Information Technology and its Relationship to Marketing and
Marketing Relationships

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Abstract

Information technology (IT) and its use in marketing is radically altering how companies practice marketing. The widespread availability of information and heightened communication abilities are changing the relationships between marketing and other functions and between marketing and suppliers and customers. Marketing in the 90s operates in a totally altered landscape demanding a radical rethink and redirection for marketing.

As IT in marketing develops and moves from automational use to transformational use these changes will be magnified. There are conflicting views as to the impact of IT on marketing with many heralding the widespread acceptance and use of IT as the beginning of the end of marketing, or as the greatest threat to the marketing department. Others view this development more positively and see IT as the saviour of marketing, which can now assume its glorious and central position in the company, with an increased customer and relationship focus.

This paper traces the impact of IT on the marketing function and discusses the major implications of the new IT enhanced marketing practices. It reports a study of 204 marketing personnel in medium to large companies in Ireland. It confirms the perception that marketing is changing, and to a certain extent benefiting from the introduction and use of IT, though predominately to reinforce existing behaviour rather than initiating radical new directions for marketing development.
Introduction

A current view of marketing is that the search for a new marketing paradigm has begun, with relationship marketing as the new transformational marketing model (Gronroos, 1997; Gronroos, 1996; O'Malley and Patterson, 1998; Piercy and Craven, 1995; Schultz et al., 1996; Piercy, 1998; Snow, 1997; Payne, 1995; Tzokas and Saren, 1997; Sheth and Parvatiyar, 1995). Relationship marketing is seen as a necessity for some companies and industries (Gronroos, 1996) and 'a clear sign of the bright future' for marketing (Tzokas and Saren, 1997:105).

Paralleling this development, marketing is, and will continue to be, heavily influenced by IT, with much speculation that marketers who do not adapt to this new technological era will not survive (Bruce et al., 1996; Boshoff and Terbanche, 1996; Furness, 1996; Fletcher, 1995; Komenar, 1997; Rapp and Collins, 1995). Some see IT playing a dominant role in the reshaping of marketing (Bruce et al 1996) as 'the cornerstone of new approaches to marketing' (Talvinen and Saarinen, 1995:18) and particularly important in relationship marketing (Gronroos, 1996). IT's importance lies in spanning the boundaries between marketing and other functions, and companies and their environment, by connecting customers and partners to the firm. Ultimately the new management model could be the virtual organisation, with groups of separate enterprises linked through high-speed networks (Byrne et al., 1993, Piercy and Cravens, 1995; Schlegelmilch and Sinkovics, 1998), the network and interactions approach to relationship marketing (Gronroos, 1996).

Marketing Reorganisations

Marketing is in a state of change, redirection, refocus searching for relevance and applicability in this era (Brownlie et al., 1999; Thomas, 1994; Brownlie and Saren, 1997). From a practical perspective increased marketing reorganisations in companies highlights a major marketing rethink and a threat to the marketing department (Mitchell, 1994; Thomas, 1996; Piercy and Cravens, 1995; Bruce et al., 1996). There appears to be a move away from the functional perspective. Traditionally marketing was hierarchical within a functionally divided company (Mitchell, 1994). Doyle. (1995) argues that marketing's difficulties are due to this functional focus, rather than viewing marketing as an integrated business process, with sole responsibility for some tactical issues, but in...
general needing co-operation with other departments. Marketing should never have had a functional perspective (Thomas, 1996) and should permeate throughout the organisation (Gummesson, 1987).

This relates to customer oriented management, which of itself is a goal of the marketing concept, viewing all staff and particularly staff that interact with customer as part-time marketers (Gummesson, 1991). It could be that 'the presence of new information networks may indeed be seen in the future as the single greatest facilitator of the marketing concept, with their potential to alter both the relative balance of power and the directness of contact between firms and customers' (Peattie and Peters, 1997:145). This building and managing of relationships is the corner stone of relationship marketing (Ford, 1990; Gronroos, 1996). Bruce et al., (1996:203) contend that 'this would weaken marketing as a function as IT can facilitate such a reconfiguration of marketing activities', as marketing tasks are diffused throughout the organisation. As O'Driscoll, (1997:4) states 'marketing can no longer boast of its pre-eminence position in the firm' nowadays it must focus on 'embracing relationships, networks, new forms of communication and organisation'.

Marketing's Lack of Change

Within the discussion of marketing reorganisations and redirection resides the contention that marketing has been slow to change with much criticism and debate on the lack of marketing development and growth (Marion, 1993, Mintzberg et al., 1995, Brownlie and Saren, 1997; Mitchell, 1994; O'Malley and Patterson, 1998; Brownlie et al., 1999). This has led to the contention that marketing may be heading for extinction (see Brown, 1996). Brownlie et al., (1994:8) concluded that 'marketing as a domain of knowledge and practice is itself becoming as myopic, complacent and inward looking as all the once great but now defunct myopic companies' It is clear that there is a transformation in marketing but the question is 'how might marketing transform itself in order to continue to have relevance into the next century and beyond' (Brownlie et al., 1994:8).

Is Marketing Adopting IT?
The preceding discussion is also mirrored in the IT and marketing literature, with the view that marketing has been slower than other functions to embrace IT (Mitchell, 1994; