

Review on Reflecting Information and Communication Technology in Marketing Practices

Asst. Neeta Singh and Chaudhary Abhishek Ramutar

Department of Commerce,
Nirmala College of Commerce, Mumbai
rns2005@gmail.com

Abstract: *Global company operations have undergone a fundamental change as a result of information and communication technology (ICT). The introduction of ICT may have had the most impact on marketing of all organisational roles, as the variety of digital media available offers a myriad of new ways in which goods and services could be sold. Although ICT deployment has been given more attention during the 1990s, marketers have had trouble completely embracing the integration of ICT in marketing. In light of this, the purpose of this inquiry was to determine how widely ICT in marketing is used by marketers and how much ICT in marketing is taught to tertiary-level marketing students. The results demonstrate that marketers are in a phase of transition where ICT in marketing is being employed more frequently in conjunction with conventional marketing techniques. It also emphasises the necessity for marketing students to have more specialised exposure to ICT as part of their curriculum*

Keywords: marketers, students of marketing, information and communication technology (ICT) in marketing

I. INTRODUCTION

A range of new technologies have developed significantly as a result of the technical innovation that typified the latter half of the 20th century, particularly in the domains of biotechnology, new materials and product creation, and computer and communications technology (Wange, 2007). Particularly in the past twenty years, there has been significant advancement in computer and communications technology. Information Technology (IT) applications and uses now encompass a wide range of microelectronic and telecommunications devices, including laptops and computers, the Internet (via optical fibres and wireless connections), iPads, digital television, palmtops, iPods, and digital cameras and videos (Freeman and Hasnaoui, 2010). ICT is also essential for gathering, analysing, storing, retrieving, manipulating, managing, controlling, moving, displaying, and transmitting data and information (Boritz, 2000).

The globe has truly become a global village as a result of these innovations, enabling connection and communication across time and location. ICT has expanded the field of marketing and given marketers a variety of fresh, creative ways to connect with their target audience. One of the seven major difficulties that marketers are now dealing with, according to the Canadian Marketing Association, is acknowledging the significance of ICT in marketing (Gustavson, 2006). The World Wide Web (www) and the Internet, among other new technologies, experienced rapid development in the 1990s (Schultz and Patti, 2009: 76). The advent of digitalization gave rise to many new products, services, and communication tools. Computers and fax machines came first, followed by smartphones, iPods, iPads, Blackberries, social media, and other similar devices.

The growth of ICT has had the biggest impact on marketing, even though practically all sectors and industries have been significantly impacted by technological breakthroughs. In order to effectively position their organisations in the digital age, marketing students—the upcoming generation of marketers—must possess solid operational knowledge of ICT (Lamont and Friedman, 2001). This investigation sought to ascertain the degree to which marketing professionals use ICT and to determine, through a case study, whether students at the Central University of Technology, Free State (CUT), are exposed to the various forms of ICT in marketing. Research (Mairead et al., 2008; Oshunloye, 2009; Zehrer and Grabmüller, 2012) indicates that marketers struggle to fully integrate ICT into their marketing strategies.

There aren't many research papers that concentrate on ICT integration in marketing, and the majority of them use the Internet as a medium (Nothnagel, 2006; Oshunloye, 2009). Brady et al. (2002, 2008), for example, looked into how ICT was incorporated into marketing practise and how it was used in modern marketing practise. In addition, Dye and Venter (2008) investigated how marketing courses should be revised for the Internet era. Numerous research (Qirici et al., 2011, Eric and Gil-Saura 2012, Zehrer and Grabmüller 2012, Burgess et al., 2011) also concentrate on ICT and its use in the tourism and hospitality sector.

Assessing how much marketers use ICT in their marketing efforts and whether students at the CUT, as a case study, are sufficiently exposed to ICT as part of their marketing course are the main contributions of the current investigation. In South Africa's Bloemfontein, the study was carried out. Because of the nature of the research problem, a two-pronged strategy was required, and both a qualitative and a quantitative research design were used in the study. The quantitative portion required giving a structured questionnaire to senior marketing students at the CUT, while the qualitative section involved conducting semi-structured interviews with marketers in the Bloemfontein region.

The CUT is one of South Africa's six so-called Universities of Technology (UoTs). The goals of UoTs' teaching and research are different from those of other institutions since they combine theory and practise to offer business and industry employable skills and research that is innovation-focused and applied (Moraka and Hay, 2009). Therefore, UoTs need to be aware of the needs and specifications of business and industry.

