Full Length Research Paper

Reflecting on Information and Communication Technology (ICT) in marketing from a marketer’s and student perspective

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Information Communication Technology (ICT) has fundamentally changed the way in which global business is conducted. Of all the organisational functions, marketing has possibly been impacted the most by the emergence of ICT, as the array of available digital media presents a plethora of new ways in which goods and services could be marketed. Despite an increased emphasis on ICT deployment since the 1990s, marketers have struggled to fully embrace the integration of ICT in marketing. With this in mind, this investigation aimed to ascertain the extent to which ICT in marketing is embraced by marketers and the extent to which marketing students on a tertiary level are exposed to ICT in marketing, as part of their curriculum. The findings show that marketers are in a transition phase where ICT in marketing are increasingly used in conjunction with traditional marketing methods. It also highlights that marketing students need more specific exposure to ICT in marketing as part of their curriculum.

Key words: Information and Communication Technology (ICT) in marketing, marketers, marketing students.

INTRODUCTION

The technological innovation that characterised the late 20th century has led to significant development in a variety of new technologies – notably in the fields of biotechnology, new materials and product development, and computer and communications technology (Wange, 2007). Computer and communications technology, especially, has been subjected to great advancement in the past twenty years. The application and use of Information Technology (IT) has evolved to include various forms of microelectronic and telecommunications tools such as laptops and computers, the Internet (via optical fibres and wireless connections), mobile technology, iPads, digital television, palmtops, iPods and digital cameras/videos (Freeman and Hasnaoui, 2010). Furthermore, ICT is central to the acquisition, analysis, storage, retrieval, manipulation, management, control, movement, display, and transmission of data and information (Boritz, 2000).

These developments have indeed shaped the world into a global village, enabling communication and interaction irrespective of time and space. ICT has opened the world of marketing, giving marketers an array of new and innovative ways in which they can communicate with their customers. Acknowledging the importance of ICT in marketing has been highlighted by the Canadian Marketing Association as one of the seven key issues that marketers are facing currently (Gustavson, 2006). The 1990s were characterised by a burst of new technologies including the Internet and the World Wide Web (www) (Schultz and Patti, 2009: 76). Digitalisation brought along a large number of additional communication devices, products and services. First, fax machines and computers, then mobile phones, iPods, iPads, Blackberries, social networks, and the like.

While nearly all sectors and industries have been

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greatly affected by advancements in technology, marketing has been most profoundly influenced by the development of ICT. It is thus imperative that marketing students, as the next generation of marketers, have sound operational knowledge of ICT to be able to properly position their organisations in the digital world (Lamont and Friedman, 2001). Since research (Mairead et al., 2008; Oshunloye, 2009; Zehrer and Grabmüller, 2012) indicates that marketers struggle to fully integrate ICT into their marketing strategies, this investigation aimed to ascertain the extent to which marketing professionals utilise ICT and, by means of a case study, ascertain as to whether students at the Central University of Technology, Free State (CUT), are exposed to the various forms of ICT in marketing.

Research studies that focus on the integration of ICT in marketing are not abundant and most of them focus on the Internet as medium (Nothnagel, 2006; Oshunloye, 2009). Other studies include Brady et al. (2002, 2008) who investigated the integration of ICT into marketing practice and the role of ICT in contemporary marketing practice, respectively. In addition, Dye and Venter (2008) studied the rethinking of marketing curricula in the Internet age. There are also numerous studies that focus on ICT and its application in the tourism and hospitality industry (Qirici et al., 2011; Šeric and Gil-Saura 2012; Zehrer and Grabmüller, 2012; Burgess et al., 2011).

The contributory value of the current investigation lies in assessing the extent to which marketers use ICT in their marketing endeavours and whether students at the CUT, as a case study, are adequately exposed to ICT as part of their marketing course. The study was conducted in Bloemfontein, South Africa. The nature of the research problem necessitated a twofold approach and the study comprised both a qualitative and a quantitative research design. The qualitative section entailed semi-structured interviews with marketers in the Bloemfontein area, and the quantitative section involved administering a structured questionnaire to senior marketing students at the CUT.

