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# An observation analysis of e-service quality in online banking

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**Abstract** This study focuses on observing customer perceptions of internet banking and e-service quality from a user-based perspective within an Irish context. The study involves an observational study of a purposive sample of 20 consumers based upon their perceptions of the Bank of Ireland website using unstructured and structured observation techniques. Respondents moved from basic to higher order gratifications according to IT experience and internet usage. While information and transaction gratifications were deemed key to online banking, enjoyment gratifications held limited associations, thus emphasising its functional nature. User group categorisations had a direct impact on online behaviour in terms of time spent evaluating in addition to the level of customer pro-activity. The paper highlights the value of the uses and gratifications categorisations system, which provides a key platform to the study of e-service quality and offers e-banking providers a more effective system of serving individual customer e-service needs. Online banking providers can make the process of using e-banking more enjoyable by enhancing website interactivity and creating unique online experiences. Future e-banking penetration and the success of complex financial product adoption will be dependent on proactive online marketing campaigns coupled with increased website responsiveness. This paper adopts a unique perspective by exploring e-service quality from the user-based approach by assessing the uses and gratifications sought by online users, and subsequently examines their impact on effective web design and the e-service dimensions deemed focal to premium usage.

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## INTRODUCTION

Although the study of financial services has received increased attention over the last few

years, it continues to pose challenges for marketers and academics alike. Technological advancements and changing social trends such as heightened customer pro-activity and increased preferences for convenience have caused intense restructuring of the financial services sector. Collectively, these internal and external forces have caused banks to re-evaluate their marketing strategies and

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have subsequently triggered growth in the adoption of self-service banking technologies (SSBTs). SSBTs are automated delivery systems that allow customers to produce a service independent of service employees.<sup>1,2</sup> There has been large-scale adoption of SSBTs such as plastic cards, telephone banking and internet banking within the Irish marketplace over the last few years.<sup>3</sup> Similarly, telebanking is undergoing continuous uptake within the Irish financial services marketplace while internet penetration levels in Ireland stand at 47 per cent,<sup>4</sup> of which internet banking appears to be a continuously growing market.<sup>5</sup> Given the recent substantial growth in these technology-based banking methods within the Irish marketplace, the purpose of this research is to explore and evaluate Irish customers' perceptions of internet banking and to investigate the dimensions of e-banking services from a user-based perspective, which is deemed essential for superior e-service delivery. The research provides key academic and practical contributions to the field through highlighting the value of the uses and gratifications categorisations system as a key framework to the study of e-service quality and identifying its impact for e-banking providers in regard to effective web design and e-service dimensions deemed focal to customer banking needs. The paper makes core recommendations in terms of adding value and optimising current online banking service offerings.

## **THEORETICAL BACKGROUND**

### **e-services and e-service quality**

The conception of 'e-service' emerged upon the growth of the internet. Initially, firms developed an online presence due to the cost reductions that could be gained from automation.<sup>6</sup> Although firms gained efficiencies from selling online (e-commerce), their failure to focus on customers' needs and

wants resulted in poor online service performance. A refocus on customers and the quality of online service heralded the notion of e-service, described as 'content-centred and internet-based customer service, driven by the customer...with the goal of strengthening customer-service provider relationships' (de Ruyter and Wetzels, p. 2).<sup>7</sup> Over the last few years, online providers have benefited substantially from this heightened link with their customers, so much so that practitioners accredit the provision of superior e-service with enhanced customer-firm communications and collaborative product development.<sup>8</sup> Despite the growth of e-services, little research has been conducted regarding what constitutes 'e-service' or, alternatively, the determinants critical to the provision of optimum e-service.

Research regarding e-service quality is still at the early empirical stages.<sup>9-15</sup> e-Service quality is the consumers' overall 'evaluation and judgment of the excellence and quality of e-service offerings' (Santos, p. 235)<sup>16</sup> within the virtual domain. Similar to traditional service quality, e-service quality is multidimensional in nature,<sup>11</sup> insofar as it can mean different things to different people. Online service quality is important to firms as it can result in increased hit rates for websites, high levels of customer retention and stickiness (Santos, p. 233).<sup>16</sup> The provision of optimum service quality within the online context is focal to website success, especially since customers can compare service firms quite easily online and switching costs are low.<sup>12</sup> It is important to note, however, that within the service marketing literature, there remains a lack of consensus regarding the dimensions integral to e-service quality delivery. Oftentimes online studies tend to solely focus on either web usability or the attributes of e-service dimensions, without first of all understanding the uses and gratifications sought by online users. It is for this reason that this paper adopts a somewhat unique perspective by exploring e-service quality from the

user-based approach by assessing the uses and gratifications sought by online users, and subsequently examines their impact on effective web design and the e-service dimensions deemed focal to premium usage.

### Uses and gratification perspective

In general, uses and gratification techniques are utilised to explain audience use and experience of mass media.<sup>17,18</sup> The adoption of the uses and gratifications approach within this research facilitates greater understanding of respondents' behaviours and continued use of online services. Katerattanakul (p. 58)<sup>19</sup> defines an effective or quality website as a 'web site that is designed to be fit for use by web users and consumers'. Katerattanakul's study reviewed various literatures and theoretical foundations such as: consumer information search model<sup>20</sup> information quality framework,<sup>21,22</sup> computer playfulness<sup>23</sup> consumer trust,<sup>24</sup> virtual communities<sup>25</sup> and system quality.<sup>26,27</sup> Katerattanakul's extensive review<sup>19</sup> affords understanding of the online attributes essential to quality website design. Based on the premise of an effective website, Katerattanakul (p. 57)<sup>19</sup> proposes that consumers seek three main gratifications when interacting online: 'information search, transactions and enjoyment', with each gratification influencing specific dimensional aspects of e-service quality.

