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Heavy users of e-banking and Customer Experience Management: evidences on intrinsic motivation

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Abstract: The study provides insights into experiential marketing in a predominantly goal-directed service like internet banking. A model is proposed that combines two complementary approaches in the analysis of experience: a cognitive approach based on quality and an affective approach based on emotions. 754 valid observations have been collected through an online survey among heavy users of internet banking. Latent scores were used to compare consumers' perceptions, differences in demographics and usage variables. The results show that both perceived quality and flow state are major determinants of satisfaction and positive emotions. The paper contributes to electronic business by examining the relationships between consumer motivation, service quality, satisfaction, flow experiences and behavioural variables.

Keywords: customer experience management; experiential marketing; consumer behaviour; intrinsic motivation; cognitive; affective; service quality; internet banking; electronic business.

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1 Introduction

According to Payne and Frow (2005), Customer Relationship Management (CRM) “is a holistic approach to managing customer relationships to create shareholder value”. CRM takes into consideration strategy creation, the multiple touch-points view to customer and integration of data as well as assessing the performance of CRM activities (see e.g., Chen and Ching, 2007). One of the issues that need to be taken into consideration in CRM is the experience that the customer has with the offering

(product + service) and with the brand in question. Arguments have been put forward in a number of studies that we are moving away from products, services and brands towards experiences (Carù and Cova, 2007). In this context, the notion of CRM has expanded into the continuous concept of CEM in which it becomes essential to consider experiential aspects related to the emotional and irrational side of the consumer behaviour (Gentile et al., 2007; Holbrook, 2007).

Starting from the work of Thompson et al. (1989), a number of studies have examined how IT facilitates CEM (Dawes and Rowley, 1998) and accordingly how multiple channels should be managed (Payne and Frow, 2004). Nevertheless, internet banking is rarely studied from an experiential point of view. To lay a common ground for discussion of CEM activities, we will use the popular definition by Schmitt (2003) to define CEM, even though (Holbrook, 2007) criticised Schmitt of being more of consultant than an academic. According to Schmitt (2003), "CEM is the process of strategically managing a customer's entire experience with a product or a company". In addition, Schmitt (2003) defines customer experience being "a customer contact with the product or company". Therefore, CEM can be seen as one issue that is part of successful CRM activities. Winer (2001) further highlights the importance of this study in relation to CEM, suggesting that in the retail bank business customer interaction frequency is high and directed towards the bank, which makes it an excellent place to utilise experience management. In other industries, according to Winer (2001), interaction may be high but not directed towards the service provider (e.g., buying airline tickets from online seller like Expedia). In the CEM literature, and also in online consumer behaviour studies, the user's motivations are studied often (Agarwal and Karahanna, 2000; Gentile et al., 2007; Lee et al., 2005; Lin et al., 2005; Parsons, 2002; Shang et al., 2005; Teo et al., 1999).

Consumers combine utilitarian and hedonic perceptions to produce attitudes, affective states and, ultimately, behaviour. This reasoning is valid for the internet and for specific online services like internet banking. Even though internet banking is a predominantly goal-directed service, the computer-mediated channel provides wider possibilities for hedonic perceptions and behaviours (Chen, 2006; Chung and Tan, 2004; Hackbarth et al., 2003; Moon and Kim, 2001; Shang et al., 2005; Trevino and Webster, 1992). The interactive nature of this channel opens new possibilities for exploratory behaviour, traditionally linked to intrinsic motivation (Agarwal and Karahanna, 2000; Davis, 1989; Ghani and Deshpande, 1994).

The literature refers to the internet as a channel that simultaneously provides recreational and utilitarian features (Fagan et al., 2008; Huang, 2005). The challenge of this research is to prove the existence of the flow construct (also called cognitive absorption or playfulness) as representative of the hedonic component in a typical goal-directed service such as internet banking. From the literature on consumer satisfaction, we have collected some common constructs, such as perceived quality reflecting the utilitarian side of this service.

2 The consumer experiential dimension

The flow state has been proposed by a number of authors as a possible metric in the online user's experience (Chen et al., 2000; Hoffman and Novak, 1996; Koufaris, 2002; Novak et al., 2000).

The flow construct has been object of several studies starting with Csikszentmihalyi's (1975) conceptualisation of flow state in segmented channels. Extensions from the original model have been made (Ellis et al., 1994; Massimini and Carli, 1988), including some structural models (Ghani and Deshpande, 1994; Hoffman and Novak, 1996; Novak et al., 2000; Trevino and Webster, 1992). Novak et al.'s (2000) model was applied to the internet as a specific case of human-computer interaction. Once in flow, the user has a high level of concentration, engaging in the activity, forgetting everything around and has a distorted perception of time. According to Novak et al. (2000), the flow state presents the following characteristics:

- 1 *Pleasant learning.* Web exploring becomes a pleasant activity, allowing for the improvement of navigation skills, which are characterised by a continuous sequence of answers facilitated by computer interactivity. Users who experienced flow will exhibit a higher level of exploratory behaviour and are more willing to assume risks (Baumgartner and Steenkamp, 1996).
- 2 *Loss of time perception.* The positive navigational experience leads to a distortion in time perception (Webster et al., 1993).
- 3 *Feedback.* The experience exploring the web will feedback into the navigational process and will bring higher levels of control and self-confidence in the new connections.
- 4 *Dependence.* After several satisfactory navigational episodes, the user will repeat the experience.
- 5 *High levels of concentration without self-conscious thoughts.* The concentration level is high once the user has control over the environment. Interactivity allows for a fusion of the task and the consciousness, leading the user to ignore everything around.