The CUT is one of six so-called Universities of Technology (UoTs) in the South African context. The teaching and research aims of UoTs are distinct from that of other universities, as UoTs have a focus on providing and industry with applicable workplace skills and innovation-oriented, applied research (Moraka and Hay, 2009). UoTs must therefore be attuned to the needs and requirements of business and industry.

EXPLAINING ICT IN MARKETING

ICT is a composite term that embodies three important concepts, namely “information”, “communication” and “technology”. “Information” in a scientific context can be regarded as processed data that is obtained from, for example, business accounts and invoices. Information is an essential component of decision making and affects the management of knowledge in the organisational context. Though abstract, information can also be visualised as a commodity which can be bought or sold (Womboh and Abba, 2008). Furthermore, it can be defined as any communication or representation of knowledge such as facts or opinions in textual, numerical, graphic, cartographic, narrative or audio-visual forms.

“Communication” refers to the transfer or exchange of information from person to person or from one place to another. Communication is an integral part of human existence and implies the transfer of information, ideas, thoughts and messages (Womboh and Abba, 2008). “Technology” points to the use of scientific knowledge to facilitate the invention of tools that assist human beings in their efforts to overcome environmental hazards and impediments to comfort. In this regard, technology could refer to aspects such as computers, telephones (land lines), mobile phones, television, radio, and the like (Nchaka, 2009).

Tinio (2002) defines ICT as a set of technological tools or devices used by individuals to communicate, create, disseminate, store and manage information. Digital technology reflects hardware and software products, communication tools and products and/or services used to transmit information (Onunga and Shah, 2005; Pernia, 2008). This corresponds with the definition of Herselman and Britton (2002), who refers to ICT as comprising computers, software, networks, satellite links and related systems which allow people to access, analyse, create, exchange and use data, information and knowledge. On the other hand, ICT in marketing is described by Requena et al. (2007) as a tool that allows the development of strategies of differentiation based on product innovation, while Reinecke et al. (2009) define ICT as the application of technological tools and/or devices to differentiate products and services in an attempt to create value for customers.

ICT-RELATED MARKETING COMMUNICATION CHANNELS

Marketing involves a variety of activities to attract potential customers and aims, first and foremost, to generate interest in the products and services, and to stimulate repeat business. The digitally advanced and competitive environment in which modern organisations operate necessitates an ICT-integrated marketing approach, where new possibilities for the promotion of products and services could be exploited and where marketers can create stronger brand loyalties to ensure a sustainable competitive advantage for their organisations (Smith and ZeZook, 2011).

It should be emphasised that, although ICT opens up new markets and possibilities, the traditional forms of marketing is not diminishing in their importance (Winer,
Radio is experiencing a resurgence with the advent of satellite and digital formats. Outdoor advertising is becoming more creative and, while newspapers and magazines have been negatively affected by ICT, they are still prominent marketing channels. Although this study focuses on ICT in marketing, traditional forms of marketing will inevitably form part of the discussion.

The Internet and the digitalisation of information have, together with the spread of the use of ICT devices, created the context of E-marketing. E-marketing has a broader meaning, as it includes not only digital media such as web, E-mail and wireless media, but also the management of digital customer data and electronic customer relationship management systems (E-CRM systems) (Cleofhas and Gibson, 2009). Within the broader E-marketing domain, this section aims to explain the main ICT-related marketing communication channels that should be considered in the overall design of an organisation’s strategic marketing strategy. These channels include Internet marketing, social media marketing, digital marketing, mobile marketing and direct marketing.

**Internet marketing**

The Internet is often described as an engine of globalisation which knocks down borders and imposes market democracy on every nation. Indeed, the Internet has become integrated into the practices of businesses, governments and social movements and has changed the way modern individuals live and work. Hence, the Internet could be a powerful marketing tool if exploited by organisations (Yannopoulos, 2011). Besides being a new platform for buying and selling, the Internet has emerged as a new intermediary for companies to promote their businesses. Because of its characteristics and the high numbers of users, the Internet has become as powerful as traditional communication channels such as television, magazines and radio (Efendioğlu and Igna, 2011).

