

User Behaviour and Attitudes Towards Consumer Issues on Markets for Online and Mobile Products & Services

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Abstract: The paper investigates the specific challenges created by new online services and delivery methods with regard to the protection of consumers interests. By means of a survey of a representative sample of online consumers in five EU countries, the authors found a high degree of interest in young online and mobile products and services including online pay-media, downloads of pay-software, location-based online services and online pharmacies. The survey results also provide evidence that the degree to which consumer concerns are taken seriously by providers and regulators are likely to exert a strong influence on people's willingness to purchase novel products and make use of novel online distribution channels.

1. Introduction

Many consumers, it seems, are reluctant to use ICT-based products and services because of a lack of trust and confidence. Areas which are widely believed to sap consumers' trust and confidence include doubts about the reliability and interoperability of products purchased, apparently unfair terms & conditions, usability problems, and threats to online privacy. Existing empirical data on these issues suggest that they may indeed impact considerably on the behaviour of consumers. A 2003 Eurobarometer survey found that, on average, 60% of EU citizens were concerned about protection of privacy, and one in four was very concerned [2]. Eurostat's ICT Household Survey asks people who report never ordering online about the reasons. In 2006, between 10% (IE) and 70% (FI) of non-users stated security concerns as reasons, and between 5% (SE) and 55% (DE) mentioned trust concerns about receiving or returning goods and complaint/redress issues [5].

The strength and nature of the link between security concerns and behaviour, however, is still unclear. Survey results analysed in the SIBIS project [11] show little correlation between the extent of persons' overall security concerns and their decision to use the Internet for transactions. It has been suggested that security and privacy concerns, instead of leading to total rejection of the Internet for purchasing, lead to limited and cautious use of e-commerce applications. Indeed, one way consumers deal with security concerns is to limit their purchasing to a few well-known online retailers, instead of shopping around for the cheapest offer available. Such behaviour diminishes the potential of the Internet to improve market efficiency by enabling consumers to locate real price advantage and by giving small and start-up retailers a proper share of the market.

2. Paper Objectives and Methodology Used

In the context of a research study the authors have investigated the specific challenges created by online services and delivery methods with regard to the protection of consumers

interests. The specific focus of the study was on newly emerging markets and product areas, as opposed to more well established applications such as mail order businesses who offer online ordering. Five market case studies were carried out: (a) online gaming; (b) online media including online music and movies; (c) mobile services, in particular location-based services; (d) online software; (e) e-health services. These were then subjected to in-depth analysis, looking in particular into interrelations between technical, market and regulatory developments and how these relate to consumer issues. Findings were summarised into a number of hypotheses, which were then translated into the data collection instruments used for the primary empirical research, consisting of two surveys.

The purpose of the **Internet Consumer Survey** was to provide insight into demand-side issues. The survey was conducted online in early 2007 and targeted at Internet users in Spain, Germany, Poland, Sweden and the UK. A quota sampling approach was used to create a sample representative for the Internet user population (aged 18-60) in each of the countries surveyed according to age, gender, region and household size. 2,500 successful interviews were conducted. The questionnaire contained five sections: current and future usage of emerging online and mobile products; levels of trust and means to increase trust; supplier lock-in, spyware and licence agreements; price information for mobile services; and legal rights, enforcement and related behaviour. The **European Information Society Consumer Policy Survey** was carried out by means of a network of national correspondents covering all EU Member States. It dealt with the national regulatory environment for consumer protection related to IS products, and with good practice in policy action taken by stakeholders.

This paper discusses some of the key results of the study and presents summary recommendations that have been developed on the basis of the evidence collected.

3. Key Findings and Policy Recommendations

The survey results, presented in full in [10], clearly indicate the high degree of interest in young online and mobile products and services including online pay-media (music and film files), downloads of pay-software and location-based services. Between 40% and 50% of Internet consumers show interest in each of these (see Table 1).