First, 'information search' consists of four main determinants: ability, motivation, cost and benefit.<sup>21</sup> Ability to search for information refers to the customer's capability of finding information relevant to their needs. Motivation to search for information relates to the customer's level of effort generated in collecting and processing information. The final two determinants refer to the benefits and costs incurred by the customer during the information retrieval process. 'Transaction' gratifications relate to the importance of secure and reliable systems and customer support online. Previous research has shown that customers perceive

price as one of the main motivators for shopping online (Surjadaja and Ghosh, p. 42).<sup>28</sup> Customers mainly use the internet as a means of comparison-shopping and, in a sense, the internet offers the potential of shifting the power from suppliers to buyers.<sup>29</sup> The final gratification, 'enjoyment', highlights the importance of website playfulness and interactivity. The greater the degree of customer-website interactivity, the higher the level of involvement, which in turn influences website loyalty and intention to purchase.<sup>30</sup> The researchers contend that online provider awareness of their target market's uses and gratifications will enhance the firm's competitive appeal. Online providers, who understand their customers' online uses and gratifications, are better able to focus on website dimensions in tune with the target markets needs, thus enhancing the overall e-service offering and subsequently improving website effectiveness, efficiency and e-service quality delivery.

### A financial services perspective

In the services marketing domain, financial services when compared to other types of services are considered unique mainly due to the complexity and noncomparability of financial products and the high degree of risk involved in purchase decision making.<sup>31,32</sup> As an outcome of these traits, it is customary that contact personnel are often seen as the service in the customer's eyes,<sup>33</sup> with the interaction between the bank employee and the customer perceived as important as the product exchanged in the final transaction (Cowles and Crosby, p. 521).<sup>34</sup> Over the past 20 years, the banking sector has undergone significant changes,<sup>35</sup> with a more technologically savvy customer base, software and technology advancements and deregulation collectively changing the role and structure of the financial services sector. The rise in PC ownership and ever-changing customer needs has created a target market that craves convenience, 24/7 accessibility

and variability of services. In response to these developments, banks have reduced the number of branches available as a means of shifting transactions to 'lower-cost electronic channels' (Byers and Lederer, p. 134).<sup>36</sup> Process automation, however, is proving more challenging for complex services such as banking, with constant levels of high service quality performance being difficult to achieve via automated distribution channels such as internet banking. Hence, the continuing automation of the retail financial services sector and the transformation of delivery channels from relatively high-touch, interpersonal-orientated encounters to high-tech interactions justifies this research.

### Irish financial services landscape

The format of the Irish financial services sector and the role banks play within it has undergone severe change due to 'deregulation, competition, technology, financial innovation and economic growth' (Fitzpatrick and Doran, p. 30),<sup>37</sup> evidenced by over 20,000 Irish consumers switching banks in 2005 under the Personal Switching Code.<sup>5</sup> The reformation of the Irish banking sector is mainly driven by factors such as customer convenience, automation as a means of reducing business costs, regulatory need for secure systems and competition from 'nonbank' entrants.<sup>38</sup> Consequently, banks nowadays have to compete for customers they traditionally 'had the luxury of taking for granted' (Ibbotson and Moran, p. 94).<sup>39</sup> The Irish financial services sector is a fitting industry for exploration as it has seen phenomenal growth with the adoption of technology into its distribution systems over the last few years. New technological applications such as 'intelligent agents' (Daniel, p. 72)<sup>29</sup> allow customers to compare products and services online and ultimately avail of the most awarding financial packages (Jayawardhena and Foley, p. 20).<sup>35</sup> Recent statistics from the Irish Bankers Federation<sup>40</sup> show a growth in efficient banking methods

as delivery media become progressively more technologically oriented and the role of cash steadily declines. Thus, the extensive adoption within Ireland of automated financial service delivery systems particularly merits research as there remains a dearth of knowledge and understanding regarding customer attitudes and perceptions of SSBTs and their effect on overall service quality.

### RESEARCH PURPOSE AND METHODOLOGY

This qualitative study of Irish retail banking explored consumers' e-banking uses and gratifications as a means of assessing e-banking service quality dimensions. The research adopted a realist ontological position<sup>41-43</sup> involving an inductive stage with online consumers employing qualitative methods using unstructured observation and a deductive phase focusing on web usability through quantitative methods using structured observation. The utilisation of combined methods enabled the study to explore e-service quality from the user-based approach that is the customer's subjective judgment,<sup>44</sup> by gaining insight into informant's 'actual' rather than 'stated' internet capabilities, thus reducing the 'social desirability effect' (Bryman, p. 134).<sup>43</sup> The inductive qualitative or 'unstructured' approach explored informants' meanings, interpretations and views of e-banking service offerings, and the deductive quantitative or 'structured' approach used an observation schedule to investigate a 'specific set of issues'<sup>43,45</sup> (p. 459) relating to the quality of Ireland's leading financial service provider, Bank of Ireland's website.

The data collection process was divided into inductive and deductive phases, which were preceded by the collection of data on respondent profiles. Initially, respondents were asked to complete a brief 'fact-sheet' regarding general information (age, occupation) and specific information (hours of internet usage per week, information technology experience levels, etc), which

greatly aided respondent profile development (Bryman, p. 324).<sup>43</sup> As a means of reducing respondent anxiety levels, an issue oftentimes associated with observation, during the initial data collection stage respondents were asked a series of questions relating to their general internet usage, previous online experiences/purchases and incidents of poor online service. Once respondents felt more at ease, the observation process commenced in the form of both unstructured (inductive) and structured (deductive) observation research.