Consumer's satisfaction is a central theme in consumer behaviour literature and, in this study, we try to expose the customer's central perceptions: disconfirmation of expectations and overall service evaluation. We used two scale items from the study by Methlie and Nysveen (1999). This scale, adapted to the context of internet banking, showed an acceptable reliability (0.70 of extracted variance, 0.82 of composite reliability) and was very operative (low number of items and easy to answer).

Considering the affective nature of satisfaction, the models have been improved and adapted to the complexity of consumer behaviour with more accuracy (Liljander and Strandvik, 1997; Oliver, 1994; Westbrook and Oliver, 1991). We will use emotions as a predominant affective construct, considering enjoyment as a unidimensional emotional construct through the combination of dimensions 'activation' and 'joy'. This procedure has been replicated in previous studies (Childers et al., 2001; Ghani and Deshpande, 1994; Koufaris, 2002; Novak et al., 2000).

3 Perceived quality: The utilitarian dimension

Perceived quality is one of the most frequent themes in the management research. The measures and scales used by academics and consulting firms to measure quality from the consumer perspective differ in their items and dimensions. Many academics have

used a limited set of variables (Zeithmal, 2002), rather than the wider ranging focus of electronic service quality (such as e-SERVQUAL from Zeithmal et al. (2000)). While some researchers have focused on the technical side of the website (such as the WEBQUAL scale from Lociacomo et al. (2000)), others combine concepts from both service quality and retailing literature (like the '.comQ scale' or 'eTailQ' (Wolfenbarger and Gilly, 2002, 2003)), revealing that there is a lack of consensus on the component dimensions (Zeithmal et al., 2002). In line with the research by Szymansky and Hise (2000), this study defines the perceived internet banking service quality in terms of the *information availability and content, financial security, convenience and personalisation* (see also Appendix 2).

Information availability and content. From the consumer point of view, the information depth and availability of internet banking services are comparable with the 'product assortment' of other electronic services (also called the 'merchandising' construct by Szymansky and Hise, 2000). This construct is frequently mentioned as an important factor for electronic services (Jun and Cai, 2001; Li et al., 2002). The accurateness of information and the bank's reputation has also been considered as central in this channel (Bitner, 1995; Cheung and Lee, 2001). Aesthetics is also a variable that can be included in this construct as an intrinsic part of the content (Evanchitsky et al., 2004).

Financial security. Security and privacy are crucial evaluative criteria in electronic services (Zeithmal et al., 2002). Privacy is directly related to personal information protection. The marketing literature examines consumer privacy in the sense of a consumer's control over information disclosure and the environment in which a consumer transaction occurs. Studies have shown that privacy is the main concern in internet activities (Hoffman et al., 1999). On the other hand, security is related to risk and fraud avoidance. A financial loss through unauthorised credit card use is a major concern among all internet users.

Convenience. Internet banking is widely promoted as a convenient channel for banking services, given that the user can economise on time and effort. The construct used in this study is measured by three items from the study of Kwon and Chidambaram (2000): comfort, time saving and speed of transactions.

Personalisation. It is one of the main tools of the user's interface adaptation, given that it allows for a reduction of the time spent on information search, for interactive help and simplification of decision making in complex contexts (Laroche et al., 2000; Senecal and Nantel, 2004). Personalisation systems can be categorised in customisation (where the user personalises his or her own environment) and proactive configuration (also known as adaptive configuration), like recommendation agents (Forbes and Rothschild, 2000).

4 The role of intrinsic motivation

An intrinsically motivated task is based on a motivational state that makes people feel attracted to and stimulated by the task in itself, and not merely by clear goals or external rewards (Csikszentmihalyi, 1975; Hoffman and Novak, 1996; Shin and Zhou, 2003).

The internet provides self-directed navigation and a perception of freedom of movement and election (Hoffman and Novak, 1996), playfulness (Malone and Lepper,

1987; Webster, 1989) and creative behaviour. Many studies about internet behaviour have adopted the classification of online experience in two categories: exploratory behaviour and task-directed behaviour. The first one follows a ritualistic orientation (in the use of internet), whereas the second is more instrumental (Rubin, 1984; Rubin and Perse, 1987). Ritualistic orientations are more centred on “the channel than on the content” and are associated with diffuse motivations, like amusement, habit, relaxation, and with non-selective behaviours, less intentional and emotive (Rubin and Perse, 1987). Instrumental orientation is more selective, rational and intentional, as a reflection of a specific content aim (Hoffman and Novak, 1994). This kind of distinction matches the common marketing classification based on predicted benefits: hedonic and utilitarian motivations, respectively (Childers et al., 2001; Havlena and Holbrook, 1986; Srinivasan, 1987). Hoffman and Novak (1994, 1996) argue that hedonic navigation tends to evolve into instrumental navigation, as experience in the use of the channel grows. Accordingly, the involvement in an instrumental task motivated extrinsically is related with goal achievement, while a ritual task is motivated by the web browsing itself, i.e., intrinsically.