Table 1: Respondents having had any problems with a supplier of online or mobile products or services (percentages of internet users, N=2500)

	Downloading pay-media				Downloading pay-software				Mobile for LBS				Playing online games				Online Pharmacies			
	Already used	Interested	Not interested	Don't know	Already used	Interested	Not interested	Don't know	Already used	Interested	Not interested	Don't know	Already used	Interested	Not interested	Don't know	Already used	Interested	Not interested	Don't know
Total	24	20	46	10	21	20	48	12	9	29	49	13	19	9	62	10	17	28	43	13
DE	23	11	57	8	24	15	54	7	4	22	62	12	15	9	70	6	42	22	29	8
ES	20	22	47	11	18	18	50	14	8	32	45	14	20	10	59	11	6	20	59	15
PL	22	26	43	10	20	28	41	11	21	30	40	9	32	11	47	10	20	27	39	14
SE	20	27	43	11	19	25	41	15	9	37	38	15	12	8	69	10	7	38	31	14
UK	33	16	41	10	23	13	53	12	4	24	58	14	15	7	67	11	11	21	56	13

Source: Empirica / DIW Internet Consumer Survey, 2007

Data gathered by other researchers comes to similar conclusions (cf. [8]). A large number of consumers have already made first contact with products that are delivered online: The latest Eurostat survey found that in 2006, 9% of the EU27 population aged 16 to 74 purchased goods or services which were delivered online, such as music, films, books,

or software [5]. In Germany, one in four individuals did so.

The results from our survey also indicate, however, that the interests of consumers are not always well protected in ICT-based product areas. Consumer concerns need to be taken more seriously by providers and regulators to increase people's willingness to purchase novel products and make use of novel online distribution channels. In this respect, five key issue domains can be identified:

3.1 *Fair Conditions of Use*

Anecdotal evidence suggests that European consumers face unexpected curtailment of their ability or rights to use the products and services they wish to purchase or have already paid for. Indeed, our case study research identified numerous reports that consumers are increasingly obliged if they desire a product to agree to terms which appear unbalanced. The main mechanisms through which these terms are enforced are far-reaching provisions in end user license agreements (EULAs), sometimes coupled with technical protection measures (TPM) into digital rights management systems (DRM).

Among European experts, it seems that a consensus is emerging that EULAs and DRM systems as they are currently being used in the online media domain are in danger of shifting the balance between the interests of copyright holders and the public to the disadvantage of the latter [6][7].

Indeed, with the benefit of hindsight industry might agree today that the near-exclusion of consumer representatives and the wider public from the initial discussion about DRM was misguided. In spring 2007, the backlash against DRM has led market leaders iTunes and MusicLoad to publicly announce that they would be happy to get rid of DRM. It appears that the attempt of industry to establish business models for online media without proper consideration of consumer protection issues has backfired. As a result, it is to be recommended that in future, consumer representatives should be involved in the main standard-setting bodies and related public consultation initiatives.

A key requirement from the viewpoint of consumers is **interoperability**, as in the case of DRM systems used by online music services and digital playback devices. There can be little doubt that consumers want interoperability; our survey shows that close to 90% of all Internet users consider the possibility to play or read old files on their computer or other playback devices as important, two thirds of which rate it even as "very important". These findings confirm earlier evidence from other sources [3][4].

Much attention has also been paid to the fact that DRM systems (together with the **anti-circumvention rule contained in the EU Copyright Directive**) can make it very difficult to enforce the copyright **exemptions** which are explicitly allowed for in Member States' Copyright Laws. Of core interest for consumers is the exemption for private copying.

In order to improve consumer trust and confidence, more use should be made of **industry codes of conduct** which could safeguard a fair balance between providers of online products and consumers.

In order to be effective, an agreement on industry self-regulation should be coupled with clear, well measurable targets to be achieved and sanction mechanisms (related to policy intervention).

3.2 *Transparency of Quality*

Consumer representatives from across Europe confirm, based on experience in their home country, that trust and confidence in Information Society related products suffers from lack of transparency [3][4]. The complexity of TPM and DRM systems, EULAs and other features which are typical for Information Society products means that consumers are vulnerable to unfair practices introduced by suppliers. Suppliers are likely to suffer as well,

as most consumers shy away from purchasing products and services when they feel uncertain about the quality – understood here in the widest sense of the term – of the offer.