II. A DESCRIPTION OF ICT IN MARKETING

Information, communication, and technology (ICT) are three key elements that are combined into one word. In a scientific setting, "information" can be thought of as processed data that is gleaned from sources like corporate invoices and accounts. Information is a crucial part of decision-making and has an impact on how knowledge is managed inside a company. Information can be thought of as a commodity that can be purchased or sold, despite the fact that it is abstract (Womboh and Abba, 2008). It can also be described as the transmission or representation of knowledge, including facts and opinions, in any form, including written, numerical, graphic, cartoon, narrative, or audiovisual.

The term "communication" refers to the transfer or exchange of information between individuals or between geographical locations. According to Womboh and Abba (2008), communication is a crucial aspect of human existence and entails the exchange of knowledge, concepts, ideas, and messages. The term "technology" refers to the application of scientific knowledge to enable the creation of tools that aid humans in their endeavours to overcome environmental risks and comfort barriers. In this context, technology could include items like computers, landlines, cell phones, televisions, radios, and similar devices (Nchaka, 2009).

ICT is a group of technological instruments or gadgets that people use to communicate, create, distribute, store, and manage information, according to Tinio (2002). Hardware, software, communication tools, and goods and/or services used to transport information are all examples of digital technology (Onunga and Shah, 2005; Pernia, 2008). This is in line with Herselman and Britton's definition of ICT from 2002, which classifies it as include computers, software, networks, satellite linkages, and related systems that enable access to, analysis of, creation of, exchange of, and use of data, information, and knowledge. While Reinecke et al. (2009) define ICT as the use of technological tools and/or devices to differentiate products and services in an effort to create value for customers, Requena et al. (2007) describe ICT in marketing as a tool that allows the development of differentiation strategies based on product innovation.

III. MARKETING COMMUNICATION CHANNELS RELATED TO ICT

Marketing entails a range of activities to draw in potential clients and primarily attempts to spark interest in the goods and services as well as encourage repeat business. Modern organisations must adopt an ICT-integrated marketing strategy to compete in the highly competitive and digitally advanced environment in which they operate (Smith and ZeZook, 2011). In this strategy, marketers can strengthen brand loyalty and take advantage of new opportunities for product and service promotion.

It should be underlined that traditional means of marketing are still crucial despite the fact that ICT creates new markets and opportunities (Winer,

2008). For instance, the introduction of satellite and digital formats has led to a revival of radio. While newspapers and magazines have been adversely impacted by ICT, outdoor advertising is becoming more imaginative and they are still

important marketing vehicles. The discussion will unavoidably include traditional forms of marketing even if the study's main focus is on ICT in marketing.

The framework for e-marketing has been created thanks to the Internet, the digitization of information, and the widespread usage of ICT devices. With the management of digital consumer data and electronic customer relationship management systems (E-CRM systems), as well as digital media like the web, email, and wireless media, e-marketing encompasses a greater range of activities (Cleofhas and Gibson, 2009). This section seeks to describe the primary ICT-related marketing communication channels that should be taken into account in the overall design of an organization's strategic marketing strategy within the broader domain of E-marketing. Internet marketing, social media marketing, digital marketing, mobile marketing, and direct marketing are some of these channels.

Internet promotion

The Internet is frequently referred to as a force for globalisation that breaks down boundaries and forces market democracy on all countries. In fact, the Internet has altered how contemporary people live and work by integrating itself into economic, governmental, and social movement practises. Therefore, if utilised by firms, the Internet could be a potent marketing tool (Yannopoulos, 2011). The Internet has become a new marketplace for buying and selling as well as a new platform for businesses to advertise their brands. The Internet has equal strength to traditional communication channels like television, periodicals, and radio due to its features and large user base (Efendioglu and Igna, 2011). Internet marketing, which attempts to produce, communicate, and provide value to clients, is made possible by the Internet. The practise of establishing and maintaining client relationships through online activities in order to promote the interchange of concepts, goods, and services that meet customer needs is known as internet marketing. Using the Internet to accomplish marketing goals and assist the complete marketing process is another way to define internet marketing (Ngai, 2003). Organisations must have a user-friendly website in addition to online marketing strategies including search engine optimisation, banner advertising, email marketing, and direct links from their own and other websites (Chaffey et al., 2006).

Social Media Marketing

The emergence of social media is quickly altering how businesses interact and conduct business. Smith and ZeZook (2011) contend that social media satisfies the underlying human desire for communication and that its development may be considered the most significant advancement since the Industrial Revolution. The most media attention has been created by social media networking sites like Facebook, MySpace, Twitter, and YouTube out of all the many sorts of E-media. The phrase "social media" has become a household term in the communication and marketing fields. According to Tuomela (2010), social networking sites work by giving users a forum for dialogue. As a result, social media marketing has gained recognition and significance. Take Facebook, for example, a social networking site that has inspired a wide range of businesses to create company accounts (Lewis, 2010).

