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# Effects of complaint behaviour and service recovery satisfaction on consumer intentions to repurchase on the internet

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## Abstract

**Purpose** – The purpose of this paper is to investigate the impact of complaint behaviour and service recovery satisfaction on consumer intentions to repurchase through internet channels.

**Design/methodology/approach** – Using survey data from large consumer samples from 15 European countries, the authors classify consumers according to: whether they had negative experiences with online purchases, whether they complained, and whether they were satisfied with the complaint handling. A logistic regression analysis assesses the effects of these experiences on repurchase intentions.

**Findings** – Remarkable differences arise among the consumers with respect to intentions to repurchase on the internet. Consumers with negative experiences who complained expressed higher repurchase intentions than consumers with no reason to complain and also than consumers who had negative experiences but did not complain. Yet the highest repurchase intentions arose among consumers who complained and expressed satisfaction with the complaint handling, in support of the service recovery paradox in an online setting.

**Originality/value** – This project is one of the first empirical studies of the consequences of dissatisfaction and complaints related to online purchase behaviour.

**Keywords** Service recovery, Online purchase behaviour, Consumer satisfaction,
Complaint behaviour

**Paper type** Research paper

## 1. Introduction

Electronic commerce, especially sales in business-to-consumer markets, continues to increase remarkably. In Europe, for example, online sales have increased more than 10 per cent annually, and similar trends are expected at least through 2015, matching the growth rate of online sales in the US (Forrester Research, 2011). Several major European retailers have transformed into online-only providers, such as Woolworths in the UK and Wehkamp in the Netherlands. The sustainable growth of this channel demands that consumers who adopt the internet for their purchases continue using it

(Devaraj *et al.*, 2006; Fang *et al.*, 2011; Huang, 2008; Srinivasan *et al.*, 2002; Yen, 2010), which suggests the need to investigate consumers' choices of and loyalty to the internet (e.g. Gensler *et al.*, 2012).

In particular, even as online shopping continues to grow steadily, market research studies indicate that increases in customer satisfaction are much slower (Freed and Anderson, 2012a, b). Customer satisfaction with online purchasing largely drives repeat purchases through the internet (Chang *et al.*, 2012; Chea and Luo, 2008; Devaraj *et al.*, 2002; Rao *et al.*, 2011; Reibstein, 2002), but when online customers encounter service failures or other negative purchase-related experiences, they likely become dissatisfied instead. Negative experiences could lead to complaints (Chea and Luo, 2008; Cho *et al.*, 2002a; Jasper and Waldhart, 2013), whether to the company or focal web site or to some other, external organization, or site. Common complaints online include problems with customer service, confusing business rules, unsatisfactory delivery issues, product failure, problems with after-sales service, or payment/billing issues (Cho *et al.*, 2002b). Both the form of the negative experience and the way the company handles the complaint likely affect future online purchase intentions and thus could determine whether the projected growth estimates for online retailing become a reality (Chang *et al.*, 2012; Rao *et al.*, 2011; Reibstein, 2002).

## 2. Research objective

Extant literature on traditional, offline retailing (e.g. Dunning *et al.*, 2004; Larivière and Van den Poel, 2005) indicates that even a dissatisfied customer is willing to repurchase from a retailer if the complaint is handled well (Schneider and Bowen, 1999; Maxham, 2001). That is, effective service recovery actions can win a consumer back – and even may make the customer more loyal than before the negative experience, which reflects the service recovery paradox. Some recent studies examine service failures and recovery in online settings (Chang *et al.*, 2012; Pizzutti and Fernandes, 2010; Sousa and Voss, 2009; Wang *et al.*, 2011), but generally without addressing consumer complaint behaviour or the service recovery paradox (De Matos *et al.*, 2007). Pressing questions for online retail channel thus remain unanswered. What happens to dissatisfied and complaining online customers? Do they intend to buy online again or not? Does the service recovery paradox hold for online purchase behaviours?

We seek to investigate the impact of complaint behaviour and service recovery satisfaction on intentions to repurchase through internet channels. To this end, we use a large scale, pan-European survey, which supports generalization and international comparisons of the findings. In total, four central findings have notable implications for both e-commerce academics and practitioners. First, consumers with negative online purchase experiences who complained may exhibit higher repurchase intentions than consumers with no negative experiences. Second, complaining consumers express higher internet repurchase intentions than consumers with negative experiences who did not complain. Third, consumers using a retailer's own online feedback system indicate higher average repurchase intentions than consumers who file their complaints on some external organization or web site. Fourth, both complaint routes – internal and external – can retain customers, if the complaint handling is satisfactory. The rest of the paper is organized as follows. We first present the research model and provide a review of the relevant literature. Then, the study design is described. In the next sections we present the empirical results. Finally, we conclude, suggest potential implications for online retailers, convey limitations of this study, and provide directions for future research.

## 3. Conceptual development

### 3.1 Effects of service failure and complaint handling

Service failure and recovery, complaint handling, and customer satisfaction with complaint management have received considerable research attention (Dunning *et al.*, 2004; Maxham and Netemeyer, 2002; McCollough *et al.*, 2000). Maxham (2001) defines service failures as situations in which customers perceive a breakdown in a firm's system (e.g. delivery delays, malfunctioning products, or incorrect account balances, etc.), while service recovery refers to the responses of service providers to service failures (Gronroos, 1988). In offline contexts, dissatisfied customers are often willing to repurchase if the service recovery is adequate. Adequate service recovery thus is critical, because customers who experience poor recovery efforts tend to take their business elsewhere (Schneider and Bowen, 1999), which is costly; it is usually cheaper to keep existing customers satisfied than to acquire new customers (Fornell and Wernerfelt, 1987; Hart *et al.*, 1990). The benefits of service recovery are captured in the service recovery paradox (De Matos *et al.*, 2007; McCollough and Bharadwaj, 1992), which acknowledges that effective recovery can prompt consumer attitudes and behaviours that are even more favourable than those expressed before the problem occurred. In addition, consumer complaints provide firms with valuable consumer feedback, which may help them improve their products or services (Blodgett and Anderson, 2000). Because companies have so much to gain from proper complaint handling, service failure and recovery represent critical issues for all businesses, online or offline.

Complaint behaviours have well-established effects in offline retail and service settings. For example, different customer responses result from unsatisfactory encounters, ranging from doing nothing to taking legal action. According to comparisons of the satisfaction expressed by customers who received error-free service and by customers who experienced a successful service recovery (McCollough *et al.*, 2000), satisfaction may be highest in the former group, but a strong recovery substantially improves satisfaction among the latter. When customers complain directly to the retailer, satisfaction with the service recovery offers a strong predictor of positive word of mouth but not necessarily of repurchase intentions (Maxham and Netemeyer, 2002), though some other studies find that successful service recovery and complaint handling has a positive impact on repurchase behaviour (e.g. Kuo and Wu, 2012). In a comprehensive study, Voorhees *et al.* (2006) compare silent complainants with complainants who received satisfactory, unsatisfactory, or no recovery. Silent complainants were more likely to repurchase and less negative in their attitudes than customers who complained and received no or an unsatisfactory service recovery. In contrast, silent complainants were less likely to repurchase and more negative in their attitudes than customers who complained and received satisfactory recoveries.