### The observation process

In its purest form, observation involves 'collecting data without questioning or communicating with people' (Carson and Gilmore, p. 134).<sup>45</sup> Observational procedures are fitting to services marketing research due to their 'ability to examine service interactions unobtrusively as they occur' (Grove and Fisk, p. 217).<sup>46</sup> For the purpose of gaining optimum insight into respondents' actual perceptions and usage of online services, the researchers utilised structured and unstructured observation. Structured observation is a 'systematic, formal' technique (Grove and Fisk, p. 220),<sup>46</sup> which utilises 'explicitly formulated rules for the observation and recording of behaviour' (Bryman, p. 167),<sup>43</sup> and is oftentimes more quantitative in nature when compared to other observational methods, such as unstructured observation or participant observation.

The inductive, unstructured observation phase involved recording remarks or comments made by respondents regarding the Bank of Ireland website, also taking note of respondents' varying website capabilities. In accordance with qualitative analysis, the unstructured observation data were coded using content analysis in the form of template analysis.<sup>47</sup> The deductive, structured observation sessions involved the utilisation of an observation schedule which consists of a set of rules that have to be adhered to by the

observer.<sup>43</sup> Owing to the exploratory nature of e-service quality and the nonexistence of previous e-service observation guidelines or rules, the researchers constructed an observation schedule based on Katerattanakul's<sup>19</sup> web usability study. Hence, the observation schedule focused on key design attributes essential to individuals' online uses and gratifications, and quality website design. As a result, the observation schedule focused on focal areas such as website organisation and content, relevancy and ease of understanding online information, and navigational efficiency or flow of the website. The structured observation results involved quantitative analysis utilising Likert scales.<sup>43</sup>

### Sampling technique

A purposive sampling technique through the use of a recruitment questionnaire was employed. The recruitment questionnaire assessed characteristics such as respondent demographics (eg sex, age, profession), degree of internet experience and financial product knowledge. This sampling method was particularly useful as only informants who were relevant to the research were sampled,<sup>44</sup> hence enabling a rich comparison of different internet and financial experience levels across the sample. The sample population was split between online banking users and nonusers and was slightly skewed to include a greater number of online banking users than nonusers (14 registered users and six nonusers). The rationale behind recruiting a higher percentage of online banking users was to capture insights into their wider repertoire of e-banking experiences and capabilities. In order to be inclusive, nonbanking users were also included to explore their perceptions of an online banking service that they had never used before. Informants were observed until 'theoretical saturation' was achieved (Bryman, p. 334),<sup>43</sup> which occurred after 20 observation sessions.



**Table 1** Profile of respondents

| Name     | Sex    | Age cohort | Profession               | Income | User of online banking | Years of information technology experience | Hours spent online per week |
|----------|--------|------------|--------------------------|--------|------------------------|--|-----------------------------|
| Kate     | Female | 21–25      | Consultant               | Low    | Yes                    | 5–9  | >26                         |
| Susan    | Female | 21–25      | Tax auditor              | Low    | Yes                    | >10  | 6–10                        |
| Patrick  | Male   | 21–25      | Production operator      | Low    | No                     | 3–4  | 2–5                         |
| Nora     | Female | 21–25      | HR officer               | Low    | Yes                    | >10  | >26                         |
| Jill     | Female | 21–25      | Insurance claims handler | Low    | No                     | >10  | <1                          |
| Sharon   | Female | 21–25      | Primary teacher          | Low    | Yes                    | 3–4  | >26                         |
| David    | Male   | 26–35      | Research student         | Low    | Yes                    | >10  | 6–10                        |
| Liz      | Female | 26–35      | Secondary teacher        | Low    | No                     | <1   | 6–10                        |
| Bridget  | Female | 36–45      | Secretary                | Low    | Yes                    | 1–2  | 2–5                         |
| Marie    | Female | 36–45      | Staff nurse              | Low    | Yes                    | 3–4  | 2–5                         |
| Brendan  | Male   | 46–55      | Porter                   | Low    | Yes                    | 5–9  | 6–10                        |
| Michelle | Female | 56–65      | Library assistant        | Low    | No                     | >10  | 21–25                       |
| Rita     | Female | 36–45      | Nurse manager            | Middle | No                     | 1–2  | 2–5                         |
| Adam     | Male   | 56–65      | Civil servant            | Middle | No                     | >10  | 21–25                       |
| Jane     | Female | 46–55      | Dietitian                | Middle | Yes                    | 5–9  | 2–5                         |
| Hugh     | Male   | 65+        | Retired                  | Middle | Yes                    | >10  | 6–10                        |
| Anita    | Female | 46–55      | Clerical official        | Middle | Yes                    | 5–9  | <1                          |
| Mark     | Male   | 26–35      | Accountant               | Middle | Yes                    | >10  | 2–5                         |
| Lisa     | Female | 26–35      | IT consultant            | High   | Yes                    | 5–9  | 2–5                         |
| Philip   | Male   | 26–35      | Lecturer                 | High   | Yes                    | >10  | >26                         |