As a result of this conceptualisation, there are two main ways of web browsing/using internet: ritual browsing and task-directed search (Hoffman and Novak, 1994, 1996; Novak et al., 2000) (see Table 1).

Table 1 Task categories

<i>Dimension</i>	<i>Goal-directed tasks</i>	<i>Experimental tasks</i>	<i>Studies</i>
Orientation	Instrumental	Ritual	Li and Bukovak (1999), Rubin and Perse (1987)
Implication	Situational	Stable	Bloch et al. (1986), Richins and Root-Shaffer (1988), Wolfinbarger and Gilly (2001)
Motivation	Extrinsic	Intrinsic	Csikszentmihalyi (1975) and Davis et al. (1992)
Navigation	Directed	Non directed	Bloch et al. (1986)
Benefits	Utilitarian	Hedonic	Batra and Ahtola (1990), Childers et al. (2001) and Gentile et al. (2007)
Election	Directed	Browsing	Deci and Ryan (1985), Hoffman and Novak (1996)
Dominant mental process	Cognitive	Emotional	Berkowitz (1993), Shiv and Fedorikhin (1999)
Activity	Work	Fun	Hammond et al. (1998), Wolfinbarger and Gilly (2001)
Buy	Planned	Impulsive	Koufaris (2002) and Rook (1987)

Source: Adopted from Hoffman and Novak (1994), Novak et al. (2000) and Gentile et al. (2007)

Hoffman and Novak (1994, 1996) argue that online task-directed activities imply residual implication, direct searches and learning, whereas experimental activities are characterised by stable implication and indirect information search.

A distinction between extrinsic and intrinsic motivation has been used to segment consumers (Hoffman and Novak, 1994). Traditionally, marketers have been interested in goal-directed activities such as precise information search, pre-purchase considerations or effective purchase. On the other hand, exploratory browsing is more heterogeneous but more stable (Bettman, 1979; Biehal and Chakravarti, 1982; Bloch et al., 1986). Opinion leaders tend to get involved in tasks in a stable way, a kind of involvement that rarely takes place in recreational situations.

The hedonic–utilitarian duality may also correspond to an emotion–rational classification. To Koufaris (2002), an emotion is a result of an exploratory process, whereas a planned purchase reflects a cognitive utilitarian preponderance.

The Optimum Stimulation Level (OSL) was also mentioned as a determinant of exploratory behaviour (Mehrabian and Russel, 1974; Raju, 1980), given its strong influence over intrinsic motivation, the seeking of variety and the willingness to assume risks (Holbrook and Gardner, 1993; Raju, 1980; Steenkamp and Baumgartner, 1992).

In this work, we have defined the intrinsic motivation construct by adapting the literature around formalisations of exploratory behaviour (Novak et al., 2000) to the internet banking context. We asked the users about the regularity of connection to the service without a specific purpose (see Appendix 2). In view of the fact that this research focuses on active users (with more than 10 connections during the previous month), a stable motivation is expected owing to learning and stability in contents.

5 Hypotheses development

The perceived quality is described as a source of external reward to the user (Childers et al., 2001; Igbaria, 1993; Kwon and Chidambaram, 2000) and is linked with the products offer (products, services and information), convenience, security (that includes privacy perceptions) and personalisation (Cheung and Lee, 2001; Koufaris and Hampton-Sosa, 2002; Tan and Thoen, 2001; Muñoz and Cruz, 2004). This multidimensional feature of perceived quality lead to the following hypothesis:

H1_{a,b,c,d}: The perceived quality in internet banking is a second-order construct integrating: a) information and content, b) convenience, c) security, d) personalisation.

Previous studies indicate that e-service quality has a positive influence on consumer responses such as satisfaction and attitudes (Collier and Bienstock, 2006; Chen et al., 2002; Zeithmal et al., 2002). Research on the banking sector also confirms this positive and significant relationship (Barroso and Martín, 1999; Muñoz and Cruz, 2004). Thus, we expect:

H2: The perceived quality will have a positive impact on consumer's satisfaction.

The interaction of affective experiences, satisfaction and perceived quality has been a subject of several studies (Kelley and Hoffman, 1997; Oliver, 1994; Trevino and Webster, 1992).

Hoffman and Novak (1996) state that, even in goal-oriented navigation session, if the user feels challenged in the task that arouses a heightened affective state (i.e., achieves a state of flow), they are then more willing to interact with the website. The navigation experience is primarily driven by the website characteristics

(Childers et al., 2001; Novak et al., 2000). Consequently, the provision of high e-service quality via the various attributes (such as relevant information content, security and speed of response) is crucial to provide pleasurable experiences, facilitating flow experiences (Carlson and O'Cass, 2008).