### 3.2 Service failure, dissatisfaction, and complaint behaviours online

An online consumer undergoes experiences during the purchase process, whether positive, neutral, or negative, which cause the consumer to feel satisfied or dissatisfied. Dissatisfied consumers might complain about the online service failure (Lee and Cude, 2011), and their dissatisfaction likely affects repurchase intentions (Fang *et al.*, 2011; Rao *et al.*, 2011). Several e-commerce studies (e.g. Atchariyachanvanich *et al.*, 2007; Bhattacherjee, 2001; Chea and Luo, 2008; Khalifa and Liu, 2002) apply expectation – confirmation theory (Bhattacherjee, 2001; Oliver, 1980) to examine the effect of customer satisfaction on these intentions. They show that satisfied customers tend to

continue purchasing through the internet, but dissatisfied customers are tempted to reject the internet as a purchase channel.

The insights obtained from offline service failure/recovery research may be somewhat relevant to online settings (Chang and Chin, 2011). However, various incidents and issues are unique to the internet environment, such that the circumstances surrounding an online service failure likely differ from the factors typically at the root of offline service failures. For example, credit card security, privacy, punctual delivery, and ease of navigation are uniquely critical to e-service quality, rather than offline versions (Cho *et al.*, 2002b; Holloway and Beatty, 2003). In addition, the online environment lacks most of the human interaction elements that define traditional service experiences. Chang and Chin (2011) examine antecedents of consumer complaint responses in online and offline settings and find that perceived behavioural control is an important driver of complaint intentions in online settings, but positive attitudes towards complaining and social norms are more important offline. Mattila and Wirtz (2004) reveal that offline and online complainants tend to differ in their coping strategies; consumers who complain to seek redress tend to complain offline, but those who want to vent their frustration use the online channel. Another important difference between online and offline complaint behaviour pertains to the way they spread, such that the former spreads faster, to more people, and remains accessible for longer periods. In particular, dedicated complaint sites function as central forums for consumers to share their bad experiences (Chebat *et al.*, 2005; Cho *et al.*, 2002b; Harrison-Walker, 2001). These differences in turn produce discrepancies in the numbers of complaints offline vs online. In online settings, a relatively higher percentage of dissatisfied customers complain (Holloway and Beatty, 2003). As Jasper and Waldhart (2013) show, consumers using the internet as a purchase channel are more likely to complain than consumers using traditional channels, and they do so through an online rather than traditional channels (Lee and Cude, 2011). Because consumers making online purchases may differ in their complaint behaviour and repurchase intentions from offline consumers, it becomes necessary to test findings from offline settings to determine their applicability online.

For online service failure and recovery, we note four important elements: whether the consumer had negative experiences with online purchases, if a consumer who had negative experiences filed a complaint, if the complaining consumer was satisfied with the complaint handling, and where the consumer complained (i.e. to the company that provided the purchase or somewhere else). The combination of these four factors produces a typology of six consumer groups, representing different complaint behaviours, and levels of satisfaction with the service recovery[1].

A first group of consumers consists of those who had no negative experiences with online purchases. They are generally satisfied and have no reason to complain about online purchases (satisfied customers, Group 1). When a consumer has experienced a problem, several scenarios arise. Some consumers choose not to engage in complaint behaviour, despite having a reason to do so (Chang and Chin, 2011; Chebat *et al.*, 2005; Voorhees *et al.*, 2006). They constitute the silent complainants group (Group 2). Consumers who do complain might complain to the company that owns the web site from which they purchases, through the web site, e-mail, or other online communication means (Holloway and Beatty, 2003). We label this group internal complainants; it comprises two subgroups, depending on satisfaction with the service recovery: consumers satisfied (Group 3) and unsatisfied (Group 4) with the service recovery attempt (Sousa and Voss, 2009). Consumers also might complain to an external (offline or online) source, such as an online complaint forum (Goetzinger *et al.*, 2006; Ward and

Ostrom, 2006) or consumer protection organization (Singh, 1989). This external complainants group also can be divided further into consumers satisfied (Group 5) and unsatisfied (Group 6) with the recovery reaction following their complaint. Rather than consumers' intentions to complain, we note self-reported complaint behaviour for this study.

In online retailing research, Cho *et al.* (2002a) study the relationship of e-commerce satisfaction, complaining, and repurchase intentions. If the degree of online customer dissatisfaction increases, a customer's propensity to complain increases too. Furthermore, customers' repeat purchase intentions relate positively to the propensity to complain. A content analysis of company responses to e-mail complaints and customer reactions reveals that a written reply exerts a positive impact on both satisfaction with the response and repurchase likelihood (Strauss and Hill, 2001). Yet online retailers often fail to manage their service recoveries (Holloway and Beatty, 2003), even though the quality of their recovery effort largely determines subsequent consumer loyalty (Chang *et al.*, 2012; Kuo and Wu, 2012; Pizzutti and Fernandes, 2010; Sousa and Voss, 2009). The relationship between service recovery satisfaction and repurchase intention is particularly strong in high purchase frequency contexts (Chang *et al.*, 2012). Because many consumers lodge complaints on external forums though, rather than directly contacting the company (Goetzinger *et al.*, 2006; Harrison-Walker, 2001), e-tailers need to monitor complaint forums and respond promptly, or else establish an excellent online feedback system to minimize the number of complaints on external sites (Goetzinger *et al.*, 2006). Even in these insightful studies of complaint behaviour after online purchases, no research offers a comparison of the various consumer groups we have distinguished or insights into their repurchase intentions.

### 3.3 Research model and hypotheses

To investigate whether and how consumer groups with different complaint behaviours and levels of service recovery satisfaction differ, we focus on repurchase intentions online. The internet is still a relatively novel purchase channel, and to meet the projections of high growth, retailers in this channel must achieve customer loyalty. We thus formulate the following hypothesis:

*H1.* Consumers who vary in their complaint behaviours and satisfaction with the service recovery differ in their intentions to repurchase through the internet channel.

With our research model (Figure 1), we examine differences across complaint groups while controlling for past online purchase behaviour, country, and consumer characteristics (age, gender). Prior behaviour is an important predictor of future behaviour (Ouellette and Wood, 1998; Rossi *et al.*, 1996); in particular, the frequency of previous online purchases has a positive impact on future repurchase intentions (Gensler *et al.*, 2012; Pavlou, 2003). In addition, online purchase behaviour tends to differ considerably across countries (Mahmood *et al.*, 2004; Sabiote *et al.*, 2012), and consumer characteristics such as gender and age have an impact on online purchases (Akhter, 2003; Yeh *et al.*, 2012). Therefore, we assess the direct effect of past online purchase behaviour, country, age, and gender and derive a second hypothesis:

*H2.* Consumers who vary in their past online purchase behaviour, country, age group, and gender differ in their intentions to repurchase through the internet channel.

We also anticipate a potential interaction, between consumer complaint behaviour and service recovery satisfaction on the one hand and past purchase behaviour on the other. Consumers who have already made more online purchases may be less influenced by a single negative experience. Past online purchase behaviour thus could mitigate the effect of negative experiences; similarly, the effect of service recovery may be less prominent when past online purchase frequency is greater. Therefore, we hypothesize:

H3. The effects of complaint behaviour and service recovery satisfaction on intention to repurchase through the internet channel differ for consumers with varying past online purchase behaviours.