As shown in Table 1, the age profile of informants ranged from 21 to 65+ years with the under-21 age cohort disqualified from the sample selection process due to the likelihood of this group having minimal financial requirements. Although there was no upper age limit, a sampling principle required informants to have internet experience, which proved difficult to find among older age profiles. The oldest informant, however, was 70 years and used online banking for all his financial needs. As a purposive sample, the 21–25 and 26–35 age profiles appeared to have greater access to the internet and enhanced internet capabilities, thus signifying a higher likelihood of using online banking. Hence, the sample comprised a greater proportion of 21–25 (30 per cent) and 26–35 (25 per cent) age profiles, with the remaining age profiles 36–45, 46–55 and 56+ each representing 15 per cent of the sample population. Income levels varied from ‘lower’ (<€40,000 per annum) to ‘middle’ (€40,000–€75,000 per annum) to ‘high’ (€76,000 per annum), which were developed from Irish socio-economic figures.<sup>48</sup>

## DISCUSSION OF FINDINGS

### Online experience and internet uses and gratifications

The relative importance of previous online experience and online behaviour in the form of respondents’ online uses and gratifications were explored. The findings were consistent with Katerattanakul’s study,<sup>19</sup> in so far as all three web gratifications (information search, transaction and enjoyment) were highlighted as important to respondents prior to being observed and subsequently throughout the observation sessions. Based on the findings, respondents could be divided into the following gratification groups: (1) ‘basic users’, (2) ‘intermediate users’ and (3) ‘expert users’. The profiles of each respondent are illustrated in Table 1. In Table 2, respondents are categorised into user groups based on the number and scope of gratifications sought online.

As illustrated in Table 2, strong correlations existed in relation to user group categorisations and informants’ IT experience and hours spent online per week. For instance, the basic

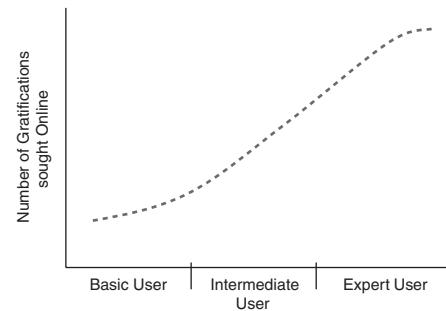
**Table 2** User profiles

| Basic group   | Intermediate group                                  | Expert group                                      |
|---|---|---|
| Marie (age 36–45, 3–4 years, 2–5 hours per week)      | Hugh (age 65+, >10 years, 6–10 hours per week)      | Nora (age 21–25, >10 years, >26 hours per week)   |
| Bridget (age 36–45, 1–2 years, 2–5 hours per week)    | Brendan (age 46–55, 5–9 years, 6–10 hours per week) | Sharon (age 21–25, 3–4 years, >26 hours per week) |
| Rita (age 36–45, 1–2 years, 2–5 hours per week)       | Susan (age 21–25, >10 years, 6–10 hours per week)   | David (age 26–35, >10 years, 6–10 hours per week) |
| Liz (age 26–35, <1 year, 6–10 hours per week)         | Kate (age 21–25, 5–9 years, >26 hours per week)     | Lisa (age 26–35, 5–9 years, 2–5 hours per week)   |
| Michelle (age 56–65, >10 years, 21–25 hours per week) | Mark (age 26–35, >10 years, 2–5 hours per week)     | Philip (age 26–35, >10 Years, >26 hours per week) |
| Adam (age 56–65, >10 years, 21–25 hours per week)     | Jane (age 46–55, 5–9 years, 2–5 hours per week)     | —   |
| Jill (age 21–25, >10 years, <1 hours per week)        | —   | —   |
| Patrick (age 21–25, 3–4 Years, 2–5 hours per week)    | —   | —   |
| Anita (age 46–55, 5–9 years, <1 hours per week)       | —   | —   |

user group consisted of either minimal IT-experienced respondents, low-end internet users or a mixture of the two. It is important to note that even though two respondents belonging to the basic user group had >10 years IT experience and spent between 21 and 25 hours online per week, their inability to undertake online transactions and their use of the internet for mainly information search rendered their usage as basic. The intermediate and expert user groups consisted of more IT-proficient and high-end internet users. Figure 1 conceptualises the categorisation of the three user groups' respective online uses and gratifications with movement from basic to expert usage correlating positively with IT experience and internet usage.

Basic users usually sought detailed, factual information to solve their specific information needs, 'I like straight to the point information' (Rita, age 36–45). In comparison to basic users, intermediate and expert users demonstrated greater information gratifications, and thus had more detailed or specific information quality expectations. For example, one user remarked:

I wouldn't stay online reading all the garble...I go online to gather the



**Figure 1** Breakdown of user groups

information that I personally want in a speedy manner. (Hugh, age 65+, intermediate user)

In the context of online banking, the majority of respondents used it for informational needs such as current account, credit card and direct debit inquiry services.

With regard to online transactions one respondent proficiently captures the characteristics of the basic user group when describing her online purchases as 'standard purchases' (Jill, age 21–25, basic user), such as CDs and books. Instances during which basic users failed to conduct online transactions generally related to limited internet access and/or credit card unavailability. Despite the range of services available, online interviewees

conducted basic banking transactions such as bill payment, credit card payment, transferral of money and the purchase of phone credit. Differences between general e-service and e-banking transaction needs of intermediate and expert users may be related to the perception among respondents that banking was a complex service not wholly suited to automated service provision. It is proposed therefore that over time and with continued customer uptake of e-banking services, financial service products that are currently perceived as 'complex' (such as mortgage and loan applications) may be perceived as more straightforward.