Internet advertising

Urban (2004) hypothesises that digital marketing could expand and enhance traditional marketing functions by utilising the Internet and IT. According to Merisavo (2008), digital marketing is the practise of using digital distribution channels to promote goods and services to consumers in a timely, relevant, personalised, and cost-efficient way. Specifically, social networks (like Facebook, Twitter, and MySpace), mobile technologies (like Blackberry and iPhones), and online videos (like YouTube), venture capitalists are putting more money into each of the three types of digital marketing listed above, according to Chester and Montgomery (2008). Podcasting, blogging, banner adverts, and video broadcasts are more examples of digital marketing strategies.

Mobile advertising

Since the 1990s, mobile technology has accelerated information science on a mobile level, altering the velocity of communication. One significant paradigm change that has grown strongly in the past ten years is the transition from desktop to mobile communication. People now could not have envisioned the limitless connectivity made available by mobile technology twenty years ago (Tetere, 2011). Mobile marketing is any type of marketing, advertising, or sales

promotion that aims to persuade and enlighten consumers via a mobile channel, according to the Mobile Marketing Association (MMA, 2005). The proper message is delivered to clients and enterprises at the ideal time and location thanks to mobile marketing (Gregori, 2009). In 2010, a lot of products were released that paved the way for a boom in mobile marketing. Smartphone adoption increased as a result of the release of Apple's iPhone, Google's Android operating system, and Apple's iPad. Now that mobile marketing is expanding beyond mobile messaging to include mobile email and internet browsing, there are more marketing opportunities.

Marketers now have access to new channels (Bush, 2010). The content's relevance, informational value, and entertainment value should all be taken into account while developing mobile marketing strategies. Meeting the demands of the target audience should be a top focus, as mobile media are typically thought of as more personal than traditional marketing channels (Vatanparast and Butt, 2010).

Direct selling

Nearly 200 years ago, mail-order services gave rise to direct marketing. This runs counter to the assertion that direct marketing is a relatively young field of study (Tapp, 2008). Direct marketing has experienced a significant global expansion over the past 20 years, making it the marketing discipline with the quickest rate of expansion. This is primarily due to the significant advantages it provides to buyers and sellers alike (Kotler and Armstrong, 2008). Direct marketing gives consumers access to a variety of uniquely created products from all around the world. It provides a more affordable, quick, and effective alternative for merchants to contact their target markets. According to Flici (2011), direct marketing is increasingly being considered when formulating strategic marketing plans and building long-lasting client connections.

In order to enhance returns on investments, this strategy targets certain clients with personalised advertising and promotional efforts. Direct marketing is an interactive system that disseminates the marketing message through a range of media. It uses traditional and digital marketing strategies that target particular people or groups of people, such as mobile technology, email (or spam), door-to-door selling, automated dialling machines, and, more recently, automated SMS (Short Messaging Services) messages. Political parties, social welfare organisations, and charities all employ direct marketing to raise money. The sources that direct marketers employ are information gathered from marketing lists, public information (such as phone books or public registries), or information based on prior transactions (Flici, 2011).

In conclusion, when firms think about their strategic marketing plans, they should take into account the numerous ICT marketing applications. The various ICT-based marketing strategies shouldn't be used in isolation; rather, they should be a part of an integrated approach where management takes into account how different channel types will affect the organization's overall marketing initiatives (Cleofhas and Gibson, 2009). All organisations must use at least one type of ICT-based marketing communication as part of their overall marketing strategy in the context of modern business. The importance of ICT in marketing is anticipated to rise as consumers become more technologically savvy, leaving companies that did not take this into account behind.

IV. CONCLUSION AND RECOMMENDATIONS

This leads one to the conclusion that, despite the fact that ICT in marketing is rapidly expanding, traditional marketing techniques are still heavily valued by marketers. Another conclusion that could be drawn is that the students who participated in the survey for this investigation need more hands-on experience using ICT for marketing. With their emphasis on vocational education and training, the marketing programmes offered at especially UoTs should appropriately equip students for the workforce. This includes both introducing students to realistic simulations and theoretical perspectives of ICT in marketing. Thus, the following suggestions can be made:

- Appropriate labs should be set up so that marketing students can use the different ICT gadgets, including laptops, iPads, iPods, and digital cameras.
- Lecturers ought to be familiar with ICT in marketing.
- Business and industry experts should be used to train students in the use of ICT in marketing.
- Students studying marketing should have practical tasks on using ICT in the field. This should encompass all ICT tools and equipment, not just Internet marketing.

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