Webster and Hackley (1997) found that, in technological contexts, the perceived quality is a major antecedent of the experience, being the latest related to flow and enjoyment.

Accordingly, we expect that the e-service quality will have a significant positive influence on experience constructs like flow and enjoyment:

H3: The perceived quality has a positive impact on flow state.

H4: There is a positive influence of perceived quality on the enjoyment level.

If the user considers the results of the web navigation to correspond to his/her expectations, some enjoyment (Chen, 2006; Webster et al., 1993) and satisfaction will be produced (Clarke and Haworth, 1994). Ghani et al. (1991) and Sandelands et al. (1983) found a positive relationship between flow and satisfaction in computer contexts. On the basis of the available literature, one can state that there is a positive influence of flow over satisfaction (as a cognitive process) and over enjoyment (as an affective state) (Day, 1981; Sandelands et al., 1983). No relationship between satisfaction and enjoyment is hypothesised, given that other studies have shown that cognitive and affective evaluations are independent (Muñoz and Cruz, 2004).

H5: The perceptions of flow state have a positive impact over enjoyment.

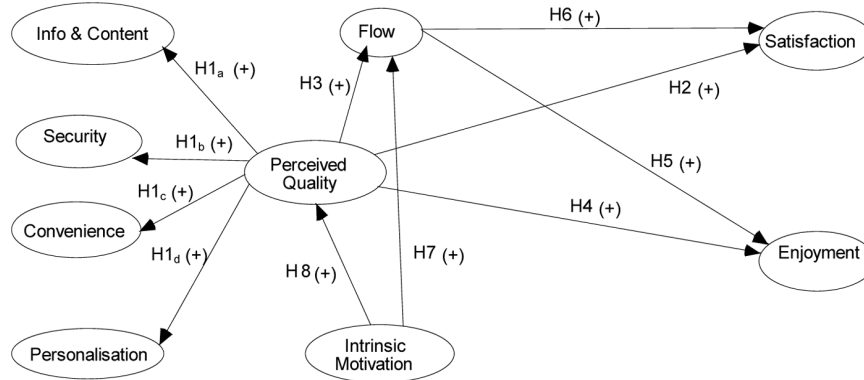
H6: The perception of flow leads to a greater level of satisfaction.

Intrinsic motivation can be defined as the sense of a non-planned connection with the service (see Appendix 2). Intrinsic motivation is typically related to exploratory behaviour, non-directed activities (Bloch et al., 1986) and flow (Novak et al., 2000). The majority of participants are active users and we propose that intrinsic motivation will exist in such a channel owing to its specific characteristics (Bloch et al., 1986; Richins and Root-Shaffer, 1988; Wolfinbarger and Gilly, 2001). On the basis that intrinsic motivation is related to the search for variety and willingness to assume risks (Holbrook and Gardner, 1993; Raju, 1980; Steenkamp and Baumgartner, 1992), it can therefore be argued that highly intrinsic motivated consumers will be more likely to evaluate the service as more stimulating and engaging. Conversely, it can be argued that less intrinsic motivated consumers will be less likely to experience flow and more likely to evaluate the service as more risky and less overall perception of excellence and quality of e-service offerings. Thus,

H7: Intrinsic motivation will be positively related to flow.

H8: Intrinsic motivation will be positively related to perceived quality.

Even without hypotheses grounded on literature, one will proactively explore the discriminative role of demographic variables (sex, age, occupation and education) in the intrinsic motivation construct. To simplify, Figure 1 presents the research model, as well as the implicit hypotheses.

Figure 1 Proposed conceptual model

6 Research methodology

Several qualitative interviews were conducted with internet banking sector experts (in Portugal and Spain) to improve the survey instrument. With the qualitative findings as the foundation, the quantitative stage focused on gathering survey data to empirically test the proposed model. The survey was pretested with 35 MBA students and modified where considered appropriate. Constructs and items were adapted according to several constraints: the language should be appropriate to the European banking context, and simultaneously, the survey could not be long given that the participation rate drops dramatically with the number of items (Szymansky and Hise, 2000). As a result, constructs are measured parsimoniously with a minimum number of items.

About the sample representativeness of the population or similar groups, it must be remembered that the target-group for this study is heavy users of private banking service customers. Accordingly, the bank 'pre-screened' the possible respondents by selecting those with more than 10 logins to the service in the previous month. Hence, the participants in the sample were consistent with the relevant sampling frame for the survey. To minimise the bias, no repeated responses from the same client were authorised. However, the limitations of a self-selected online survey should be kept in mind when interpreting findings.

10,029 client were identified through the pre-screening and subsequently the survey was made available to all during a two-week period. Over 3000 clients answered the survey and 754 complete responses were collected (without missing values). The bank provided individual demographic and usage information and these were added to the responses to the survey.

With the data collected, a structural equation model using Lisrel 8.8 has been estimated with robust maximum likelihood estimator over the asymptotic covariance matrix, and also proved the unidimensionality, internal consistency, and the convergent and discriminant validity (see Appendix 2). On the basis of demographic and usage variables provided by the bank, differences between the constructs were explored.