The Internet enables Internet marketing, which aims to create, communicate and deliver value to customers. Internet marketing is defined as the process of building and maintaining customer relationships through online activities in order to facilitate the exchange of ideas, products and services that satisfy customer needs. Internet marketing can also be described as the process of using the Internet to achieve marketing objectives and to support the entire marketing process (Ngai, 2003). It is imperative that organisations have a user-friendly website in conjunction with online promotional techniques such as search engines, banner advertising, E-mails and direct links from own and other websites (Chaffey et al., 2006).

**Social media marketing**

The rise of social media is rapidly changing the way in which organisations operate and communicate. According to Smith and ZeZook (2011), social media fulfils the fundamental human need of communication, and the emergence of social media could be regarded as the biggest development since the Industrial Revolution. Of all the different types of E-media, social media networking sites such as Facebook, MySpace, Twitter and YouTube have generated the most publicity. The term “social media” is the new buzz word in the communication and marketing industry. Tuomela (2010) asserts that social networking sites function by providing the platform for communication between the users. Consequently, social media marketing has grown in popularity and importance, for instance Facebook, a social networking site, which has enticed a wide variety of businesses to set up business profiles (Lewis, 2010).

**Digital marketing**

Urban (2004) suggests that digital marketing may use the Internet and IT to extend and improve traditional marketing functions. Digital marketing is defined as the practice of promoting products and services using digital distribution channels to reach consumers in a timely, relevant, personal and cost-effective manner (Merisavo, 2008). According to Chester and Montgomery (2008), venture capitalists are increasingly investing in the following three types of digital marketing, namely social networks (such as Facebook, Twitter and MySpace), mobile technology (such as Blackberry and iPhones) and online videos (such as YouTube). Other forms of digital marketing include podcasting, blogging, banner ads and video streams.

**Mobile marketing**

Mobile technology has catalysed information science on a mobile level, changing the pace of communication since the 1990s. The evolution from desktop to mobile communication is a key paradigm shift that has emerged prominently in the last decade. Twenty years ago mobile was not a viable marketing technique. Today, mobile marketing can now move beyond mobile messaging to mobile E-mail and searching the Internet, which means that more potential marketing
channels are opened to marketers (Bush, 2010). One critical factor that should be considered in mobile marketing is that the content must be relevant, informative and entertaining. Mobile channels are generally perceived to be more personal than traditional marketing channels (Heinonen and Strandvik, 2003), and meeting the needs of the target audience should be a main priority (Vatanparast and Butt, 2010).

Direct marketing

Direct marketing originated from mail-order services almost two centuries ago. This is in contrast to the claim that direct marketing is a new discipline (Tapp, 2008). In the last two decades, direct marketing has seen an enormous expansion, making it the fastest-growing marketing discipline worldwide. This is mainly because of the great benefits it offers to both buyers and sellers (Kotler and Armstrong, 2008). For buyers, direct marketing offers customers access to a wealth of individually designed products anywhere in the world. For sellers, it offers a lower-cost, rapid and efficient alternative for reaching their markets. According to Flici (2011), direct marketing is increasingly becoming part of key thinking regarding the development of strategic marketing strategies and the development of sustainable customer relationships.

This method targets specific customers with personalised advertising and promotional campaigns in order to increase higher returns on investments. Direct marketing is an interactive system that uses a variety of media to convey the marketing message. It applies marketing approaches that target specific individuals or groups of individuals by using both traditional and digital marketing methods such as mobile technology, E-mail (or spam), door-to-door selling, automated dialling machines and, more recently, automated SMS (Short Messaging Services) messages. Direct marketing is also used by charities (to secure donations), political parties and other social and welfare groups. Information obtained from marketing lists, public information (such as phone books or public registers) or information based on previous transactions supplies the sources that direct marketers use (Flici, 2011).

To summarise, the various forms of ICT in marketing should be considered when organisations contemplate their strategic marketing plans. The various ICT-based marketing methods should not be used in isolation, but should form part of the integrated approach where management considers the impact of the various types of channels on the overall marketing efforts of the organisation (Cleothas and Gibson, 2009). In the context of contemporary business it is imperative that all organisations employ at least some form of ICT-based marketing communication as part of their overall marketing strategy. As consumers become more technologically inclined the prominence of ICT in marketing is likely to increase, leaving those behind who did not consider its prominence.

