

Most importantly, Art. 6 the DSD provides for a right of the consumer to cancel the contract, without good cause and without extra charge (except for the cost of returning goods). The period during which the consumer may cancel the contract is at least 7 working days. This means, for example, that if a consumer buys goods online she/he can return them within 7 working days, if she/he changes her/his mind, even if the goods are not defective in any way. If the consumer is not informed of her/his cancellation right, the cancellation period is extended to three months.

The DSD also gives the supplier a maximum of 30 days to carry out its obligations (Art. 7). Furthermore, the DSD provides that, in case of fraudulent use of a payment card for distance selling, the payment must be cancelled (Art. 8).

Equivalent rights exist in the DMFS in respect of financial services (information requirements, cancellation right).

[28] Directive 97/7/EC of the European Parliament and of the Council of 20 May 1997 on the protection of consumers in respect of distance contracts Official Journal L144 of 4/6/1997 p.19

[29] Directive 2002/65/EC of the European Parliament and of the Council of 23 September 2002 concerning the distance marketing of consumer financial services Official Journal L271 of 9/10/2002 p. 16

Consumer Sales Directive[30]

The Consumer Sales Directive (CSD) 1999/44/EC is primarily concerned with the quality of goods (whether sold online or offline). It provides as a minimum right that a consumer can demand that goods be repaired or replaced if they turn out to be defective (Art. 3). If the goods cannot be replaced or repaired the consumer may have a reduction in price or can cancel the contract and have the cost of the good (Art. 3). The consumer is entitled to exercise these rights if the defect appears within two years after delivery (Art. 5). If the defect appears within six months it is assumed that it was present at the time to goods were sold, unless the supplier shows that the goods were not defective at the point of sale (Art. 5 (3)). If the manufacturer or seller of goods makes certain promises about goods (for example to replace or repair defective goods) this becomes legally binding (Art. 6).

Unfair Contract Terms Directive[31]

The Unfair Contract Terms Directive (UTD) 93/44/EC provides that an unfair term in a contract between a business and a consumer is not binding on the consumer (Art. 6). It only applies to business-to-consumer contracts and if the contract terms are not individually negotiated, in other words it only applies to standard terms and conditions (Art. 3 (2)).

An unfair term is a term which causes an imbalance in the respective rights and obligations to the detriment of the consumer. This imbalance must be contrary to good faith (Art. 3). However, the UTD does not apply to the main obligations under the contract such as whether the price is a fair price for the goods or services in question, Art. 4 (2). The Annex of the UTD lists examples of terms which may be unfair. For example, where the seller excludes liability for personal injury or death of the consumer or where the seller reserves an option for the business not to carry out its part of the contract.

Interplay with national rules

The problem with these three core consumer Directives is that they only provide for minimum harmonisation of the Member States' consumer law. This means that the Directives only established the minimum consumer protection standards which the Member States have to implement and are allowed to maintain or adopt higher standards of consumer protection. As a result, consumer law differs significantly from Member State to Member State, leading to fragmentation and increased compliance costs.

Furthermore, consumer enforcement varies considerably between Member States, both in terms of who enforces consumer rights and the actual legal method to ensure consumer rights are respected. In some Member States, an official authority is responsible for monitoring and prosecuting breaches of consumer law. In other Member States, there is no such official consumer authority and enforcement is left to private consumer associations or even private individuals (with or without the help of legal aid).

Moreover, enforcement methods vary considerably as well: some Member States provide for criminal prosecution of serious breaches by business, others provide for civil court orders (i.e. the court ordering a business to cease a particular practice), other Member

[30] Directive 1999/44/EC of the European Parliament and of the Council of 25 May 1999 on certain aspects of the sale of consumer goods and associated guarantees; Implementation deadline 1. January 2002; Official Journal L 171 7/7/1999 p. 12

[31] Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts; Implementation deadline 31. December 1994, Official Journal L 95; 21/4/1993 p. 29

States provide for collective actions (consumers grouping together to share the costs of legal action), others rely on consumer associations to bring cases before the civil courts.