Enjoyment gratifications were also sought online, with examples including respondents playing computer games or searching for information on pastimes such as musical interests or sports like golf. As to be expected, e-banking users did not specifically seek enjoyment gratifications; however, 'enjoyment' in this instance related to website interactivity, heightened through mortgage calculators and the availability of services that increased length of stay online such as exchange rate information and posting comments. The characteristics of financial services were reinforced in the study, highlighted by one respondent's comment, 'everyone needs banking, it's a practical thing' (Sharon, age 21–26). This highlights the functional nature of banking which appeared to hold limited 'enjoyment' associations for consumers.

Overall, respondent uses and gratifications were directly influenced by both professional and personal needs with respondent IT experience and internet usage driving advancement from basic to expert user groups.

### **Perceived service quality of the Bank of Ireland website**

Owing to the confidential nature of banking services (eg customer log in, privacy of customer details, account balances and credit

transfers), it was deemed unsuitable to observe respondents using their e-banking accounts. As a result, an online service, which would be unrelated to respondent's personal banking affairs, was favoured. Hence, the researchers observed respondents using Bank of Ireland's nonmembership website (available to customers and noncustomers) illustrated in Figure 2.

Respondents were allocated 15 min to peruse the Bank of Ireland website. Throughout the unstructured observation sessions respondents talked aloud as they explored the website, during which time their remarks or comments regarding the online service were taken note of. The tabs to the left-hand side of the screen in Figure 2 greatly aided respondents' navigational flow by enabling them to speedily select options most suited to their life stage financial requirements. Figure 3 provides a more detailed overview of some of services available from the Bank of Ireland website. If, for example, a respondent clicked on the personal banking option in Figure 2 they were directed to the website frame in Figure 3.

The findings from the unstructured observation sessions revealed respondent surprise regarding the 'range' of financial services (Hugh, age 65+, intermediate user), and 'options' (David, age 26–35, expert user) available online. The observation sessions revealed correlations between online inquisitiveness and user group categorisations. In general, intermediate and expert users demonstrated greater online search capabilities and exploration of the Bank of Ireland website. Moreover, when compared to basic users, intermediate and expert users exhibited higher click rates between web pages. Intermediate and expert users were also more inclined to scan web pages and click hyperlinks of interest. In comparison, basic users spent more time per web page, generally did not click as many options as the other user groups and also read sections of each web page rather than



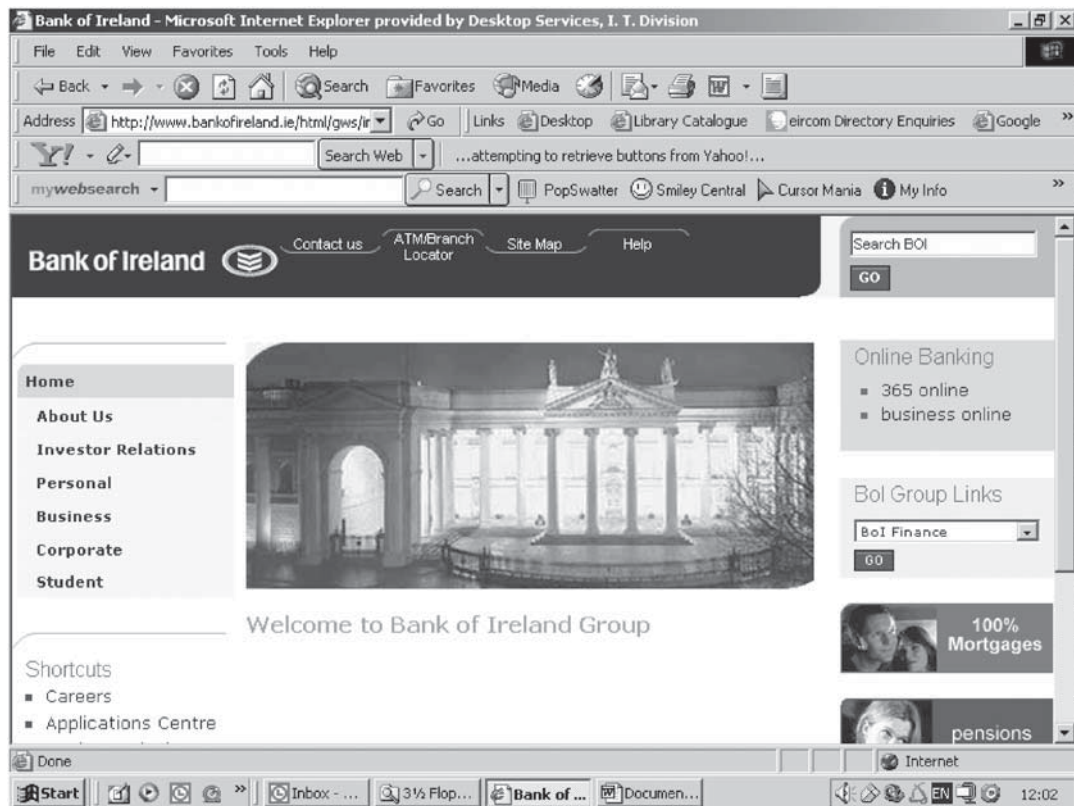


Figure 2 Bank of Ireland's nonmembership site

scanning through the website. Hence, the overall finding from the unstructured observation sessions demonstrated that user group categorisations had an impact on respondent online behaviour with intermediate and expert users exhibiting an increased tendency towards pro-activity, website evaluation and switching between web pages.