METHODOLOGY

The research problem emanated from the reported low levels of integration of ICT in marketing (Mairead et al., 2008; Oshunloye, 2009; Zehrer and Grabmüller, 2012). In addressing the problem, the investigation aimed to ascertain the extent to which marketers use ICT as part of their marketing endeavours and whether students at the CUT are adequately exposed to ICT in marketing as part of their curriculum. Both qualitative and quantitative research methodologies were applied in this investigation. The qualitative section involved semi-structured interviews that were conducted with marketers in the Bloemfontein area, and the quantitative section entailed administering a structured questionnaire to third- and fourth-year students at CUT.

The qualitative section

Qualitative research has its roots in social science and is more concerned with understanding human behaviour and the attitudes and beliefs of individuals. Salkind (2009) explains the primary goal of qualitative research as describing and understanding, as opposed to merely explaining, social action. The method of data collection applied to the qualitative section of the study was semi-structured interviews. Miller and Brewer (2003) assert that interviews are conversations with a purpose to collect detailed information about a specific topic or research question. These conversations do not just happen by chance, rather they are deliberately set up and follow certain rules and procedures.

Data were gathered from marketers about how and what type of ICT they apply in their work environment. The design of the semi-structured interview schedule was based on the themes which were identified in the literature and a similar interview schedule developed by Oshunloye (2009). For purposes of this investigation, snowball sampling was employed in selecting individuals for the interview. According to de Vos et al. (2005), snowball sampling is particularly useful in gaining access to individuals who are hard to reach. Marketers operate in numerous industries and positions, and the researcher used a few members from the target population to locate others. This process continued until a saturation point was reached.

Although a pilot study for qualitative research is less statistically correct, it should nevertheless be conducted (de Vos et al., 2005), as it enables the researcher to test the nature of the questions and to make rectifications where necessary. The interview schedule was piloted using one respondent, and the outcome indicated that all questions were clear and understandable. Interviews of about 15 min were scheduled with respondents. The researcher recorded all interviews and, after each interview, made notes on the general impression of the interview (Leedy and Ormrod, 2010). Any other open-ended discussions were also reflected upon after each interview. After the completion of each interview, the researcher consolidated the various responses and extracted the main themes that were identified by interviewees. Eight interviews were conducted. After the eighth interview, recurring responses were recorded, meaning the saturation point had been reached and no further interviews were deemed necessary.

The quantitative section

The quantitative section of the study consisted of a structured questionnaire that was administered to third- and fourth-year CUT
students. Third- and fourth-year students were deliberately selected, as they have not only been exposed to marketing literature, but they have also participated in a service learning programme and completed a Work-Integrated Learning (WIL) module. Service learning is a pedagogical practice that integrates service and academic learning to promote increased understanding of course content, while helping students develop knowledge, skills and capacities to deal effectively with problems (Hurd, 2006). WIL is used as an umbrella term to describe curricular, pedagogic and assessment practices across a range of academic disciplines, as students are exposed to working in business and industry (CHE, 2010).

The population consisted of 117 individuals of which 67 were third-year and 50 were fourth-year students. The data collection tool employed in the quantitative section of the study was a structured questionnaire. One of the advantages of questionnaires is that they provide data amenable to quantification (de Vos et al., 2005). The primary purpose of the questionnaires was to gather and measure students’ responses about their exposure to and application of ICT within the marketing programme. Moreover, the questionnaire enabled the capturing of responses about students’ knowledge of ICT in the marketing field as well as their level of interaction with the various forms of ICT.

The questionnaire was based on constructs which were identified in the literature, and consisted of three sections: Section A captured the demographic data (gender, race and qualification enrolled for). Section B captured students’ ICT access, usage and knowledge of ICT, which included how long respondents have been exposed to using computers and how many hours per week they use computers, where they have access to computers and how proficient they are with the various applications. It also captured respondents’ knowledge of the various forms of traditional and E-marketing methods and whether they have been practically exposed to using these methods. Section C captured respondents’ perceptions towards ICT.

Questionnaires were distributed to the marketing students during class time and were collected by the researchers. Of the 117 questionnaires distributed, 67 questionnaires were returned (N=67), yielding a response rate of 57%. Before the main study commenced, the questionnaire was piloted to five tourism and hospitality marketing students to ensure that it was clear and understandable to students. The pilot study confirmed that the questionnaire was clear and that it needed no further refinement.