Status

The Core Consumer Directives have been revised and consolidated. The Commission has issued a Proposal for a Directive on Consumer Rights[32] on 8. October 2010. The Proposal makes the Core Consumer Directives more consistent with respect to:

- the definitions of 'consumer' and 'business', 'durable medium';
- the same, harmonised withdrawal period would apply; and
- the UTD would be made more consistent by introducing a black list of terms which are always considered unfair and update the provisions (for example the DSD would apply to all distance contracts not only organised sale schemes).

The new Directive would also introduce maximum harmonisation in some respects to counter the problem of market fragmentation (for example, introducing a standard form for contract cancellation). The European Parliament adopted the Consumers Rights Directive on 23 June 2011[33] The main changes in the text adopted by the European Parliament relative to the Commission's proposal involve, among others, the removal of the proposal that traders would have to pay for the return of goods priced over €40 and a proposed requirement for retailers to make their goods available to consumers in all EU Member States.

Unfair Commercial Practices Directive

Overview

The Unfair Commercial Practices Directive (UCPD) 2005/29/EC[34] prohibits the use of unfair commercial practices in business-to-consumer transactions. It applies to advertising and marketing, as well as contracting and post-contractually. The prohibition on unfair commercial practices work at three levels:

- specific practices are prohibited (for example, displaying a trust mark or quality mark without having the authorisation to do so; advertorials blurring editorial content with advertising, which is particular relevance to internet content; bait advertising; pyramid selling; including in advertising a direct exhortation to children);
- misleading and aggressive practices are prohibited; and
- there is a 'catch all clause' prohibiting any practice that is contrary to a trader's care and skill and good faith and is materially distorting the consumer's economic behaviour.

[32] Proposal for a Directive of the European Parliament and of the Council on consumer rights Brussels, 08.10.2008 COM(2008) 614/3.

[33] European Parliament, Consumer Rights Directive, Texts adopted at the sitting of Thursday 23 June 2011._

[34] Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council ('Unfair Commercial Practices Directive'). Official Journal of the European Union L149 of 11/06/2005 p. 22.

Interplay with national rules

The UCPD is the first consumer Directive adopting a maximum harmonisation approach. In other words, Member States are not allowed to maintain or adopt stricter standards. The ECJ has held that this maximum harmonisation applies not only to new laws created after the Directive but also to already existing laws so that Member States have to change their laws if they are incompatible with the maximum harmonisation in the UCPD.[35]

Status

The Commission has issued a non-binding Guidance Document for the interpretation of the Directive.

Jurisdiction and Applicable Law in case of a e-commerce dispute

Overview

The Brussels (Jurisdiction) Regulation[36] and the Rome I (Applicable Law) Regulation[37] are relevant where a consumer is seeking redress against a business in an e-commerce transaction (or vice versa). In a civil court case, the rules on jurisdiction determine whether a court is competent to hear a case. The question of which court has jurisdiction to decide a dispute arises where the disputants are located in two different countries or where the subject matter of the dispute is connected to several countries. This is particularly important in the digital environment as internet transactions may cross a border.

Once a court has decided that it is competent to decide an international case, it then has to decide according to which country's laws it should decide the dispute. In principle an English court, for example, may apply French contract law. Which law applies to a cross-border contract is determined by the Rome I Regulation.

If a business directs its activities to a Member State, the special consumer protection rules in the Regulations apply (Arts 15-17 of the Brussels and Art. 6 of Rome I Regulation).

With regards to jurisdiction, these rules mean that the business can bring a claim only in the Member State where the consumer is domiciled. By contrast, the consumer has a choice: she/he can sue the business in her/his own local courts or the business's place of business. For applicable law this means that the consumer is protected by his or her local consumer protection law.

The Court of Justice of the European Union has ruled on when a website operator is directing its services to a Member State[38]. The Court found that the business must have objectively manifested its intention to establish commercial relationships with customers from the consumer's domicile. The ECJ held that it was necessary to consider all evidence, which showed that the business was envisaging doing business with consumers domiciled in the particular forum.

[35] In Joined Cases C-261/07 and C-299/07

[36] Council Regulation (EC) No. 44/2001 of 22 December 2000 on the jurisdiction and the recognition and enforcement of judgements in civil and commercial matters.

[37] Regulation (EC) No. 593/2008 of the European Parliament and the Council of 17 June 2008 on the law applicable to contractual obligations (Rome I), Official Journal L 177 04/07/2008 p 6.