Customers from countries with varying cultural backgrounds may differ in their online repurchase intentions. Hofstede (2003) describes countries along five cultural dimensions: power distance, collectivism individualism, femininity masculinity, uncertainty avoidance, and long- vs short-term orientation. Trust levels, which vary substantially across these dimensions, are key determinants of online shopping behaviour (Mahmood *et al.*, 2004). In particular, the uncertainty avoidance dimension, which refers to societies' tolerance for uncertainty and risk, could help explain customers' intentions to repurchase online (Sabiote *et al.*, 2012). Some cultures accept more risk, whereas high uncertainty avoiding cultures try to minimize the possibility of unknown and surprising situations, to avoid risk and create security. Therefore, we expect that consumers from high uncertainty avoidance countries express lower online repurchase intentions than consumers from medium or low uncertainty avoidance countries. However, consumers from high uncertainty avoidance countries who have already bought online also might have relatively higher online repurchase intentions, because they do not want to expose themselves to new contexts, and are less prone to adjust their behaviour. Our research model tests for the direction of this effect. Furthermore, different uncertainty avoidance levels also might moderate the relationship of complaint behaviours and service recovery satisfaction with repurchase intentions (Sabiote *et al.*, 2012). Therefore, we test for an effect of uncertainty avoidance:

H4. The effects of complaint behaviour and service recovery satisfaction on intention to repurchase through the internet channel differ among consumers from cultures that vary in their level of uncertainty avoidance.
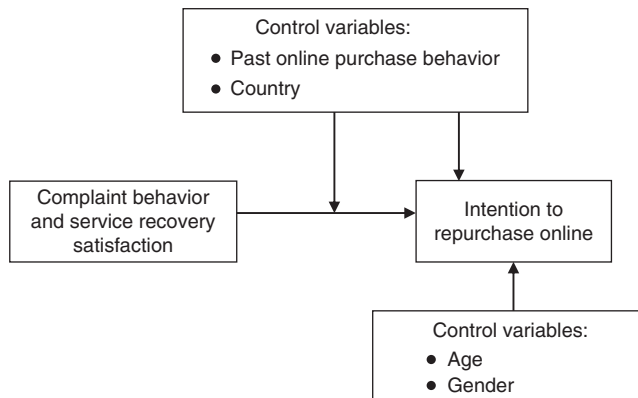


Figure 1.
Research framework: effects of complaint behaviour, service recovery satisfaction, and control variables on repurchase intentions online

Concluding, we are interested in differences in intentions to repurchase online among consumers with different complaint behaviours and levels of service recovery satisfaction, and from various countries. The research framework (Figure 1) includes the relationships discussed above, namely the influence of complaint behaviour and service recovery groups, past online purchase behaviour, country, and consumer characteristics on intentions to repurchase online.

## 4. Research methodology

### 4.1 Survey description

The European Opinion Research Group, a consortium of market and public opinion research agencies, carried out wave 60.0 of the Standard Eurobarometer. These data were collected at the request of the European Commission, Directorate-General Press and Communication, Public Opinion Analysis Unit. The Standard Eurobarometer survey covers 15 European Union member states (Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxemburg, the Netherlands, Austria, Portugal, Finland, Sweden, and Great Britain) and includes people aged 15 years and older. The sample design, for all member states, is multi-stage, with random probability. The sample sizes were approximately 1,000 for the larger countries but less for Luxemburg and Ireland. We restricted the sample for our study to respondents who indicated online purchase experience, or 2,978 European consumers. Table I contains the descriptive statistics for each country.

### 4.2 Measures

One of the topics in Eurobarometer 60.0 is e-commerce (see the Appendix). We used data from this part of the survey for our study. The constructs relied on single-item measurements in the Eurobarometer survey; this large questionnaire deals with numerous issues, so single-items measures are often the only information available. Bergkvist and Rossiter (2007) affirm though that single-item measures provide validity comparable to that of multi-item scales, especially for relatively concrete constructs.

| Country | Uncertainty avoidance | Total respondents | Sample size and sample description | |
| --- | --- | --- | --- | --- |
| | | | Online purchases (% of total) | Intention to repurchase online (% of online purchasers) |
| Denmark | Low | 1,000 | 344 (35%) | 231 (77%) |
| Ireland | Low | 1,001 | 171 (17%) | 109 (87%) |
| Sweden | Low | 1,000 | 375 (38%) | 237 (71%) |
| UK | Low | 1,314 | 331 (25%) | 243 (85%) |
| Austria | Medium | 1,031 | 178 (17%) | 105 (76%) |
| Finland | Medium | 1,011 | 231 (23%) | 120 (64%) |
| Germany | Medium | 2,057 | 401 (20%) | 269 (85%) |
| Luxemburg | Medium | 606 | 153 (25%) | 96 (73%) |
| The Netherlands | Medium | 1,023 | 315 (31%) | 153 (57%) |
| Belgium | High | 1,030 | 123 (12%) | 63 (71%) |
| France | High | 1,051 | 129 (12%) | 91 (82%) |
| Greece | High | 1,000 | 29 (3%) | 12 (57%) |
| Italy | High | 1,000 | 72 (7%) | 31 (69%) |
| Portugal | High | 1,000 | 36 (4%) | 19 (70%) |
| Spain | High | 1,000 | 90 (9%) | 39 (70%) |
| Total | | 16,124 | 2,978 (19%) | 1,818 (75%) |

**Table I.**
Descriptive statistics per country

The dependent variable is consumers' intention to repurchase on the internet in the next three months ("yes," "no," "don't know"). Few respondents chose the "don't know" option (less than 9 per cent), and because our goal was to study drivers of repurchase intentions, we combined the "no" and "don't know" categories. In the sample, 61.1 per cent (1,818) of consumers intend to repurchase through the internet channel, and 38.9 per cent (1,160) did not or did not know if they would repurchase online.

To categorize these respondents into the six complaint behaviour and service recovery satisfaction groups, we first used their answers to the questions: "After making an internet purchase, have you ever had reason to complain? If yes, to whom did you complain?" A respondent entered the internal complainants group if she or he complained directly through the web site or to the organization that ran the web site; instead, a respondent was assigned to the external complainants group if she or he complained to a consumer organization, a government body, or another organization or association. In total, 17 respondents indicated both internal and external complaint behaviours. Considering the relative group sizes, we assigned these cases to the external complaint behaviour group. Next, we assigned respondents to the silent complainants group if they indicated they had a reason to complain but did not. Customers who indicated no reason to complain after an internet purchase were categorized as satisfied customers. Finally, for the categorization based on customers' satisfaction with the response, we used their answers to the question, "Were you satisfied or dissatisfied with the way your complaint was handled?".

As control variables, we included past online purchase behaviour and consumer characteristics. For past online purchase frequency, we used a categorical variable and performed a median split, such that high purchase frequency implies a purchase at least once every three months, whereas low purchase frequency reflects a purchase every six months or less. For age, we used four categories: 15-24, 25-39, 40-54, and 55 years or older. Respondents also indicated their gender.

The country grouping reflected the uncertainty avoidance index (Hofstede, 2003), and the 15 countries entered three groups: high, medium, or low uncertainty avoidance (Table I).

### 4.3 Sample description

With respect to their past online purchase behaviour, 40.5 per cent of the respondents indicated a high purchase frequency, whereas 59.5 per cent exhibited a low purchase frequency. The percentage of respondents in each country group was as follows: 16.7 per cent in high, 42.1 per cent in medium, and 41.2 per cent in low uncertainty avoidance countries. Furthermore, 22.0 per cent of the respondents fell in the 15-24 year age group, 41.0 per cent were 25-39 years, 26.1 per cent were 40-54, and 10.9 per cent were at least 55 years of age. Finally, 44.5 per cent of the respondents were women and 55.5 per cent were men.