7 Sample description

In this section, we describe the demographic profile of the participants, using the variables from the bank's database (concerning the participants in this study). Table 2 reveals that the group is predominantly male (65.6%) and young (71.4% being less than 40 years old). The respondents are quite similar in age and gender to those in other web-based studies on internet banking (Laukkanen and Pasanen, 2008; Karjaluoto et al., 2002; Polatoglu and Ekin, 2001): a typical internet banking user is a relatively young male.

As for the length of time of using the service, the mean is 602 days (about two years). On average, the majority of participants (90%) connect once every two days. Only 11 participants do more than two connections a day (see Table 2).

Table 2 Univariate analysis of demographic variables

<i>Variable</i>	<i>Category</i>	<i>Frequency</i>	<i>% from total</i>
Sex	Male	495	65.6
	Female	259	34.4
	Total (valid)	754	100.0
Age s.d. = 10.4* Mean = 35.5* Min. = 18* Max. = 76* Median = 32*	18–29 years	267	35.5
	30–39 years	270	35.9
	40–49 years	126	16.8
	50–59 years	71	9.4
	>60 years	18	2.4
	Total (valid)	752	100.0
Time using the service* s.d. = 270.9* Mean = 602 days* Min. = 1* Max. = 1029*	<3 months	34	4.5
	3–6 months	44	5.8
	6 months–1 year	105	13.9
	12–18 months	90	11.9
	18–24 months	141	18.7
	2–3 years	340	45.1
	>3 years	0	0
	Total (valid)	754	100.0
Daily average connections s.d. = 0.484* Mean = 0.59* Min. = 0.04* Max. = 6.61*	<0.3	156	20.7
	0.3–0.5	245	32.5
	0.5–1	275	36.5
	1–2	67	8.9
	>2	11	1.5
	Total (valid)	754	100.0
Occupation**	1	100	13.3
	2	156	20.8
	3	228	30.4
	4	267	35.6
	Total (valid)	751	100.0

Table 2 Univariate analysis of demographic variables (continued)

<i>Variable</i>	<i>Category</i>	<i>Frequency</i>	<i>% from total</i>
Education	Primary	21	3.7
	Secondary	332	57.7
	University	214	37.2
	Post-Grade	8	1.4
	Total (valid)	575	100.0

*Using the original continuous variable.

**Occupation: 1. Housewife, students, unemployed and retired people 2. Industrial workers, services and commerce 3. White-collar workers 4. Entrepreneurs, managers and executives.

As for occupation, the most frequent group is number four: entrepreneurs, managers and executives; with 35.6% of the cases. The majority has secondary education (57.7%).

8 Results

From confirmatory factor analysis of perceived quality, we concluded that the second-order model fits well ($\chi^2 = 150.40$; d.f. = 50; $p < 0.000$; CFI = 0.971; NFI = 0.957; GFI = 0.968; AGFI = 0.950; RMSEA = 0.039) and is free from multicollinearity (Tolerance = 0.721; VIF = 1.387).

From the model, it is possible to confirm that perceived quality is mostly determined by information and content features (products, services and information), rather than by those associated to the channel itself (security, convenience and personalisation).

The overall confirmatory factor analysis revealed good fit measures ($\chi^2 = 160.68$; d.f. = 55; $p < 0.000$; CFI = 0.968; RMSEA = 0.05; NFI = 0.953; GFI = 0.970; AGFI = 0.950), showing the existence of a causal model. The reliability and validity analysis showed acceptable results (see Appendix 2). Both *Cronbach alphas*, reliability index and extracted variance of each construct, show acceptable values (see Appendix 2). The convergent validity is guaranteed by an acceptable *t* test (for all loadings and causal relations except for variable E3) and by a standardised factor loading over 0.7. The discriminant validity was verified through Fornell and Larcker (1981) and Anderson and Gerbing (1988) tests.

The final causal model shows a good fit ($\chi^2 = 177.50$; d.f. = 58; CFI = 0.964; NFI = 0.948; RMSEA = 0.052; GFI = 0.966; AGFI = 0.947) and the standardised direct effects coefficients are shown in Figure 3. All paths are significant and exhibit positive relationships. The individual *r*-squares are all greater than the recommended 0.10 cut-off (Falk and Miller, 1992). It is appropriate, then, to examine the meaning of simultaneous relations among constructs.

The flow construct exists and demonstrates good reliability, also revealing significant relationships with almost all constructs and indicating that it is an essential dimension for characterising the user experience in this particular hypermedia context.

The results confirm the consumer's double identity as a shopper and as a creative technology user, since both flow (hedonic component) and perceived quality (cognitive utilitarian dimension) have a significant impact on satisfaction. From Figure 3,

we conclude that the impact of perceived quality on satisfaction is stronger than the impact of flow. This is not a surprising result, given the predominant utilitarian nature of the service.

Intrinsic motivation stands out as a major input of the model given that it has a significant and positive impact on perceived quality and flow. The total standardised effects reveal a greater impact on the hedonic dimension than on the utilitarian one (see Appendix 1). Hence, all hypotheses have been corroborated (see Figure 1 for hypotheses and Figures 2 and 3 for results).