[38] In Case C-585/08 and C-144/09 Joined Cases Peter Pammer and Alpenhof, Judgment of 7. December 2010

Interplay with national rules

Since these are EC Regulations, the Member States have no discretion in implementation and hence it is unlikely that there are significant differences between the Member States.

Status

Finally, it should be noted that the rules of the Brussels Regulation are currently being revised. The Commission has consulted on proposed changes to the Brussels Regulation and a proposal for legislation is expected in 2013 with final approval expected within the next two to three years.

E-commerce Directive

Overview

The E-commerce Directive (ECD)[39] is not primarily a consumer protection directive, but has some provisions of relevance to consumer protection:

- Art. 5 provides a list of information which must be provided to the consumer by e-commerce businesses (information society provider). This includes their name, geographic address and contact details which allow for rapid and effective communication (e.g. e-mail addresses). The ECJ has interpreted this provision[40], ruling that e-commerce service providers do not necessarily have to provide a telephone number to allow customers to contact them, but that the service provider has to enable customers to contact it directly by non-electronic means of communication if, in certain circumstances (such as a journey or holiday), customers have no internet access;
- Art. 6 requires that commercial communications such as marketing emails contain specified information;
- Consumers must be given information about the online contracting process, such as the steps required to conclude the contract, the technical means for identifying any input errors and the languages offered (Art. 10 (1);
- Art. 10 (3) requires that contract terms are made available so that consumers can store and reproduce them (effectively in a durable medium);
- According to Art. 11 (1) the consumers are given an opportunity to correct errors when contracting online, other than by email;
- Art. 11 (2) requires that businesses must acknowledge a consumer's online order.

Interplay with National Rules

The ECD only provides for partial harmonisation as the contract law in the EU is not harmonised. So, for example, there are no rules in the E-commerce Directive as to when an online contract is concluded. There is also a degree of overlap and inconsistency between the Distance Selling Directive and the E-commerce Directive (information requirements; provision of terms and other information on durable medium). A consolidation of the consumer protection rules contained in the E-commerce Directive with those contained in the Distance Selling Directive would be useful to simplify the law in this area.

[39] Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce). Official Journal of the European Union L178 of 17/07/2000 p. 1.
[40] Case C-298/07 Verbraucherverbände v Deutsche Internet Versicherung.

Status

The Commission has conducted a public consultation on the E-commerce Directive in 2010 on:

- advertising by regulated professions such as pharmacists, lawyers;
- online press;
- intermediary liability;
- administrative co-operation; and
- online dispute resolution.

Other Directives and Regulations

Other provisions with relevance to the digital environment include the Mediation Directive (MD) 2008/52/EC[41], the Network of European Consumer Centres, the Regulation on Consumer Protection Cooperation EC/2006/2004[42], the Audio-visual Media Services Directive (AVMS) 2010/13/EC[43] and the Services Directive (SD) 2006/123/EC[44].

The Mediation Directive enhances the enforceability and workability of mediation. Mediation is the out-of-court settlement for disputes. This is particularly important in the digital environment where the parties may be in two different countries without access to the courts. As cross-border litigation is prohibitively expensive in many consumer cases, there is a need for workable out-of-court dispute resolution, such as mediation.

Out-of-court dispute resolution for consumers in internet transactions is also enhanced by the Network of European Consumer Centres co-ordinating complaints and consumer disputes across the Member States.

The Regulation on Consumer Protection Cooperation places obligations on Member States to co-ordinate consumer enforcement and exchange information. This is particularly important for dealing with cross-border internet scams and consumer protection.

The AVMS bridges the gap between the tight regulation of traditional broadcasting and the increasing market of video on demand delivered over public electronic communications networks. It introduces a lighter touch regulation for TV like on-demand programming. Member States have to ensure that minors do not have access to video on demand which might seriously impair their mental, moral or physical development. Furthermore video on demand which contains incitement to hatred based on race, sex, religion or nationality must be prohibited. The AVMS also contains information requirements, rules on advertising, sponsorship and product placement.

[41] Directive 2008/52/EC of the European Parliament and of the Council of 21 May 2008 on certain aspects of mediation in civil and commercial matters. Official Journal of the European Union L136 of 24/5/2008 p. 3.

[42] Regulation (EC) No 2006/2004 of the European Parliament and of the Council of 27 October 2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws (the Regulation on consumer protection cooperation). Official Journal of the European Union L364 of 9/12/2004 p. 1.