### 4.4 Data analysis method

To test our research framework (Figure 1), we began by cross-tabulating the entire sample to compare the repurchase intentions of the six complaint behaviour groups. We also compared repurchase intentions between different pairs of complaint behaviour groups. Next, we tested a model with repurchase intentions as the dependent variable and the main effects as the independent variables (i.e. complaint groups, country groups, past purchase frequency, gender, and age). We applied logistic regression, because the dependent variable has two discrete values: yes (1) or no (0). Logistic

regression analysis (Hosmer *et al.*, 2013) is comparable to linear regression analysis, for which the dependent variable is the logit transformation ($= \ln (p/1-p)$) of the probability that an event occurs ($= p$; here, repurchase intentions). To investigate potential interaction effects, we added interaction effects one by one to the logistic regression that featured the main effects. By adding each interaction effect separately, we avoided multi-collinearity problems. Thus, we tested the interaction terms of complaint behaviour groups with past purchase frequency and complaint behaviour groups with country groups.

## 5. Results

The complaint behaviour groups vary substantially in size. Most respondents (83.8 per cent, $n = 2,464$) indicated no negative experiences with online purchases, whereas the group of silent complainants was relatively small (1.5 per cent, $n = 45$), consistent with previous research (Holloway and Beatty, 2003). The number of internal complainants (13.1 per cent, $n = 386$) was far greater than the number of external complainants (1.5 per cent, $n = 46$). Within the group of internal complaints, most consumers were satisfied with the firm's response (9.8 per cent, $n = 288$); a smaller group was unsatisfied (3.3 per cent, $n = 98$). Among external complaints, the two subgroups were closer in size, though the group of satisfied consumers (0.9 per cent, $n = 27$) was slightly larger than the group of dissatisfied consumers (0.6 per cent, $n = 19$).

For insights into repurchase intentions across the complaint behaviour and service recovery satisfaction groups, we first present group differences using the original classification variables (Figure 2). Whether a consumer had a reason to complain about online purchases related significantly to repurchase intentions ($\chi^2 = 36.790$; $p < 0.001$). Repurchase intentions were considerably higher among consumers who indicated
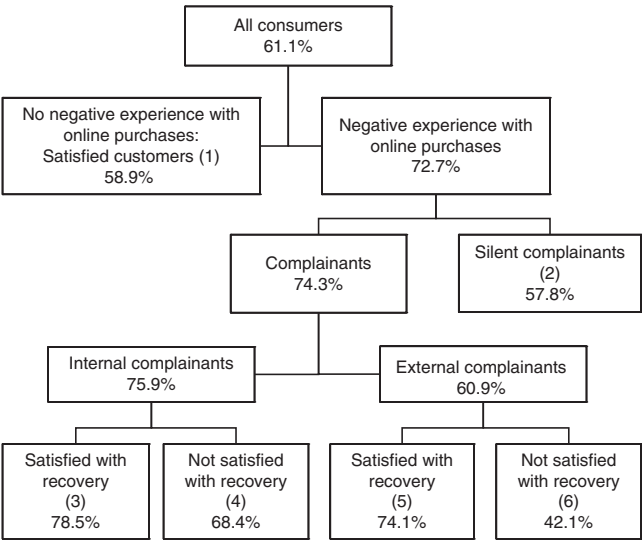


**Figure 2.**
Consumer groups, based on complaint behaviour and service recovery satisfaction

**Notes:** Numbers in brackets indicate group labels; percentages indicate how many consumers in each group intend to repurchase online

having had a negative experience with online purchases (58.9 vs 72.7 per cent). Next, among consumers who had a reason to complain, we found significant differences between those who actually did complain (74.3 per cent) and those who did not (57.8 per cent) ($\chi^2 = 5.615$; $p = 0.018$). Comparing complainants according to where they complained also revealed significant differences ($\chi^2 = 4.868$; $p = 0.027$): Those who complained internally, to the web site or company (75.9 per cent), expressed higher repurchase intentions than those who complained externally (60.9 per cent). For both internal and external complainants, we tested whether satisfaction with the response affected repurchase intentions, and in both cases, we found significant differences: 78.5 vs 68.4 per cent for internal complaints ($\chi^2 = 4.082$; $p = 0.043$) and 74.1 vs 42.1 per cent for external complaints ($\chi^2 = 4.785$; $p = 0.029$). Service recovery thus made a substantial positive contribution to the repurchase intentions of consumers who complained, whether directly to the company or through external sources. Finally, we compared consumers who had no reason to complain against those who complained (internally or externally) and were satisfied with the response. These two groups also differed significantly ($\chi^2 = 43.337$; $p < 0.001$). Satisfied customers expressed much lower repurchase intentions (58.9 per cent) than consumers who experienced a positive service recovery (78.1 per cent), in empirical support of the service recovery paradox in online purchase behaviour.

Examining the group differences yielded relevant insights but could not control for relative group sizes or other variables that might affect repurchase intentions. For example, the repurchase intentions of consumers with no negative experiences may be relatively lower than those of consumers with negative experiences because the members of the latter group were generally satisfied with the recovery, which increased their repurchase intentions (i.e. Groups 3 and 5 are much larger than Groups 2, 4, and 6). The online purchase frequency also probably was larger for consumers with negative experiences. Therefore, we performed logistic regression analysis with repurchase intentions as the dependent variable and the main effects as the independent variables. Noting the small size of the external complainants group, we merged external complainants satisfied with service recovery with internal complainants satisfied with service recovery (Groups 3 and 5). Then we merged consumers from both external and internal complainants groups who were not satisfied with service recovery (Groups 4 and 6). Therefore, the logistic regression applied to four consumer groups: satisfied, silent complainants, complainants satisfied with the response, and complainants not satisfied with the response.

In terms of fit, the main effects model significantly outperformed the null model with only an intercept (likelihood ratio $\chi^2 = 767.743$; df $= 10$; $p < 0.001$), and the proportion of explained variation was 31 per cent (Nagelkerke pseudo $R^2 = 0.312$). Thus we consider the model fit satisfactory.

With regard to *H1* and *H2a*, the results in Table II indicated that complaint behaviour and past online purchase frequency significantly influenced repurchase intentions (significant at 0.01). Hence, we find support for *H1* and *H2a*. The main effects of country group, age, and gender were not significant though (all $p > 0.10$; *H2b-d* not supported). Thus, none of these consumer characteristic exerted significant effects on repurchase intentions through the internet. In *H3* and *H4*, we noted the moderating effect of past online purchase frequency and country group. The results of the significance tests for these effects, in Table II, indicated that neither interaction effect was significant (both $p > 0.10$). Hence, we find no support for *H3* and *H4*. In other words, the effect of complaint behaviour thus appears to generalize across different country groups and purchase histories.

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| Explanatory variable | Main effects model | | | | Models with interaction effects | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | $\chi^2$ | df | $p$-value | $\chi^2$ | df | $p$-value | $\chi^2$ | df | $p$-value |
| Complaint behaviour (A) | 16.092 | 3 | 0.001 | | na[a] | | | na[a] | |
| Past purchase frequency (B) | 706.659 | 1 | <0.001 | | na[a] | | 706.517 | 1 | <0.001 |
| Country group (C) | 2.572 | 2 | 0.276 | 2.545 | 2 | 0.280 | | na[a] | |
| Age group | 1.527 | 3 | 0.676 | 1.402 | 3 | 0.705 | 1.677 | 3 | 0.642 |
| Gender | 0.199 | 1 | 0.655 | 0.198 | 1 | 0.656 | 0.226 | 1 | 0.634 |
| Interaction A × B | | | | 4.223 | 3 | 0.238 | | | |
| Interaction A × C | | | | | | | 9.469 | 6 | 0.149 |
| Nagelkerke Pseudo $R^2$ | | 0.312 | | | 0.313 | | | 0.315 | |

**Table II.**
Logistic regression
results: significance tests

**Note:** [a]The likelihood ratio statistic cannot be computed because the reduced model that omits this variable has the same degrees of freedom as the final model

In Table III, we present the parameter estimates and tests of how the categories of each variable differed from a base category. Among complaint behaviour groups, complainants satisfied with the response indicated significantly higher repurchase intentions than satisfied customers. Their repurchase intentions also were higher than those of the other two complaint groups, namely, silent complainants and complainants dissatisfied with the response. Although these two groups scored lower on repurchase intention than satisfied consumers, the differences were not significant. Among country groups, customers from neither high nor medium uncertainty avoidance cultures differed significantly in their intentions to repurchase online from the base category, that is, low uncertainty avoidance cultures.