EULAs have attracted much attention lately because of fears that they do not meet the rules laid down in EU and national legislation concerning clarity and comprehensibility of contract terms. Consumer organisations have argued that, today, consumers often click agreement to complex contracts of sale or service provision online without properly understanding the terms and conditions of purchase and with poor knowledge of the qualities of the products and services they are to receive. This consumer knowledge gap may be worsening as products gain in complexity and as innovation and competition cause the rate of change in product and service characteristics and qualities to gather pace.

Our Internet Consumer Survey shows (Table 2) that little over 40% of online purchasers have read all of the last EULA they have been confronted with. What is more, almost all of those who have tried reading the EULA think they have not understood it fully. The majority simply “click away” EULAs with little or no awareness of its contents.

*Table 2: Consumers having ever read a licence agreement completely
(percentages of Internet users, N=2500)*

	Read some or all of a license agreement		Never read any of a license agreement	Don't use such services / products	Don't know
	Ever read all from start to finish	Never read all from start to finish			
Total	41	23	25	9	2
DE	38	27	21	10	3
ES	39	26	26	8	1
PL	65	2	25	7	1
SE	35	30	23	8	3
UK	26	31	29	10	4

Source: Empirica / DIW Internet Consumer Survey, 2007

Suggestions have been made about how the quality of pre-purchase information on online and mobile products could be improved. Actions in this area can use basically two approaches: (a) targeting suppliers, by making them give more adequate information about the quality of their offer, or (b) targeting consumers, by raising knowledge and awareness which enables them to better judge the quality of offers based on available information. At the intersection between both approaches lie quality labels which are established, assigned and controlled by independent institutions, thereby introducing a market signal which can help suppliers demonstrate and help consumers identify quality features.

Targeting suppliers: Terms and conditions for software, for media download or for value-added mobile services are often found to be complex and difficult to understand. Many consumers will be unable to grasp the implications of some of the terms and conditions without advice. A careful consumer might seek advice; many will not, particularly if the payments involved are not high. As consumer organisations across Europe have pointed out, some level of standardisation would aid citizens in having to find out once only what a particular set or subset of terms and conditions mean for them as consumers of a particular type of service.

Targeting consumers: Market transparency could be improved by increasing consumer awareness about new commercial practices that affect rights of use and other related issues. Most experts in the countries of Europe agree that, as a report by OFCOM [9] points out, “in the current time of ICT-driven change consumers will inevitably have to take a much greater responsibility to take action to protect themselves both from unwanted content and services. [...] To be able to do that, the consumers will need to have access to trustworthy information and advice, and affordable, easy-to-use technological tools. Therefore, it will

be crucial to foster the further development of end-user education and empowerment while addressing the needs of vulnerable groups". It appears that much more could be done at Member State level to address these challenges. While awareness raising initiatives traditionally assume that consumers suffer from a lack of knowledge, which needs to be provided to them by means of education campaigns and the like, recent developments in Internet-based applications suggest that consumers increasingly have the possibility to exchange relevant information between themselves. Distributed production of relevance, reputation and accreditation, as described by Benkler [1] and in a recent report by the ITU [12], means that what is today called Web 2.0 can empower individuals by giving them easy access to user ratings, recommendations and warnings about market products and services. An example which is often mentioned in this context is the user-rating system applied by eBay. Because users can view how previous buyers have rated a given seller, they are in a better position to judge whether they can trust her or him to process the transaction as expected. This means that the Internet, potentially, improves the bargaining power of consumers vis-à-vis suppliers. Arguably, the traditional image of consumers as inferior and in need of protection may not always be in line with reality anymore. One problem, however, is that the systems which are offering peer-produced assessment of consumer goods (with the goal of increasing consumer trust) are themselves suffering from a trust problem, since they are not regulated and as such open to manipulation and interference by commercial interests. Options should be explored to solve this problem.