[43] Directive 2010/13/EU of the European Parliament and of the Council of 10 March 2010 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive). Official Journal of the European Union L95 of 15/4/2010 p. 1.

[44] Directive 2006/123/EC of 12 December 2006 on services in the internal market. Official Journal of the European Union L376 of 27/12/2006 p.36.

The Services Directive stipulates that service providers must not discriminate against service recipients (including consumers) based on the recipient's nationality or place of residence unless this is objectively justified (Art. 20). This is of importance for consumers in cross-border situations, as a refusal to supply a consumer in another Member State may be discriminatory as would be unjustified price discrimination.

Digital environment consumer issues not addressed by current EU legislative and regulatory framework

As can be seen from the above the European framework is comprehensive. However there are some consumer issues in the digital environment which have not been addressed. First of all it should be pointed out that EU consumer protection rules may not apply if a consumer interacts with an online operator who is legally established and located outside the EU/EEA. Even if the rules apply (for example, the data protection rules apply where an operator processes data using equipment within the EU other than for transit purposes), there are real issues about extraterritorial enforcement.

Another two issues which would need to be addressed are the questions of who is a consumer and who should be protected.

- First of all, many web 2.0 applications allow users to upload, create, sell etc information. This raises the issue of whether such users are consumers or businesses? This issue is particularly pertinent on online auction websites.
- Secondly, consumer protection laws are based on the idea that there is a power imbalance between the business and the consumer. Similar power imbalances may well exist if a single trader transacts with a big corporation. However, under EU law a single trader would not be defined as 'consumer' and hence not receive any special protection.

Finally another major problem in the digital environment is copyright and its enforcement. Copyright owners are confronted with large-scale copyright infringement through peer-to-peer file sharing and uploading of copyright protected content on websites and social networking sites etc. The balance of rights between rights holders and consumers has been distorted by the digital environment.

The Copyright Directive 2001/29/EC[45] has harmonized some aspects of copyright but has not harmonized the exceptions to copyright, which still differ significantly from Member State to Member State. Copyright holders protect their rights through Technological Protection Measures (TPMs) (which are protected by the Directive) but the Technical Protection Measures do not respect exceptions to copyright. If exceptions were harmonized it would be much easier to build the copyright exceptions into the design of TPMs.

Furthermore, a major issue is that licensing arrangements through collecting societies have not been harmonized.

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[45] Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society (sometimes known as the Information Society Directive or the InfoSoc Directive). Official Journal L167 of 22/06/2001 p. 10.

Finally, some Member States have introduced laws allowing restrictions on internet access for connections where illegal file-sharing has been conducted (UK: Digital Economy Act, France: HADOPI). This may lead to market distortions and rises the question of whether the right to internet access introduced by the Framework Directive is infringed.

ANNEX III: METHODOLOGY FOR REVIEW OF MATERIAL

This section provides an overview of the methodology applied for the review of existing material undertaken for this study.

Stage 1: Development of parameters and identification of potential sources

Any search for existing material (literature and data) begins by defining a number of parameters for selection of research material that might be considered for review. For this study these initial broad parameters included:

- **Geographical factors:** Main focus was on studies relating to EU Member States with a preference for studies including all 27 Member States. Studies for other developed countries (e.g. USA, Japan) were also included as were studies using global data. The focus on EU Member States was selected to ensure the highest possible level of relevance as well as to ensure that regional differences within the EU could be identified. Studies from other countries were included to ensure that all relevant topics could be covered, even if no European studies were available.
- **Temporal factors:** Due to the speed with which the digital environment evolves, studies and data were generally required to be no more than 10 years old with the aim of ensuring that all data used was no more than 4 years old while qualitative results could be slightly older. Exceptions to this rule were allowed for theoretical papers e.g. discussing the principles of consumer decision making.
- **Nature of the study:** The main focus was on empirical studies and statistical data which would be used to quantify and analyse actual behaviour. Some qualitative or opinion based studies were also included as were some theoretical papers discussing consumer decision making, behavioural economics and various aspects of the purchasing and complaint process.

The initial search entails a search of appropriate electronic/internet sources, appropriate print sources (e.g. journals, textbooks, research reports) and 'grey' (i.e. unpublished) literature. In addition to academic material, London Economics undertook an extensive assessment of the research material that has been commissioned and published by government departments and agencies, international organisations, think tanks, etc.