### DATA ANALYSIS AND RESULTS

#### Analysing the qualitative results

The marketers interviewed were from a variety of industries (namely the hospitality industry, banking, telecommunications, pharmaceutical wholesalers and optical retailers) and were mostly marketing managers. The qualitative analysis of the findings showed that ICT in marketing is an important consideration for interviewees and that Internet marketing is pervasively used by those interviewed, followed by SMS, pamphlets and catalogues. It emerged from the interviews that an enormous amount of traditional marketing is still being utilised. Respondents further indicated that online visibility is crucial, especially having a user-friendly website and interacting on social media sites. Facebook and Twitter were indicated as prominent marketing tools used by respondents.

#### Section A: Demographics

The gender and racial profile of respondents are displayed in Table 1. The majority of the respondents were female and African.

A total of 40.30% of respondents were enrolled for the National Diploma in Marketing and 59.70% were enrolled for Baccalaureus Technologiae in Marketing.

#### Section B: ICT access, usage and knowledge

As computer literacy is imperative for accessing the various other forms of ICT, Graph 1 indicates how long respondents have been exposed to using computers.

Graph 1 shows that the majority of students have been using computers for three or more years. Graph 2 indicates how many hours per week respondents use computers.

Graph 2 shows that the majority of respondents use computers two to four hours per week. The majority of respondents were exposed to computers while in secondary school and have access to computers at the university and/or at home. The majority of respondents were acquainted with MS Word, MS Excel, MS PowerPoint and with using the Internet.

Table 2 indicates respondents’ knowledge of the various forms of traditional and E-marketing methods and whether they have been practically exposed to using these methods.

It is clear from the responses captured in Table 2 that most respondents regard telephones (land lines and/or mobile phones) as the most effective method of marketing. This is followed by newspapers, Facebook, television, E-mail and SMS. The ‘have used it and is most effective’ column yielded low responses, apart from responses pertaining to Facebook and SMS. There is also a large number of missing values.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>29</td>
<td>43</td>
</tr>
<tr>
<td>Female</td>
<td>38</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
<td>100</td>
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<table>
<thead>
<tr>
<th>Race</th>
<th>Count</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>African</td>
<td>62</td>
<td>92.54</td>
</tr>
<tr>
<td>Coloured</td>
<td>2</td>
<td>2.99</td>
</tr>
<tr>
<td>White</td>
<td>3</td>
<td>4.47</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1. Gender and racial profile of respondents.
Table 2. Respondents' knowledge of the application of traditional and ICT marketing.

<table>
<thead>
<tr>
<th>Internet, social media and other digital marketing</th>
<th>Most effective (%)</th>
<th>Have knowledge of using it (%)</th>
<th>Have used it and is most effective (%)</th>
<th>Missing values (%)</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television</td>
<td>29.85</td>
<td>2.99</td>
<td>-</td>
<td>67.16</td>
<td>100</td>
</tr>
<tr>
<td>Radio</td>
<td>17.91</td>
<td>5.97</td>
<td>4.48</td>
<td>71.64</td>
<td>100</td>
</tr>
<tr>
<td>Facebook</td>
<td>29.85</td>
<td>11.94</td>
<td>25.37</td>
<td>32.84</td>
<td>100</td>
</tr>
<tr>
<td>Twitter</td>
<td>7.46</td>
<td>4.48</td>
<td>-</td>
<td>88.06</td>
<td>100</td>
</tr>
<tr>
<td>MXit</td>
<td>5.97</td>
<td>8.96</td>
<td>1.49</td>
<td>83.58</td>
<td>100</td>
</tr>
<tr>
<td>Blogs</td>
<td>5.97</td>
<td>-</td>
<td>-</td>
<td>94.03</td>
<td>100</td>
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<table>
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<tr>
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<td>Newspaper</td>
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<td>7.46</td>
<td>2.99</td>
<td>58.21</td>
<td>100</td>
</tr>
<tr>
<td>E-mail</td>
<td>25.37</td>
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<td>7.46</td>
<td>55.23</td>
<td>100</td>
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<tr>
<td>SMS</td>
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<td>14.93</td>
<td>10.45</td>
<td>47.76</td>
<td>100</td>
</tr>
<tr>
<td>MMS</td>
<td>2.99</td>
<td>2.99</td>
<td>-</td>
<td>94.02</td>
<td>100</td>
</tr>
<tr>
<td>Mobile phone</td>
<td>19.40</td>
<td>10.45</td>
<td>7.46</td>
<td>62.69</td>
<td>100</td>
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<table>
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<tbody>
<tr>
<td>Mail/Post</td>
<td>16.42</td>
<td>14.93</td>
<td>1.49</td>
<td>67.16</td>
<td>100</td>
</tr>
<tr>
<td>Telephone – land line and mobile phone</td>
<td>40.30</td>
<td>19.40</td>
<td>8.96</td>
<td>31.34</td>
<td>100</td>
</tr>
<tr>
<td>SMS</td>
<td>10.45</td>
<td>25.37</td>
<td>11.94</td>
<td>52.24</td>
<td>100</td>
</tr>
</tbody>
</table>