Trust marks and quality labels: Our Internet Consumer Survey has shown that a perhaps surprisingly high proportion of users would hope to contact the organisation who had issued a quality seal or trust mark to the supplier concerned. Some 85% of Internet consumers state that trust marks known to them are likely to significantly increase their trust in a supplier. This can be seen as good news for the developing movement of introducing online quality and trust marks. Also, responses to this question have to be seen against the fact that over 70% of Internet users do not report having had any problems yet, they therefore have not been in a situation where this kind of action would be called for and accordingly will not yet have considered carefully the most appropriate response to make. When asked which course they would take in the case that they have a serious problem with a supplier, a high number of Internet consumers (almost one in three) would tend to contact the organisation which has issued the trust mark to the supplier (if there was any). Against this background, well-known trust marks would significantly improve confidence in online suppliers, as 80% of Internet users state. Knowledge of existing trust marks, however, is limited to a minority in all surveyed countries except Germany.

3.3 Price Transparency

Price transparency is a problem, in particular, for advanced mobile services including location-based services (LBS) which are currently being introduced on the market.

Consumer associations in Europe report that people may hold back from using advanced mobile services with complex price structures because they cannot adequately predict, monitor or control the costs they incur through use nor properly compare prices. Indeed, our Internet Consumer Survey shows that the vast majority report having held back from using mobile services where they have been unsure of the costs they would incur. Close to one in four Internet consumers report they have held back "often" from purchasing mobile products or services due to lack of trustable price information.

Price information on services is not regulated by the Unit Prices Directive, which applies to products only. The intention of the Unit Prices Directive, to "significantly improve the ability of consumers to evaluate and compare prices and make informed market choices on the basis of simple comparisons, thus fostering competition" is equally applicable to services. Indeed, nearly half of EU member states have already introduced

legislation on unit pricing for services. This move is to be welcomed, and should be emulated in the remaining Member States.

There are other ways instead of or alongside regulation to improve consumer protection. A first step would be to give consumers, prior to the decision to purchase, clear and exact information about the price of a service on offer. Our survey shows that mobile phone users show almost universal interest in simple price information transmitted through their device prior to making a mobile phone call or using another mobile service. With the new generation of mobile handsets and with the packet-oriented communications infrastructures now in place, mobile communications and providers of location-based services no longer have an easy excuse for not providing visible or audible pricing of a selected service before the consumer commits to using their services.

3.4 Protection of Privacy

Given the increasingly ubiquitous capture of digital information which is personal in nature and under the pressure of commercial interests which can be satisfied by using that data, consumers may increasingly find that information they believed was private and which they intended to keep private has been used for purposes affecting their interests. At the same time, data which is personal in nature may be needed to provide services to consumers which are useful (e.g. LBS including orientation, route finding, applications of augmented reality) or even essential for safety (medication information for healthcare).

In the consumer software market, the use of certain proprietary formats allows suppliers to track use and remove data items from a consumer PC, creating privacy and security concerns. Spyware or monitoring programs included in commercial software packages have been reported to install themselves without warning, open security loopholes, and re-install themselves after they have been deleted. Updates may be installed automatically without the user being asked, and during the installation scan the files one already has on the computer and register this. Such software may establish an Internet connection and then try to sell the user other products.

Attempts by publishers of online games to prevent hacking may in some cases threaten users' privacy. Software used can or does transmit potentially sensitive information from the user's computing environment to the provider. The right to use scanning software is sometimes agreed with users, so that there are cases of publishers specifying in the EULA "that the company maintains the right to perform [...] anti-hacking scans" [13]. This surveillance of users is justified by suppliers as an attempt to maintain the quality of the game such that all users have equal opportunities to win by preventing people cheating or hacking the game for other purposes.

Data privacy is bound to be discussed heatedly in the case of LBS. Permission to use location data can be given simply and via the mobile device. Privacy concerns are strongest where an LBS provider obtains the position of a user from a mobile operator at its own request rather than the request of the user. Tracking services such as trackyourkid.de raise issues about consent by minors. If such services are offered as a means for parents to track the location of their children, third parties might misuse these facilities if only the child's consent is required for a location request. The UK's Children's Charities' Coalition on Internet Safety (CHIS) has pointed out that this facility is potentially open to abuse.