As previously discussed, the structured observation schedule was adapted from Katerattanakul's web usability study.<sup>19</sup> Likert scales were used within the observation schedule to ascertain respondents' degree of agreement with a series of design guideline statements. Variant design features, such as the aesthetic appeal, organisation of content and navigational efficiency of the Bank of Ireland website, were assessed within the observation schedule. The various degrees of agreement were assigned 'scale values', (Churchill, p. 393)<sup>49</sup>

ranging from 1 to 5, with strongly disagree ranking 1 and strongly agree ranking 5. It is important to note that reverse scaling scores were assigned to negatively phrased questions, with a strongly agree ranking 1 and strongly disagree ranking 5. Within the observation schedule, consistency in relation to the design guideline statements was essential as a means of ensuring 'internal reliability' (Bryman, p. 71).<sup>43</sup> Respondents generally rated the Likert scale statements consistently, resulting in an overall positive or negative rating of the quality of the Bank of Ireland website (see Appendix A). Table 3 illustrates the results from the structured observation sessions. The structured observation results further reinforce the unstructured observation findings, insofar as respondents positively perceived the Bank of Ireland website as effective or high-quality website. Almost four in five respondents

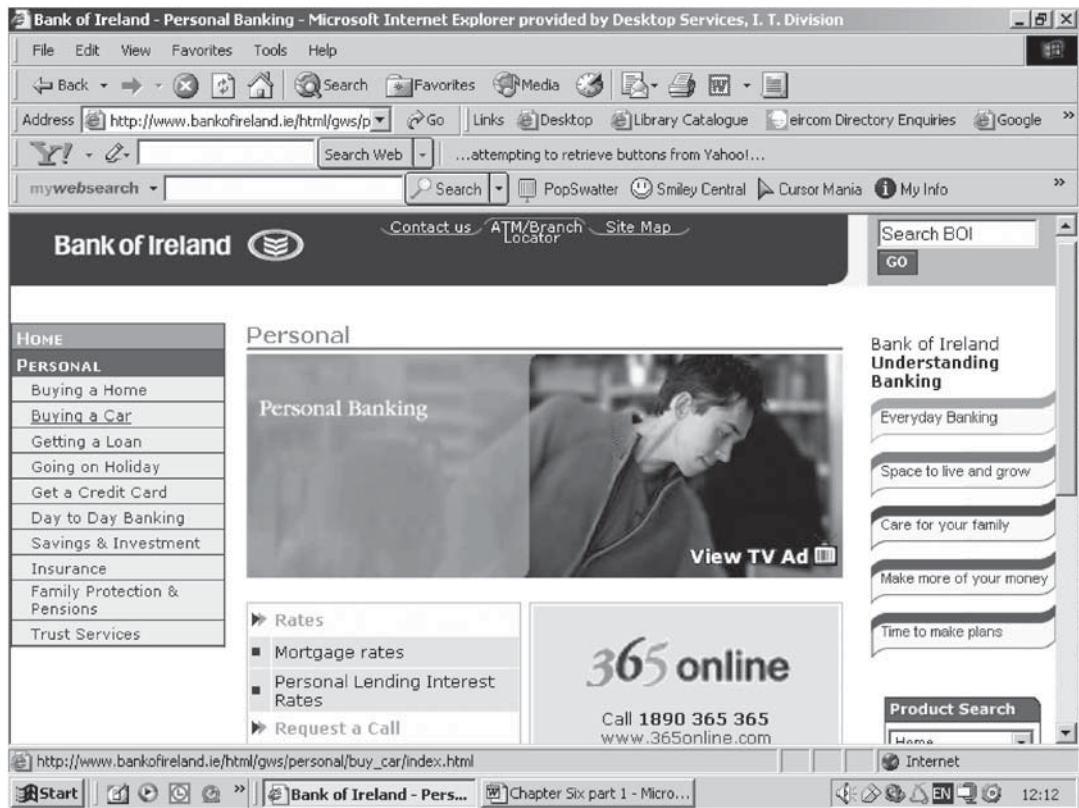


Figure 3 Personal banking packages available from Bank of Ireland

Table 3 Structured observation schedule results

|   | <i>Strongly agree</i> | <i>Agree</i> | <i>Neither agree nor disagree</i> | <i>Disagree</i> | <i>Strongly disagree</i> |
|---|-----------------------|--------------|-----------------------------------|-----------------|--------------------------|
| The Bol website was visually appealing  | —                     | 17           | —                                 | 3               | —                        |
| The Bol websites style of text was unclear and difficult to read              | —                     | —            | 2                                 | 14              | 4                        |
| The Bol websites menu options were easy to understand and straightforward     | 3                     | 17           | —                                 | —               | —                        |
| The Bol websites content was accurate and well organised                      | 2                     | 14           | 3                                 | 1               | —                        |
| Overall the Bol website was not easy to use                                   | —                     | —            | —                                 | 16              | 4                        |
| The language of the financial terms and conditions were clear and easy to use | 2                     | 10           | 7                                 | 1               | —                        |
| Navigating throughout the Bol website was complicated                         | —                     | —            | —                                 | 18              | 2                        |

Note: Bol represents Bank of Ireland

agreed that the website was visually appealing. Similar trends emerged in relation to the website’s content, with 80 per cent of respondents believing the Bank of Ireland website content was accurate and well organised. In the majority of instances, there

were minimal differences among user groups in terms of website quality ratings, with the only exception being 15 per cent (comprising solely of expert users) who disagreed with the statement, ‘the Bank of Ireland website was visually appealing’. This

negative perception of the Bank of Ireland website design among expert users would appear to be directly due to their experience of using the internet and range of website comparisons, rendering them more critical of the Bank of Ireland website, thus further reinforcing the importance of user group categorisations.