For the control variables, we found that consumers with higher past purchase frequencies online indicated significantly higher intentions to repurchase than customers

| Explanatory variable | Category | Parameter estimate | Wald statistic | $p$-value |
| --- | --- | --- | --- | --- |
| Complaint behaviour | Satisfied customers | na[a] | | |
| | Silent complainants | −0.244 | 0.471 | 0.492 |
| | Complainants, satisfied with response | 0.608 | 14.503 | <0.001 |
| | Complainants, not satisfied with response | −0.059 | 0.067 | 0.795 |
| Past purchase frequency | Low frequency | na[a] | | |
| | High frequency | 2.438 | 518.276 | <0.001 |
| Country group | High uncertainty avoidance countries | 0.074 | 0.355 | 0.551 |
| | Medium uncertainty avoidance countries | 0.153 | 2.567 | 0.109 |
| | Low uncertainty avoidance countries | na[a] | | |
| Age group | 15-24 | −0.028 | 0.030 | 0.862 |
| | 25-39 | 0.064 | 0.189 | 0.664 |
| | 40-54 | −0.064 | 0.169 | 0.681 |
| | 55 and older | na[a] | | |
| Gender | Female | na[a] | | |
| | Male | 0.039 | 0.199 | 0.655 |

**Table III.**
Logistic regression
results: effects of
complaint behaviour and
control variables on
repurchase intentions

**Note:** [a]Benchmark category for the dummy variables

with low past purchase frequencies. Consumers in various age groups did not differ significantly from the base age category (55 years and older) in their repurchase intentions. Nor did online repurchase intentions differ significantly between female and male consumers.

## 6. Discussion

This study provides insights into how consumers' dissatisfaction with online purchases affects their future intentions to buy using the internet channel. In particular, we show that repurchase intentions depend on complaint behaviour. We distinguish groups of consumers on the basis of whether they had negative experiences with online purchases, complained (with the company or elsewhere), and were satisfied with the complaint handling. We find notable differences across these consumer groups with respect to their intentions to repurchase through the internet. Consumers with negative experiences who complained and were satisfied with the complaint handling expressed higher repurchase intentions than consumers with no reason to complain (satisfied customers) and consumers who failed to complain about their negative experiences (silent complainants).

Our findings offer several important insights for extant literature (Table IV). First, consumers with negative experiences who complained may develop higher repurchase intentions than consumers with no negative experiences. That is, negative experiences and complaints do not necessarily lead customers to reject the internet as a purchase channel. Our results show that customers who complained (whether to the firm or to some external organization) and were satisfied with the response expressed higher intentions to repurchase online than did satisfied customers, consistent with the service recovery paradox. This pattern previously has been demonstrated for offline retail and other service settings (De Matos *et al.*, 2007); our study provides empirical evidence of the service recovery paradox in online settings (Sousa and Voss, 2009). Furthermore, we affirm that the service recovery paradox does not depend on past purchase frequencies or the consumer's culture, in that the findings held across 15 European nations marked by varying levels of uncertainty avoidance.

Second, complaining consumers have higher internet repurchase intentions than consumers with negative experiences who did not complain (silent complainants). This finding holds for both internally satisfied and dissatisfied complainants, and for externally satisfied complainants. Only consumers who complained to an external organization and were dissatisfied with the complaint handling indicated lower repurchase intentions than silent complainants. These findings differ somewhat from previous findings in offline settings (Voorhees *et al.*, 2006). Primarily, our study underlines the importance of encouraging consumers to complain if they are dissatisfied, to achieve high repurchase intentions.

| Conclusion | Empirical finding |
| --- | --- |
| 1. | Consumers who complained and were satisfied with the response have higher intentions to repurchase online than customers with no complaints |
| 2. | Complaining consumers have higher intentions to repurchase online than consumers with negative experiences who did not complain (silent complainants) |
| 3. | Internal complainants have higher average intentions to repurchase online than external complainants |
| 4. | Satisfaction with the service response increases intentions to repurchase online among complainants |

Table IV.
Main study findings

Third, internal complainants have higher repurchase intentions than external complainants on average. This result matches previous findings (Goetzinger *et al.*, 2006), which indicate that companies that provide their own online feedback system for complaints can minimize the number of external complaints.

Fourth, both internal and external complaint routes can help retain customers in the channel if the complaint handling is satisfactory. In contrast, in offline settings, satisfaction with service recovery did not serve as a predictor of same-firm repurchase intentions (Maxham and Netemeyer, 2002). Nor does satisfaction with recovery efforts necessarily ensure firm repurchase intentions online (Holloway and Beatty, 2003). Rather, our findings indicate that a high percentage of consumers who complained directly to an e-tailer or external organization and were satisfied with the response demonstrated high channel repurchase intentions. If consumers were unsatisfied with the response to their complaint though, the percentage of channel repurchase intentions drops considerably. For internal complainants, it fell from 78.5 to 68.4 per cent; for external complainants, the drop was even steeper, from 74.1 to 42.1 per cent. External complainants unsatisfied with the response thus had the lowest intention to repurchase through the internet. These findings reveal that service recovery pays off – or more accurately, that unsuccessful recovery can be damaging for both internal and external complaints.

To assess the effects of complaint behaviour, we controlled for past purchase behaviour, consumer characteristics, and culture. Repurchase intentions on the internet depended on complaint behaviour and past behaviour, not on consumers' ages or genders. Furthermore, consumers from different country groups did not indicate different effects of complaint behaviour on their repurchase intentions. The impact of complaint behaviour and service recovery satisfaction on future online purchases thus appears generalizable across consumers from different European countries.

## 7. Conclusion
### 7.1 Managerial implications
The differences manifested by the online complaint behaviour and service recovery groups suggest several important implications for e-commerce management. First, e-tailers need to give their customers an internal channel to complain, rather than leaving them to do so externally, on a review or complaint site. These firms should encourage customers to communicate complaints directly to them. As a passive strategy, they could locate an easily accessible link on their web site to a complaint department; a more active approach would be to ask customers by e-mail about their experiences after each purchase. Online sellers benefit most from direct complaints, because they become aware of the problem more quickly and are able to respond (Goetzinger *et al.*, 2006). Among customers who do not complain about an online service failure, the primary reason cited is that complaining is too much trouble (Holloway and Beatty, 2003). This reason should be easy for internet retailers to overcome, because technology readily facilitates online communications (Bitner *et al.*, 2000). Other options for customer feedback include toll-free numbers or a real-time chat room (Holloway and Beatty, 2003); for example, complaint management might be facilitated by the adoption of call centres staffed by specialists who have been trained to resolve individual customer problems, together with efficient web site designs (Harrison-Walker, 2001). With successful internal complaint management, an e-tailer not only gains direct, personalized customer information but also encourages this consumer to make more online purchases in the future.