Figure 2 Confirmatory factor analysis for perceived quality (standardised coefficients)

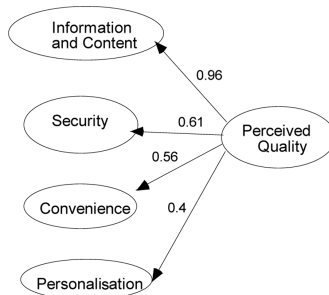
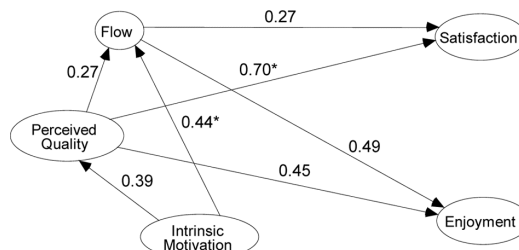


Figure 3 Estimated structural model



*Standardised total effects, all impacts significant at 0.001 level.

9 The segmentation role of intrinsic motivation

On the basis of the latent scores for intrinsic motivation, we divided the participants in two groups using the standardised latent score mean (0) as a cut-off point: above – intrinsic motivated; below – extrinsic motivated. Given that intrinsic motivation is a main input of the model, we have tested the differences among the groups based on the model's constructs (Table 3). Using standardised latent scores from the model, some non-parametric tests were operated (owing to the non-normality of data).

From the results, we verify that the intrinsic motivation groups discriminate all the constructs: for the intrinsically motivated group all constructs are significantly higher, when one uses either parametric or non-parametric tests.

On the basis of behavioural variables, like frequency of transferences among accounts, stock market investments, long-term deposits and daily average use, we found that the more intrinsically motivated group is a heavier user (concerning logins and transactions), when compared with the more extrinsically motivated group (Table 4).

Table 3 Construct differences by intrinsic motivation groups

	<i>Perceived quality</i>	<i>Flow</i>	<i>Satisfaction</i>	<i>Enjoyment</i>
Extrinsically motivated	−0.3692	−0.3530	−0.3774	−0.4300
Intrinsically motivated	0.2334	0.2231	0.2386	0.2718
<i>t</i>	7.331	9.879	5.477	5.348
<i>p</i>	0.007	0.002	0.018	0.021
Mann–Whitney <i>U</i>	42098	45505.5	40867	40760.5
Wilcoxon <i>W</i>	84876	88283.5	83645	83538.5
<i>Z</i>	−8.703	−7.533	−9.133	−9.168
Sig. (2-sided)	0.000	0.000	0.000	0.000
Kolmogorov–Smirnov <i>Z</i>	3.965	3.199	4.463	4.124
Sig. (2-sided)	0.000	0.000	0.000	0.000

754 valid cases used in SEM, standardised latent scores used in the analysis.

Table 4 Behaviour by intrinsic motivation groups

	<i>Transferences</i>	<i>Stock market investments</i>	<i>Long-term deposits</i>	<i>Daily average use</i>
Extrinsic motivated	4.82	1.62	1.88	0.5319
Intrinsic motivation	5.44	1.92	2.60	0.6271
<i>t</i>	−2.910	−2.399	−4.544	−2.797
<i>p</i>	0.04	0.017	0.000	0.005
Mann–Whitney <i>U</i>	59113.5	64660.5	59571	57976.5
Wilcoxon <i>W</i>	101891.5	64660.5	148402	100754.5
<i>Z</i>	−2.887	−2.465	−4.225	−3.252
Sig. (2-sided)*	0.004	0.014	0.000	0.001
Kolmogorov–Smirnov <i>Z</i>	1.375	1.414	1.738	1.696
Sig. (2-sided)*	0.046	0.032	0.005	0.006

754 valid cases used in SEM, standardised latent scores used in the analysis.

From Table 5, it is possible to conclude that women, users over 36 years and those with less than two years of experience with the service are (significantly) more intrinsically motivated. It seems that experience on the internet makes activities more routine and less exploratory, corroborating the study by Novak et al. (2000).

Table 5 Intrinsic motivation differences across demographics

<i>Variable</i>	<i>Category</i>	<i>N</i>	<i>%</i>	<i>Intrinsic motivation</i>
Sex	Male	495	65.6	−0.1125
	Female	259	34.4	0.2151
	Total (valid)	754	100	<i>p</i> = 0.000
Age	≤36 years	292	35.5	−1.0423
	>36 years	462	35.9	0.6588
	Total (valid)	752	100	<i>p</i> = 0.000

Table 5 Intrinsic motivation differences across demographics (continued)

<i>Variable</i>	<i>Category</i>	<i>N</i>	<i>%</i>	<i>Intrinsic motivation</i>
Occupation	A	256	0.34	0.0536
	B	495	0.66	−0.0274
	Total (valid)	751	100	$p = 0.291$
Education	Primary + secondary	353	13.3	0.0617
	University	222	20.8	−0.1119
	Total (valid)	575	100	$p = 0.43$
Experience with the service	<2 years	414	54.9	0.0723
	≥2 years	340	45.1	−0.0881
	Total (valid)	754	100	$p = 0.029$

Occupation: A: housewife, students, unemployed, retired, industrial workers, services and commerce; B: white-collar workers, entrepreneurs, managers and executives.