**Section C: Respondents’ perceptions of ICT**

In Section C respondents had to indicate whether they agree with statements on a four-point Likert scale. Cronbach’s alpha coefficient test for reliability was performed on this question and yielded a score of 0.656793, which is close to the acceptable level of 0.7. The responses are captured in Table 3.

It is apparent from the responses captured in Table 3 that most respondents feel that computers enhance the quality of their assignments (Question 3.1) and that ICT makes the marketing course more interesting (Question 3.2). A total of 55.22% of respondents indicated that ICT can be helpful in group studies (Question 3.3), and 49.25% agreed and strongly agreed that ICT creates an interactive relationship between students and lecturers (Question 3.4). A total of 40.29% of respondents indicated that using ICT does not make classes more time consuming or learning more laborious (Questions 3.5 and 3.11). The majority of respondents agreed and strongly agreed that it is easy to obtain information via ICT (Question 3.6). Respondents also indicated that computers provide new learning experiences (Question 3.8) and that ICT improves note taking (Question 3.10).

**FURTHER INTERPRETATION OF THE QUANTITATIVE RESEARCH RESULTS**

Pearson’s chi-square test (with a significance level of 0.05) was used to ascertain the correlation between how long students have been using computers and the qualification they are enrolled for. This yielded the following: Pearson’s chi-square = 8.183123, df = 4; p = .08510, which implies that the time length of using computers is not related to the respondents’ level of qualification. The relationship between the average hours per week that students access computers and the level of qualification they are enrolled for were also investigated using Pearson’s chi-square test, which yielded Pearson’s chi-square = 9.928560; df = 2; p = .00698. This implies that there is a relationship between the average number of hours per week and the level of qualification enrolled for.

Table 4 shows the correlation between the level of qualification (National Diploma versus Baccalareus Technologiae) students are enrolled for and their knowledge of the various types of ICT-related marketing (Internet/social media and other forms digital marketing, direct/mobile marketing and data marketing). Table 4 points to a correlation between students’ level of qualification enrolled for and their knowledge of the various forms of marketing-related ICT with relation to radio (Question 4.2), newspapers (Question 4.7), E-mail (Question 4.8), SMS (question 6.9) and telephones (land lines and mobile phones) (Question 4.13). This shows that respondents are acquainted with the more familiar types of marketing media.

Table 5 relates the perceptions of students towards ICT and correlates them to the level of qualification students have.
The results of Table 5 point to a significant relationship only with regard to the level of qualification enrolled for and the existence of an interactive relationship between students and lecturers when using ICT (Question 5.4) and anxiousness and students’ level of qualification (Question 5.7). This indicates that students need support and proper interaction when ICT integration is contemplated which may, in turn, have an impact on anxiousness on the part of students.

DISCUSSION

This investigation aimed to ascertain the extent to which ICT integration has occurred in the marketing domain by focusing on the extent to which ICT in marketing has been embraced by marketers and how well marketing students at CUT are exposed to ICT in marketing, as part of their curriculum. This was achieved by employing both qualitative and quantitative research methodologies. To gather the qualitative data, snowball sampling was used in selecting participants (marketers in the Bloemfontein area) and semi-structured interviews were conducted with them. The quantitative data were gathered by means of a structured questionnaire administered to third- and fourth-year marketing students at the CUT.