Second, for both internal and external complaints, the response must result in satisfactory service recovery. Online repurchase intentions can be enhanced by careful complaint management. For e-commerce companies that already invite customers to complete short, standard satisfaction surveys after each purchase (e.g. hotels, car rental companies), our findings indicate further that they should include open-ended questions with enough space for consumers to detail any complaints, and then they must initiate an adequate and prompt service recovery procedure. An excellent example appears in the Swisscom case (Zaugg, 2008). The Swiss telecommunication company noticed that complaints tended to grow more complex, were being submitted by telephone instead of online, and related mostly to billing, with little input for improving products and services. Because Swisscom sought to receive more complaints through the less expensive online channel, it chose to make the feedback forms more accessible on the company's web site. Complainants received an automatically generated confirmation, followed by a more specific reply. The new procedure shortened the company's reaction times to complaints. By restructuring online complaint procedures and after-sales services, Swisscom also succeeded in increasing customer satisfaction and revenues (Zaugg, 2008).

Third, it is particularly crucial to ensure that external complainants are satisfied with the company's response. A worst-case scenario is an external complaint who does not receive a satisfactory recovery. Thus, external complaint sites should be carefully monitored. When the Royal Bank of Scotland (RBS) suffered a major service failure in June 2012 – a technical failure disrupted banking services for millions of customers – it was "on a scale and for longer than has ever happened at any British bank since they went computerised" (Peston, 2012). Customers filed a wealth of complaints online (e.g. "Thank you […] my 21st birthday is ruined"; on web site of Bankfellows.com). But RBS also undertook an extensive and effective service recovery effort, including opening branches on Sunday, extending opening hours until late at night, and promising that no customer would be "out of pocket." However, not all external complaints are as readily accessible to e-tailers; even if e-tailers identify popular external complaint sites, consumers often prefer to remain anonymous. Managers might seek to collaborate with the external complaint organizations to react to external complaints and ensure that customers are satisfied. Such tactics require careful consideration though, because legal challenges could arise. Capturing the valuable information that consumers provide by complaining to external organizations thus remains a challenge (Goetzinger *et al.*, 2006).

Fourth, companies could try to encourage silent complainants to voice their complaints, which should increase their repurchase intentions. Dissatisfied customers who do not complain to the firm are potentially problematic for several reasons. The company loses the opportunity to act on the complaint and retain the customer; in addition, its reputation could be damaged if the customer provides negative word of mouth about it, rather than complaining (Richins, 1983). Silent complainants represent organizational opportunity costs (Fornell and Wernerfelt, 1987), in that the firm misses an opportunity to improve or resolve problems. E-commerce management thus must find ways to encourage dissatisfied customers to complain, so that they can gather more information, address the problems, and retain customers. For silent complainants, a passive strategy (e.g. making it easy to file complaints) likely is insufficient. They need to be invited actively to communicate their complaints.

### 7.2 Limitations and further research

We acknowledge several limitations of this study. For example, we treated complaints made through the web site or directly to the company as a single group of internal

complaints, because of sample size limitations. We similarly grouped external complaints to online and offline organizations. However, specifying the exact target of the complaint could provide an even better understanding of complaint behaviour; external complaints in particular deserve further attention (Ward and Ostrom, 2006). Although we controlled for several consumer characteristics, additional factors also likely affect complaint behaviour, satisfaction, and repurchase intentions. Further studies could include a broader set of explanatory variables and their interactions. Similarly, we included a large set of 15 countries in this study, but the results are limited to European nations. Researchers should determine if our findings apply in other countries, preferably outside Europe – considering the substantial global differences in online behaviour that have been observed (Mahmood *et al.*, 2004) – and then offer explanations for any global differences. The sample size of our study also is large, but the number of observations for certain combinations of country and complaint behaviours were relatively few (e.g. silent complainants, external complainants). We considered the very few consumers who complained in both channels as members of the external complainants group. Research with larger samples of silent, external, and dual complainants thus could be insightful; examining the antecedents, order effects, and consequences of complaining in two channels might yield particularly relevant insights.

The internet contains a wide variety of sites from which consumers can purchase, but the Eurobarometer Survey does not distinguish among them, even though consumer responses likely vary for the sites of well-known offline retailers vs those of internet-only retailers, foreign retailers, or online auctions, for example. Additional research should investigate possible differences across these categories, whether quantitatively (to identify differences) or qualitatively (to understand differences). The Eurobarometer Survey did not contain multi-item measurements, therefore we had to rely on single-item measures. Although the questions reflect the core of the study's concepts, future research could explore these issues with finer graded and more precise measurements. Our dependent variable refers to repurchase intentions through the internet channel in general; we focused on the intention to repurchase online despite dissatisfaction with an online purchase. Although channel loyalty clearly is crucial for this relatively novel purchase channel, consumers who complained about a negative experience and were satisfied with the service recovery (Groups 3 and 5) may have remained channel loyal, even if they switched to another online store. For e-tailers, store loyalty is just as important as channel loyalty. Therefore, further studies should investigate the impacts of positive and negative online experiences on consumer loyalty and repurchase intentions for specific e-tailers.

Another issue for future research relates to the different results we uncovered for internal and external complainants. Both internally satisfied and dissatisfied complainants indicated higher internet repurchase intentions than silent complainants, but only externally satisfied complainants did so. Externally dissatisfied complainants noted lower repurchase intentions than silent complainants. We cannot effectively explain this finding, nor are questions about why consumers choose to complain internally or externally, how their reasons affect their expectations, and whether these considerations ultimately affect consumer satisfaction and repurchase intentions clear. External complaining has not been studied widely (Goetzinger *et al.*, 2006), but consumer motivations to complain externally may affect repurchase intentions. For example, consumers might complain externally because they have low expectations about the effectiveness of internal complaints or to express social motivations (Ward and Ostrom, 2006). In the former case, even a

moderately positive service recovery may exceed consumer expectations, resulting in consumer satisfaction. Such an effect is unlikely for socially motivated external complainants though. Further research should explore what motivates consumers to complain, internally or externally, and how their different motivations affect consumer satisfaction and repurchase intentions.

Despite these limitations, our study adds valuable empirical insights to literature pertaining to consumer complaint behaviour, online complaints, the service recovery paradox, and repurchase intentions. It also offers managerial implications that can help e-tailers improve their strategies for conducting business online.

### Note

1. Strictly speaking, a consumer could complain in multiple channels. This group is rather small in the empirical study though, so we treat them as external complainants in this study.

### References

Akhter, S.H. (2003), "Digital divide and purchase intention: why demographic psychology matters", *Journal of Economic Psychology*, Vol. 24 No. 3, pp. 321-327.

Atchariyachanvanich, K., Okada, H. and Sonehara, N. (2007), "What keeps customers repurchasing through the internet?", *ACM SIGecom Exchanges*, Vol. 6 No. 2, pp. 47-57.

Bergkvist, L. and Rossiter, J.R. (2007), "The predictive validity of multi-item vs single-item measures of the same constructs", *Journal of Marketing Research*, Vol. 44 No. 2, pp. 175-184.

Bhattacherjee, A. (2001), "An empirical analysis of the antecedents of electronic commerce service continuance", *Decision Support Systems*, Vol. 32 No. 2, pp. 201-214.

Bitner, M.J., Brown, S.W. and Meuter, M.L. (2000), "Technology infusion in service encounters", *Journal of the Academy of Marketing Science*, Vol. 28 No. 1, pp. 138-149.

Blodgett, J.G. and Anderson, R.D. (2000), "A Bayesian network model of the consumer complaint process", *Journal of Service Research*, Vol. 2 No. 4, pp. 321-328.

Chang, C.C. and Chin, Y.C. (2011), "Comparing consumer complaint responses to online and offline environment", *Internet Research*, Vol. 21 No. 2, pp. 124-137.