Because of the speed of technological and market developments, it appears that legislative regulation will not necessarily be the most effective instrument to protect consumers from threats to data privacy originating from new ICT-based products and services. Because of the key role of industry in the development of new products and services which affect data privacy, self-regulation – if it can be made to work well – promises to be the best solution. However, it appears that the instrument of industry self-regulation in the area of data protection and privacy has not yet been exploited as much as it

could be in the majority of Member States. Industry action needs to be able to demonstrate the personal data is treated in ways which conforms to the general principles of privacy protection, such as those laid down in the OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data. Misuse of tracking capabilities of mobile networks needs to be curbed. Offers of location based services may need to be assessed and, if found in breach with privacy guidelines, constrained to make such use impossible.

3.5 Enforcement

Despite legal protection given in areas such as product safety, unfair contract terms, data protection, product liability, legal guarantee, and unfair competition, consumers continue to suffer damages and detriments in market processes. Discussion has taken place since the early 1990s in consumer policy research as well among policy-makers of ways to enforce consumer rights more effectively. Research had shown that the costs of legal action often clearly exceeded the economic damage to consumers and that the judicial enforcement of consumer rights is time-consuming.

Given that our survey shows that consumers level of information about national legislation is limited, what kind of action would citizens take in case they feel unfairly treated by a supplier of an ICT product or service? The survey data show (see Table 3), that one in five Internet consumers would consider taking legal action, roughly the same number than those who would look for an online dispute resolution. The most popular action would be a complaint issued with the organisation who issued the trust mark for the website in question – if there is any. The most likely form of action varies very widely between countries. This applies particularly to the options of consulting a lawyer compared to the new option of online dispute resolution. In Germany and the UK the relative importance of traditional and new techniques of dispute resolution are nearly reversed.

Table 3: Actions consumers would most likely take in case of a problem
(percentages of internet users, N=2500)

	Consult a lawyer	Look for an online dispute resolution service	Inform a TV or newspaper reporter	Contact the organisation issuing the seal / trust mark	Take some other action	Do nothing	Don't know
Total	20	18	5	29	10	3	14
DE	38	9	4	24	8	3	13
ES	21	16	4	28	11	2	19
PL	29	27	6	21	8	2	8
SE	7	12	9	37	14	4	17
UK	6	26	3	36	11	3	14

Source: Empirica / DIW Internet Consumer Survey, 2007

The European Commission, in cooperation with stakeholders, may want to implement a platform for benchlearning and exchange of good practice on enforcing “digital consumer rights”, i.e. the rights of consumers vis-à-vis suppliers of online products & services. The potential of new technology should be exploited fully for to the development of electronic dispute settlement systems. Initiatives such as the Electronic Consumer Dispute Resolution (ECODIR) should be strengthened, especially by promoting it to much larger groups of consumers who could be willing to seek redress if they knew that easy procedures existed.

On the basis of the evidence collected in our study, the current plans discussed within the European Commission to implement a new system of "collective redress", inspired by the instrument of class actions known in the USA, is to be welcomed. The system would allow European consumers to bring claims against providers of faulty goods or services, in particular in cases of cross-border trade where the means for redress in cases of improper

conduct by sellers appear fairly limited currently. If consumer organisations are to play a role in implementing collective redress, their resources may need to be upgraded.

4. Concluding Observations

The evidence produced by studies such as ours, and the recent experience reported by consumer organisations operating at the national and European level, suggest that consumer protection with regard to online and mobile products/services suffers from a basic divergence of opinions. This concerns the notion of “legitimate consumer expectations”, which traditionally has been a key component of consumer protection law and practice. It remains arguable how this notion can be usefully applied to the case of online access to commercial music and film services, because of the way in which the established consensus between providers and consumers of what constitutes “fair use” has been upset by Internet-related developments, at least in some of the industries at the centre of the public debate (mainly “media products”). The “everything for free culture” which was established in the early stage of the development of the Internet (when access itself was still a major expense for most users) has put in question many traditional business models.

Against this background, it appears unlikely that the public dispute between advocates of consumer protection on the one hand and representatives from the media industries on the other hand will disappear any time soon.

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