It emanated from the interviews that the importance of using ICT in marketing is recognised by interviewees and that a combination of ICT and traditional marketing
methods are employed by organisations. The Internet and social media marketing were recognised as a vital part of the marketing endeavours of interviewees. The importance of a user-friendly company website was reiterated by the interviewees as well as the use of social media networks. Furthermore, it emerged from the interviews that Facebook and Twitter were extensively used by respondents. Interviewees also acknowledged the continuous importance of social media, as a marketing tool, in the years to come. ICT offers a multitude of marketing possibilities and organisations need to, on a strategic level, decide which methods best suit their aims and objectives.

The interviews further confirmed that organisations still employ a great number of traditional marketing methods, supporting the notion that traditional marketing is not
diminishing in its scope and importance (Winer, 2008). Traditional forms of marketing that are still being used include SMS, pamphlets and catalogues. The conclusions based on the quantitative part of the study show that the vast majority of the students (74.62%, Graph 1) have been using computers for three years or more. This indicates that students have been exposed to computers prior to the commencement of their studies, which is supported by the fact that the majority of students are acquainted with the various software packages such as MS Word, MS Excel and MS PowerPoint.

Respondents are further acquainted with the more familiar methods of marketing such as television and radio, as well as social media marketing, mobile marketing, SMS and E-mails. The fact that telephones (land lines and/or mobile phones) are regarded as the most effective method of marketing could be because most individuals have access to either land line telephones and/or mobile phones (Table 2). The large number of missing values in the ‘have used it and is most effective’ and ‘missing values’ column (Table 2) shows that respondents are not adequately informed as to how ICT could be applied in marketing. Although respondents are aware of the various ICT channels such as television, radio, social networks, MXit, blogs and even newspapers, they have not been exposed to using them in carrying out marketing actions. Very few respondents use E-mail and the vast majority did not answer the questions pertaining to the usage of MMS, telephone marketing and postal marketing. Interesting to note, although respondents are familiar with telephone marketing, they have not been exposed to using it in the context of marketing (as indicated by Table 2, ‘have used it and is most effective’ column).

This also applies to the use of SMS, since a substantial number of respondents (47.76%) did not indicate whether they are acquainted with using SMS in the marketing context. The ‘missing values’ column of Table 2 confirms the finding that respondents are not acquainted with applying ICT in marketing. Although the marketing curriculum of the CUT has a sub-section dedicated to Internet marketing, it is evident that not enough emphasis is placed on how the various ICT methods should be applied in real-life marketing situations.

Regarding the attitudes of students, the majority agreed that computers enhance the quality of assignments and that it is an easy way to obtain information. The vast majority of respondents also indicated that the use of ICT will make the marketing course more interesting, stimulate new skills and assist in note taking. Furthermore, more than half of the respondents indicated that ICT could be useful in group studies. Respondents indicated the dominance of the Internet and social networks in the next five years and that marketer’s should exploit these mechanisms.

Further interpretation of the research results indicates a relationship between the average number of hours respondents have been using computers per week and the level of qualification they are enrolled for. The results of Table 4 point to a significant relationship only with regard to the level of qualification and the existence of an interactive relationship between students and lecturers when using ICT and anxiousness and students’ level of qualification. This indicates that students need support
and proper interaction when ICT integration is contemplated.

CONCLUSIONS AND RECOMMENDATIONS

It could thus be concluded that marketers find themselves in a transition period – while ICT in marketing is strongly emerging, there is still a significant emphasis on using traditional marketing methods. It could also further be concluded that the students surveyed for this investigation need more direct exposure to applying ICT in marketing. The marketing programmes offered at especially UoTs, with their focus on vocational education and training, should adequately prepare students for the world of work. This does not only include the theoretical perspectives of ICT in marketing, but also exposing students to real-life situations. The following recommendations can thus be proposed:

- Suitable laboratories should be established where marketing students could access the various types of ICT devices such as computers, iPads, iPods and digital cameras.
- Lecturers should be knowledgeable about ICT in marketing.
- Experts from business and industry should be utilised to instruct students on how to apply ICT in marketing.
- Practical assignments on applying ICT in marketing should be part of the curriculum of marketing students. This should not only include Internet marketing, but the entire bouquet of ICT tools and devices.

REFERENCES


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