Chang, H.H., Lai, M.K. and Hsu, C.H. (2012), "Recovery of online services: perceived justice and transaction frequency", *Computers in Human Behavior*, Vol. 28 No. 6, pp. 2199-2208.

Chea, S. and Luo, M.M. (2008), "Post-adoption behaviors of e-service customers: the interplay of cognition and emotion", *International Journal of Electronic Commerce*, Vol. 12 No. 3, pp. 29-56.

Chebat, J.C., Davidow, M. and Codjovi, I. (2005), "Silent voices: why some dissatisfied consumers fail to complain", *Journal of Service Research*, Vol. 7 No. 4, pp. 328-342.

Cho, Y., Im, I., Hiltz, R. and Fjermestad, J. (2002a), "The effects of post-purchase evaluation factors on online vs offline customer complaining behavior: implications for customer loyalty", *Advances in Consumer Research*, Vol. 29, pp. 318-325.

Cho, Y., Im, I., Hiltz, R. and Fjermestad, J. (2002b), "An analysis of online customer complaints: implications for web complaint management", *Proceedings of the 35th Hawaii International Conference on Systems Sciences, Hawaii, 7-10 January*, pp. 2308-2317.

De Matos, C.A., Henrique, J.L. and Vargas Rossi, C.A. (2007), "Service recovery paradox: a meta-analysis", *Journal of Service Research*, Vol. 10 No. 1, pp. 60-77.

Devaraj, S., Fan, M. and Kohli, R. (2002), "Antecedents of B2C channel satisfaction and preference: validating e-commerce metrics", *Information Systems Research*, Vol. 13 No. 3, pp. 316-333.

Devaraj, S., Fan, M. and Kohli, R. (2006), "Examination of online channel preference: using the structure-conduct-outcome framework", *Decision Support Systems*, Vol. 42 No. 2, pp. 1089-1103.

Dunning, J., Pecotich, A. and O'Cass, A. (2004), "What happens when things go wrong? Retail sales explanations and their effects", *Psychology & Marketing*, Vol. 21 No. 7, pp. 553-572.

Fang, Y.H., Chiu, C.M. and Wang, E.T.G. (2011), "Understanding customers' satisfaction and repurchase intentions: an integration of IS success model, trust, and justice", *Internet Research*, Vol. 21 No. 4, pp. 479-503.

Fornell, C. and Wernerfelt, B. (1987), "Defensive marketing strategy by customer complaint management: a theoretical analysis", *Journal of Marketing Research*, Vol. 24 No. 4, pp. 337-346.

Forrester Research, Inc. (2011), *European online retail forecast, 2010-2015*, Forrester Research Inc., Cambridge, MA.

Freed, L. and Anderson, J. (2012a), "Holiday satisfaction with online shopping stagnates", ForSee, Ann Arbor, MI, available at: www.waafiles.org/whitepapers/online-retail-satisfaction-index-u.s.-holiday-2012-foresee.pdf (accessed 15 January, 2014).

Freed, L. and Anderson, J. (2012b), "Top 40 UK online retailers experience weak growth in customer satisfaction", ForSee, Ann Arbor, MI, available at: www.foresee.com/research-white-papers/_downloads/online-retail-satisfaction-index-uk-christmas-2012-foresee.pdf (accessed 15 January 2014).

Gensler, S., Verhoef, P.C. and Böhm, M. (2012), "Understanding consumers' multichannel choices across the different stages of the buying process", *Marketing Letters*, Vol. 23 No. 4, pp. 987-1003.

Goetzinger, L., Park, J.K. and Widdows, R. (2006), "E-customers' third party complaining and complimenting behaviour", *International Journal of Service Industry Management*, Vol. 17 No. 2, pp. 193-206.

Gronroos, C. (1988), "Service quality: the six criteria of good perceived service quality", *Review of Business*, Vol. 9 No. 3, pp. 10-13.

Harrison-Walker, J.L. (2001), "E-complaining: a content analysis of an internet complaint forum", *Journal of Services Marketing*, Vol. 15 No. 5, pp. 397-412.

Hart, C.W.L., Heskett, J.L. and Sasser, W.E. (1990), "The profitable art of service recovery", *Harvard Business Review*, Vol. 68 No. 2, pp. 148-156.

Hofstede, G. (2003), *Cultures' Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations*, 2nd ed., Sage, Thousand Oaks, CA.

Holloway, B.B. and Beatty, S.E. (2003), "Service failure in online retailing. A recovery opportunity", *Journal of Service Research*, Vol. 6 No. 1, pp. 92-105.

Hosmer, D.W., Lemeshow, S. and Sturdivant, R.X. (2013), *Applied Logistic Regression*, 3rd ed., Wiley, New York, NY.

Huang, E. (2008), "Use and gratification in e-consumers", *Internet Research*, Vol. 18 No. 4, pp. 405-426.

Jasper, C.R. and Waldhart, P. (2013), "Internet and distance channel use and European consumer complaint behaviour", *International Review of Retail, Distribution, and Consumer Research*, Vol. 23 No. 2, pp. 137-151.

Khalifa, M. and Liu, V. (2002), "Satisfaction with internet-based services: the role of expectations and desires", *International Journal of Electronic Commerce*, Vol. 7 No. 2, pp. 31-49.

Kuo, Y.F. and Wu, C.M. (2012), "Satisfaction and post-purchase intentions with service recovery of online shopping websites: perspectives on perceived justice and emotions", *International Journal of Information Management*, Vol. 32 No. 2, pp. 127-138.

Larivière, B. and Van den Poel, D. (2005), "Investigating the post-complaint period by means of survival analysis", *Expert Systems with Applications*, Vol. 29 No. 3, pp. 667-677.

Lee, S. and Cude, B.J. (2011), "Consumer complaint channel choice in online and offline purchases", *International Journal of Consumer Studies*, Vol. 36 No. 1, pp. 90-96.

McCollough, M.A. and Bharadwaj, S.G. (1992), "The recovery paradox: an examination of consumer satisfaction, service quality, and attribution-based theories", in Allen, C.T., Madden, T.J., Shimp, T.A., Howell, R.D., Zinkham, G.M. and Heisley, D.D. (Eds), *Marketing Theory and Application*, American Marketing Association, Chicago, IL, pp. 119-129.

McCollough, M.A., Berry, L.L. and Yadav, M.S. (2000), "An empirical investigation of customer satisfaction after service failure and recovery", *Journal of Service Research*, Vol. 3 No. 2, pp. 121-137.

Mahmood, M.A., Bagchi, K. and Ford, T.C. (2004), "On-line shopping behavior: cross-country empirical research", *International Journal of Electronic Commerce*, Vol. 9 No. 1, pp. 9-30.

Mattila, A.S. and Wirtz, J. (2004), "Consumer complaining to firms: the determinants of channel choice", *Journal of Services Marketing*, Vol. 18 No. 2, pp. 147-155.

Maxham, J.G. III (2001), "Service recovery's influence on consumer satisfaction, positive word-of-mouth, and purchase intentions", *Journal of Business Research*, Vol. 54 No. 1, pp. 11-24.

Maxham, J.G. III and Netemeyer, R.G. (2002), "Modeling customer perceptions of complaint handling over time: the effects of perceived justice on satisfaction and intent", *Journal of Retailing*, Vol. 78 No. 4, pp. 239-252.

Oliver, R.L. (1980), "A cognitive model for the antecedents and consequences of satisfaction", *Journal of Marketing*, Vol. 17 No. 4, pp. 460-469.