10 Conclusions

Customer Experience Management (CEM) brings a renewed perspective on consumption: it becomes a holistic experience, which involves a person at different levels and in every interaction between such person and a company, or a company's offering (LaSalle and Britton, 2003). Owing to the increase in the number of contact points between a company and its customers, CRM has increasingly integrated the continuous concept of CEM and promotes the monitoring of intangible elements related to the emotional and experiential value perceived by customers (Gentile et al., 2007; Treiblmaier et al., 2008).

This study focuses on developing a multidimensional understanding of the customer, approaching a psychographic, behavioural and demographic analysis. The estimated structural model provides a reliable and comprehensive representation of the simultaneous relations between the user's motivations, experience (intrinsic motivation, flow, enjoyment, satisfaction), the interface features (perceived quality) and the behavioural outcomes (logins and service usage). Although internet banking is a predominantly goal-directed service, intrinsic motivation and flow were found to be relevant in the explanation of satisfaction. Users are willing to explore the internet banking services, even if it is a goal-oriented navigation session. The website is the primordial touch point through which customer experience is delivered. Therefore, the operational efficiency has a direct impact on customer experience. It is crucial for the CEM platform analysts to keep operation at a streamlining level, without barriers to customer navigation and ensuring a pleasant experience at every step of the process.

Analysing the structural model, we can confirm that the impact of perceived quality on satisfaction is stronger than the impact of flow experience. This confirms the predominant goal-directed and utilitarian nature of internet banking service. The utilitarian vector (perceived quality) shows a significant impact on the hedonic one (flow), corroborating the fact that interface features and contents determine the quality of online experience.

Perceived quality is mostly determined by the information and contents (products, services and information), rather than by items associated directly to the platform (trust in the medium, convenience and personalisation). If the bank wants to improve the users' perceived quality, a development of products and information is recommended, instead of an investment in technological channel-related features (convenience, security or personalisation improvements).

Schmitt (1999) proposes five elementary components of customer experience: sensory experiences (sense), affective experiences (feel), creative cognitive experiences (think), behavioural experiences (act) and social-identity experiences (relate to a group). Following this drawing, the results indicate that the satisfaction assessment is derived mainly from the cognitive component of experience (over the emotional and sensorial ones).

We can also conclude that user motivation plays a central role in the customer experience, given that it impacts on perceptions and behaviours. Results show that more intrinsically motivated consumers correspond to more intensive users (regarding the number of logins and transactions, such as transferences, stock market investments and long-term deposits).

Simultaneously, customer understanding provides key profiles and defines relevant segments. With respect to the internet bank user demographic profile, it is possible to verify that it is, consistent with other studies, predominantly male (65.6%), young (71.4% being less than 40 years old), and relevantly experienced in using the service, not only in terms of length of time as users (average antiquity in using the service is about two years) but also in terms of frequency of use (on average, about 90% of the users connect once every two days). The majority of the participants have a professional occupation (86.7%) and a secondary level of education.

As demographic variables show a discriminatory level concerning intrinsic motivations, they are useful in a possible segmentation. The target-group for marketing actions (such as personalised communication strategies) could be the ones with low levels of intrinsic motivation, i.e., males less than 36 years old and using the service more than two years.

The aim of CEM is to create more positive experiences at touch points and to reduce the negative experiences. In a computer-mediated environment, this goal can only be obtained by including constructs like intrinsic motivation, flow and enjoyment. The study proved that a relevant part of the value perceived by customers, regardless of the context, is related to experiential features.

11 Managerial implications

Even though the results do not permit a direct generalisation, some suggestions to CEM practitioners can be made that aspire to a greater experience, and accordingly, a set-up in perceived service value:

- 1 *Enrich the customer experience and incentive intrinsic motivation.* As mentioned before, the quality of the user's experience decreases along the time. Accordingly, banks should, on the one hand, ensure regular content updating to stimulate exploration, and, on the other hand, provide links to sites of personal interest, product cross-selling based on the user's profile (such as technologies, cars and

travel offers) or activities that allow implication and creativity, such as auctions for loans and deposits. Managers responsible over customer experience should take into account that a bank is not an experience seller, but rather a provider of contents and environments that permit the desired customer experiences to emerge (Carù and Cova, 2007; Schmitt, 1999).

- 2 *Develop experience-driven value.* Products and information are easily imitated in this channel (internet), and this fact carries an increased pressure on the importance of price. To differentiate products and services, banks should consider hedonic features as well (usability and aesthetic functionalities that enable exploratory behaviour and flow state), instead of focusing exclusively on utilitarian ones. More than using technology push or market-driven innovation, the banks that leverage on experience are more likely to get a positive market response (Gentile et al., 2007).
- 3 *Provide an integration of customer experiences.* As a process of controlling the transactions and interactions, CEM should keep in mind the different touch points and concentrate on optimising the interfaces within other channels (branch, phone, web, mobile). The internet is not a static platform and both the number of touch points and forms of contact lead to increasing multi-channel possibilities, like integrated telephone or video support in web applications.