Stage 2: Development and application of exclusion criteria and initial filter of articles

The objective of the work at this stage of the analysis was to ensure that the material had been sifted for quality and validity using the criteria below (amongst others)

- The appropriateness of the questions, populations and outcomes addressed
- Evidence of selection bias in the primary studies
- Source of material (peer reviewed, quality assured, etc.)
- Availability of details of applied methodology

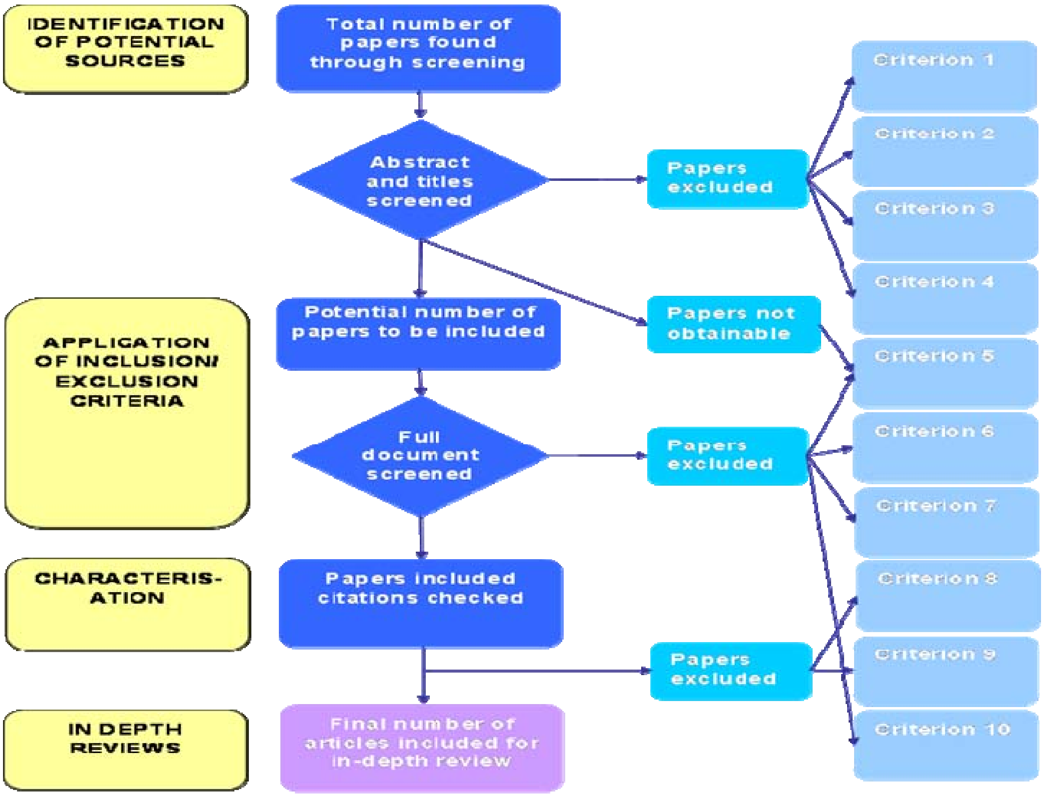
Immediately after the trawl for literature (Stage 1) was completed, the project team screened each and every one of the initial documents selected to assess whether these pieces of research work were pertinent to the study and provided a potential range of research on specific topics, based on criteria developed earlier on.

Stage 3: Application of review specific exclusion criteria and second filter of articles

Having applied the initial exclusion criteria in Stage1 and 2, the next step was to undertake a further review to identify the documents to be included in the final analysis. This involved carrying out a full review (rather than abstracts and titles as in the first stage) of each document to ensure that they were of interest to the detailed research questions.

This stage of applying exclusion criterion is displayed below and is based on a full screening of documents. It is at this stage that a significant component of the analysis was undertaken.

Figure 44: Approach to undertaking systematic reviews of literature



The search for articles was not complete at this stage. It was important to assess the citations referred to in each of the articles that have not been excluded for the review by this stage. The entire process was applied to these references (where duplications were excluded) and a final list of articles was then brought forward for final full and in depth review.

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