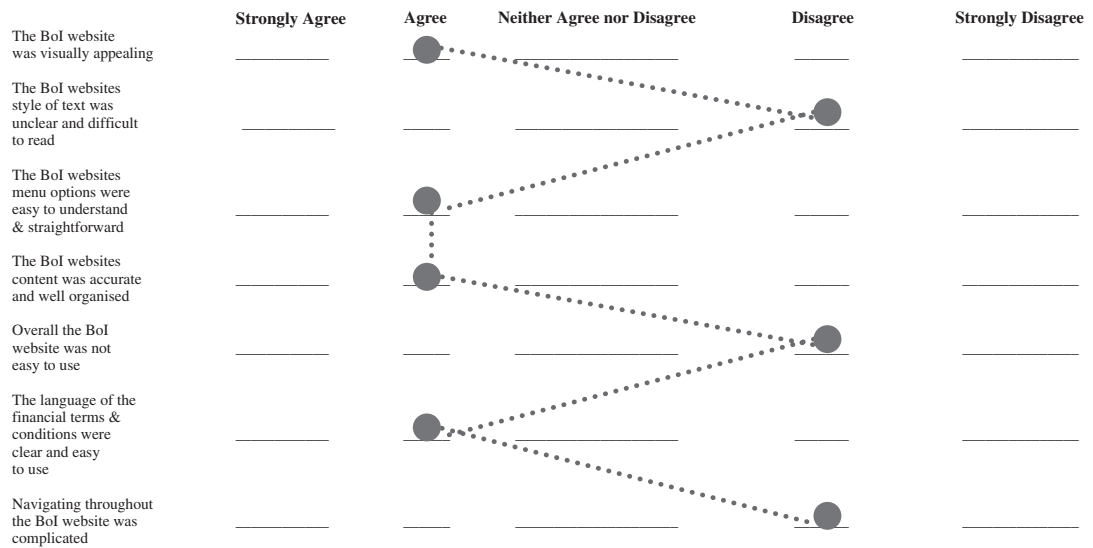
In line with these results and reflecting the internal reliability of the observational schedule, there was full agreement that the banking website had easy to understand and straightforward menu options. Respondents showed undisputed disagreement with regard to the negatively phrased Likert statements, thus confirming the clarity and navigational efficiency of the Bank of Ireland website. It is worth noting, however, that although respondents generally agreed that the financial terms and conditions on the Bank of Ireland website were clear and easy to understand, seven respondents neither agreed nor disagreed with this statement. Respondents' indecisiveness or uncertainty regarding their comprehension of the financial terms and conditions on the Bank of Ireland website indicates that this may be an area for future improvement.

The structured observation schedule consisted of seven design guideline statements. Based on this, the maximum score per guideline statement equalled to 5, the total score or highest possible e-service quality rating therefore of the Bank of Ireland nonmembership website equalled to 35 (7×5). The mid-point score equalled to 17.5, reflecting that scores below 17.5 were perceived as poor quality and scores above 17.5 were perceived as high quality. Table 4 provides an overview of each respondent's total score (sum of each respondent's individual scores for each statement within the observation schedule). Respondents' quality perceptions, that is, whether they favourably or unfavourably perceived the Bank of Ireland website, were based on a comparison standard between respondents individual scores and the mid-point score (17.5).

**Table 4** Interviewee ratings of the Bank of Ireland nonmembership website

| <i>Respondent</i> | <i>Likert scale score</i>   | <i>User type</i> |
|-------------------|-----------------------------|------------------|
| Bridget           | 34                          | Basic            |
| Patrick           | 31                          | Basic            |
| Hugh              | 29                          | Intermediate     |
| Anita             | 28                          | Basic            |
| Liz               | 28                          | Basic            |
| Sharon            | 28                          | Expert           |
| Marie             | 28                          | Basic            |
| Brendan           | 28                          | Intermediate     |
| Rita              | 28                          | Basic            |
| Mark              | 28                          | Intermediate     |
| Nora              | 27                          | Expert           |
| Jill              | 27                          | Basic            |
| Michelle          | 27                          | Basic            |
| Adam              | 27                          | Basic            |
| Jane              | 27                          | Intermediate     |
| Lisa              | 27                          | Expert           |
| Philip            | 27                          | Expert           |
| Susan             | 26                          | Intermediate     |
| David             | 26                          | Expert           |
| Kate              | 24                          | Intermediate     |
| Total score       | 555                         |                  |
| Average score     | 555/20=27.75<br>(out of 35) |                  |

The Likert scale scores show that, overall, respondents perceived the nonmembership Bank of Ireland website as a high-quality website. This view is further strengthened by the statistic that the overall sample population average or 'norm' score<sup>49</sup> was 28/35, significantly higher than the mid-point rating 17.5 (see Table 4). The scores in Table 4 are substantially high with 85 per cent of respondents rating the nonmembership Bank of Ireland website as 27 or over, a statistic that strongly reinforces the perspective that the website was of premium quality. The results show that correlations appear to exist between website evaluations and user group categorisations, with the top two scores, 34/35 and 31/35, evaluated by basic users. The incidence of higher quality ratings among basic users relates to their minimal experience of using e-services, and thus the undeniable wow factor that the nonmembership Bank of Ireland website posed for them. Accordingly, intermediate and expert users, although perceiving the



**Figure 4** e-Banking service quality evaluations

Bank of Ireland website as a premium online provider, were more likely to critique the website and assign lower scores in their respective web evaluations, with, for example, the highest intermediate score rating being 29/35, with the highest expert rating being 27/35. Although these scores are within the quality website rating range (greater than 17.5), due to their online experience, intermediate and expert users' expectations in terms of website design features and enjoyment are higher.