12 Limitations and future research

One of the main limitations is the less than optimal statistics for reliability, which is due to the random order of the questions and to the minimum item-per-construct strategy adopted. The model seems not to include all the relevant variables for measuring the consumer experience, like personality traits.

A further advancement of the research would be to replicate the survey to solidly validate the measurement scale and findings. An improved instrument could also be applied in the study of the customer experience while using mobile banking services.

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Appendix 1: Standardised direct, indirect and total effects

Effects	Quality			Flow			Satisfaction			Enjoyment		
	Direct	Ind.	Total	Direct	Ind.	Total	Direct	Ind.	Total	Direct	Ind.	Total
Quality			0.267			0.267	0.625	0.073	0.699	0.454	0.132	0.586
Flow							0.275		0.275	0.493		0.493
Satisfaction												
Enjoyment						0.493			0.586			
Intrinsic motivation	0.394		0.394	0.333	0.105	0.438		0.367	0.367		0.395	0.395

Estimation with RML, $n = 754$.

Appendix 2: Confirmatory factorial analysis and reliability

<i>Dimensions</i>	<i>Variables</i>	<i>Standardised coefficients</i>	<i>t</i>	<i>α</i>	<i>$\rho_{ve(n)}$</i>	<i>ρ</i>	<i>R²</i>
Satisfaction	S1. Internet banking services have fulfilled my expectations (1-strongly disagree to 9-strongly agree)	0.75	16.83	0.72	0.57	0.73	0.416
	S2. Internet banking services provide the operations adequately (1-strongly disagree to 9-strongly agree)	0.76	–				
Flow	F1. My time perception gets inaccurate using internet banking services (1-strongly disagree to 9-strongly agree)	0.65	–				
	F2. Time flies when I'm using internet banking (1-strongly disagree to 9-strongly agree)	0.80	18.11				
	F3. I usually forget my immediate surroundings when using internet banking services (1-strongly disagree to 9-strongly agree)	0.72	16.27	0.79	0.50	0.82	0.169
	F4. The use of internet banking services present a challenge to my internet skills (1-strongly disagree to 9-strongly agree)	0.68	15.78				
	F5. I'm very concentrated when using internet banking (1- strongly disagree to 9-strongly agree)	0.62	14.14				
Enjoyment	E1. Using internet banking is: monotonous (1)/thrilling (9)	0.70	–				
	E2. Using internet banking is: pleasant (1)/melancholic (9) (R)	0.72	17.41	0.78	0.54	0.78	0.412
	E3. <i>Using internet banking is: uninteresting(1)/interesting (9)*</i>	0.21*	1.45*				
	E4. Using internet banking is: dull (1)/fun (9)	0.78	17.98				
Intrinsic motivation	I1. I usually use internet banking services even without a planned purpose (1- strongly disagree to 9-strongly agree)	0.86	10.79				
	I2. I like to use internet banking services even if I don't have any planned action (1-strongly disagree to 9-strongly agree)	0.68	10.68	0.73	0.60	0.75	–
Convenience	C1. The use of internet banking services is time saving (1-strongly disagree to 9-strongly agree)	0.87	6.049				
	C2. Internet banking operations are fast (transactions or information search) (1-not important, 9-very important)	0.61	–	0.69	0.57	0.72	0.315
Security	S1. The banks implement internet security measures that protect its clients (1-strongly disagree to 9-strongly agree)	0.80	–				
	S2. The banks ensure that an information transaction is protected during an internet connection (1-strongly disagree to 9-strongly agree)	0.68	10.881	0.70	0.55	0.71	0.367

Appendix 2: Confirmatory factorial analysis and reliability (continued)

<i>Dimensions</i>	<i>Variables</i>	<i>Standardised coefficients</i>	<i>t</i>	<i>α</i>	<i>$\rho_{ve(n)}$</i>	<i>ρ</i>	<i>R²</i>
Information and content	IC1. The assortment of products and services offered is very important to me (1-strongly disagree to 9-strongly agree)	0.66	–				
	IC2. The past operations were processed according to my expectations (1-strongly disagree to 9-strongly agree)	0.67	12.21	0.72	0.50	0.86	0.928
	IC3. How do you value the website site aesthetics features? (1-unimportant, 9-important)	0.71	11.79				
	IC4. This bank has a good reputation. (1-strongly disagree to 9-strongly agree)	0.73	13.64				
	IC5. The bank's website offers all the relevant information about all products and services (1-strongly disagree to 9-strongly agree)	0.74	13.18				
	IC6. I believe in the information offered by the bank's website (1-strongly disagree to 9-strongly agree)	0.72	14.34				
Personalisation	P1. How do you value the website site self-configuration according to your profile? (1-unimportant, 9-important)	0.68	–	0.68	0.51	0.67	0.146
	P2. How do you value the possibility of self-configuration the bank's website according to your preferences? (1-unimportant, 9-important)	0.73	8.875				

R: Reversed scale.

*Removed from the structural model due to non-significant *t* value.