Ouellette, J.A. and Wood, W. (1998), "Habit and intention in everyday life: the multiple processes by which past behavior predicts future behavior", *Psychological Bulletin*, Vol. 124 No. 1, pp. 54-74.

Pavlou, P.A. (2003), "Consumer acceptance of electronic commerce: integrating trust and risk with technology acceptance model", *International Journal of Electronic Commerce*, Vol. 7 No. 3, pp. 131-134.

Peston, R. (2012), "Is outsourcing the cause of RBS debacle?", *BBC News Online*, 25 June.

Pizzutti, C. and Fernandes, D. (2010), "Effect of recovery efforts on consumer trust and loyalty in e-tail: a contingency model", *International Journal of Electronic Commerce*, Vol. 14 No. 4, pp. 127-160.

Rao, S., Griffis, S.E. and Goldsby, T.J. (2011), "Failure to deliver? Linking online order fulfilment glitches with future purchase behavior", *Journal of Operations Management*, Vol. 29 Nos 7/8, pp. 692-703.

Reibstein, D.J. (2002), "What attracts customers to online stores, and what keeps them coming back?", *Journal of the Academy of Marketing Science*, Vol. 30 No. 4, pp. 465-473.

Richins, M. (1983), "Negative word-of-mouth by dissatisfied consumers: a pilot study", *Journal of Marketing*, Vol. 47 No. 1, pp. 68-78.

Rossi, P.E., McCulloch, R.E. and Allenby, G.M. (1996), "The value of purchase history data in target marketing", *Marketing Science*, Vol. 15 No. 4, pp. 321-340.

Sabiote, C.M., Frias, D.M. and Castaneda, J.M. (2012), "The moderating effect of uncertainty-avoidance on overall perceived value of a service purchased online", *Internet Research*, Vol. 22 No. 2, pp. 180-198.

Schneider, B. and Bowen, D. (1999), "Understanding customer delight and outrage", *Sloan Management Review*, Vol. 41 No. 1, pp. 35-46.

Singh, J. (1989), "Determinants of consumers' decisions to seek third party redress: an empirical study of dissatisfied patients", *Journal of Consumer Affairs*, Vol. 23 No. 2, pp. 329-363.

Sousa, R. and Voss, C.A. (2009), "The effects of service failures and recovery on customer loyalty in e-services", *International Journal of Operations & Production Management*, Vol. 29 No. 8, pp. 834-864.

Srinivasan, S.S., Anderson, R. and Ponnavolu, K. (2002), "Customer loyalty in e-commerce: an exploration of its antecedents and consequences", *Journal of Retailing*, Vol. 78 No. 1, pp. 41-50.

Strauss, J. and Hill, D.J. (2001), "Consumer complaints by e-mail: an exploratory investigation of corporate responses and customer reactions", *Journal of Interactive Marketing*, Vol. 15 No. 1, pp. 63-73.

Voorhees, C.M., Brady, M.K. and Horowitz, D.M. (2006), "A voice from the silent masses: an exploratory and comparative analysis of non complainants", *Journal of the Academy of Marketing Science*, Vol. 34 No. 4, pp. 514-527.

Wang, Y.S., Wu, S.C., Lin, H.H. and Wang, Y.Y. (2011), "The relationship of service failure severity, service recovery justice and perceived switching costs with customer loyalty in the context of e-tailing", *International Journal of Information Management*, Vol. 31 No. 4, pp. 350-359.

Ward, J.C. and Ostrom, A.L. (2006), "Complaining to the masses: the role of protest framing in customer-created complaint web sites", *Journal of Consumer Research*, Vol. 33 No. 2, pp. 220-230.

Yeh, J.-C., Hsiao, K.-L. and Yang, W.-N. (2012), "A study of purchasing behaviour in Taiwan's online auction websites: effects of uncertainty and gender differences", *Internet Research*, Vol. 22 No. 1, pp. 98-115.

Yen, Y.S. (2010), "Can perceived risks affect the relationship of switching costs and customer loyalty in e-commerce?", *Internet Research*, Vol. 20 No. 2, pp. 210-224.

Zaugg, A.D. (2008), "Online complaint management @ Swisscom: a case study", *Management Online Review*, June, pp. 1-17, available at: www.morexpertise.com

**Appendix. Questionnaire Eurobarometer 60.0**
We used the following questions from the Eurobarometer questionnaire: 62, 63, 72 (a,c), and 79 from the internet purchases section; D.8 and D.11 from the demographics section; and question 1 about the respondents' nationality.

Question 62:

Have you ever bought anything on the Internet?

1. Yes

2. No

3. Don't know

Question 63:

How often do you buy things on the Internet?

1. Once a week or more often

2. Once a month

3. Once every 3 months

4. Once every 6 months

5. Once a year

6. Less often

7. Don't know

Question 72a:

After making an Internet purchase, have you ever had reason to complain?
(IF YES) To whom did you complain?

    1. Yes, directly to the web site online

    2. Yes, to the organization owning/running the web site (offline)

    3. Yes, to a consumer organization

    4. Yes, to a (*nationality)* government body

    5. Yes, to another organization, association

    6. Yes, but I did nothing about it

    7. No, no complaint

    8. Don't know

Question 72c:

Were you satisfied or dissatisfied with the way your complaint was handled?

    1. By the web site online

    2. By the organization owning/running the web site (offline)

    3. By a consumer organization

    4. By a {*nationality*} government body

    5. By another organization, association

Question 79:

Do you think you are going to shop on the Internet in the next three months?

    1. Yes

    2. No

    3. Don't know

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1. Atika Qazi, Alireza Tamjidyamcholo, Ram Gopal Raj, Glenn Hardaker, Craig Standing. 2017. Assessing consumers' satisfaction and expectations through online opinions: Expectation and disconfirmation approach. *Computers in Human Behavior* **75**, 450-460. [Crossref]

2. TarofderArun Kumar, Arun Kumar Tarofder, NikhashemiSeyed Rajab, Seyed Rajab Nikhashemi, AzamS.M. Ferdous, S.M. Ferdous Azam, SelvantharanPrashantini, Prashantini Selvantharan, HaqueAhasanul, Ahasanul Haque. 2016. The mediating influence of service failure explanation on customer repurchase intention through customers satisfaction. *International Journal of Quality and Service Sciences* **8**:4, 516-535. [Abstract] [Full Text] [PDF]

3. Hatice Aydın, Sevtap Ünal. 2016. The Mediating Role of Psychological Distancing and Complaining Behaviour on the Effect of Negative Emotions on Repurchase Intention. *International Journal of Trade, Economics and Finance* **7**:5, 179-185. [Crossref]

4. Mahmud Hassan, Luis V. Casaló Ariño. 2016. Consumer devotion to a different height. *Internet Research* **26**:4, 963-981. [Abstract] [Full Text] [PDF]

5. Ali Gohary, Bahman Hamzelu, Hamid Alizadeh. 2016. Please explain why it happened! How perceived justice and customer involvement affect post co-recovery evaluations: A study of Iranian online shoppers. *Journal of Retailing and Consumer Services* **31**, 127-142. [Crossref]

6. Francesca Negri, Vania Vigolo, Angelo Bonfanti. 2016. Managing responses to online reviews: an opportunity for value co-creation?. *MERCATI E COMPETITIVITÀ* :1, 103-122. [Crossref]

7. Luis V. Casaló, Carlos Flavián, Miguel Guinalíu, Yuksel Ekinci. 2015. Do online hotel rating schemes influence booking behaviors?. *International Journal of Hospitality Management* **49**, 28-36. [Crossref]