In order to conceptualise respondents' rating of the Likert scale statements within the observation schedule, the findings used a 'snake diagram', which is generally used within the semantic differential method<sup>50</sup> (p. 384). The semantic differential method is a self-report technique for attitude measurement. In the semantic differential method participants are asked to 'check which cell between a set of bipolar adjectives or phrases best describes their feelings towards an object' (Churchill and Iacobucci, p. 981).<sup>50</sup> The snake diagram in Figure 4 conceptualises the observation schedule findings and illustrates conclusively that respondents favourably perceived the

nonmembership Bank of Ireland website as an effective and, thus, a quality website.

## CONCLUSIONS

A large body of e-service quality research to-date focuses on determining the dimensions salient to e-service quality delivery without first of all taking note of customers' online uses and gratifications.<sup>51-54</sup>

The research unveiled the importance of gratifications as a means of gaining insight into customers' online behaviour, e-service perceptions and continued use of e-services. The research revealed that uses and gratifications are directly influenced by both professional and personal/financial needs with advancement through the user groups, from basic to expert generally correlating positively with respondent IT experience and internet usage. Although current website analysis tools such as tracking devices are informative regarding clicks per web page and time spent browsing, they lack richness regarding customers' actual online behaviour. As internet uptake and usage continues to rise, the researchers recommend that further study into internet uses and gratifications will be a

natural step towards more effectively satisfying customers' e-service expectations. In conclusion, the uses and gratification categorisation system provides a more informed platform for the study of e-service quality as it explores customers actual online uses and their ability to ascertain higher-order outcomes from e-services. In the context of e-banking, the evolving nature of customer perceptions may represent prospects for banks in future years as they endeavour to sell more complex financial service products online. Consequently, both e-banking and general e-service providers can adopt the user group categorisation system as a means of more effectively serving customers based on their individual e-service needs, thus facilitating greater insight into the e-service quality evaluation process.

The observation schedule, which was adapted from Katerattanakul's web usability study,<sup>21</sup> proved an effective means of evaluating e-banking service quality. The strength of the proposed observation schedule arose from its exploration of a cross-section of online attributes adapted from Katerattanakul's design guidelines: organisation of website content, accurate and relevant information, navigational efficiency, control of the system relating to attention focus and aesthetic appeal. The findings showed that e-banking customers currently seek two gratifications, namely information search and transactions with enjoyment gratifications not featuring in e-banking customers' gratification set. Owing to the fiduciary role of banks,<sup>55</sup> enjoyment does not factor into customers' expectation set because ultimately customers perceive banking as a functional service that has to be undertaken. As customers predominately adopt a transactional approach to banking, further fuelled nowadays by SSBT adoption, enjoyment gratifications are not actively sought by e-banking customers. The research contends, however, that since customers also use a multitude of nonfinancial service websites they have a broad repertoire of

e-service expectations to draw upon prior to e-banking use. Thus, online banks need to continuously update their online service offerings to ensure that their e-service bundles are in line with mainstream e-services, like social networking or commercial websites. Owing to the comprehensive nature of the proposed observation schedule, it can be concluded that financial service managers have an effective means of evaluating the quality of their e-banking websites. Academic researchers and web providers alike need to primarily focus on customer online uses and gratifications, conceptualised as the 'why they use [the web] factor', which subsequently will provide a clearer understanding of the dimensions integral to online success, otherwise known as the 'how to deliver factor'. Hence, successful e-banking service delivery is largely dependent on making the actual process of using e-banking more enjoyable by enhancing website interactivity and creating a unique online experience for the e-banking customer.

The unstructured observation findings revealed that respondents were generally surprised regarding the range of banking services and financial products available online. Evidently, respondents generally had a standard or basic set of e-banking expectations, which were based largely on traditional classifications of financial services.<sup>31,32,55</sup> Based on the structured observation findings, respondents perceived the Bank of Ireland website as high quality. Future e-banking success and heightened penetration rates will largely depend on changing customers' inert attitudes towards financial services. The research contends that through proactive online marketing campaigns, banks may heighten customer awareness regarding the range of financial services available. The research maintains that increased e-banking consumption largely depends on the development of website responsiveness, as complex financial service offerings are at this time not entirely suited



to automated service provision. In conclusion, the future of e-banking success depends on financial service managers' assessment of the suitability of their product portfolios to e-service provision.

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## Appendix A

### Structured Observation Schedule

Based on your online session using Bank of Ireland's website could you answer the following by stating the extent to which you strongly agree/agree/neither agree nor disagree/disagree/strongly disagree to these statements.

|  | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
|--|----------------|-------|----------------------------|----------|-------------------|
| The Bol website was visually appealing   | 1              | 2     | 3                          | 4        | 5                 |
| The Bol websites style of text was unclear and difficult to read                     | 1              | 2     | 3                          | 4        | 5                 |
| The Bol websites menu options were easy to understand and straightforward            | 1              | 2     | 3                          | 4        | 5                 |
| The Bol websites content was accurate and well organised                             | 1              | 2     | 3                          | 4        | 5                 |
| Overall the Bol website was not easy to use  | 1              | 2     | 3                          | 4        | 5                 |
| The language of the financial terms and conditions were clear and easy to understand | 1              | 2     | 3                          | 4        | 5                 |
| Navigating throughout the Bol website was complicated                                | 1              | 2     | 3                          | 4        | 5                 |

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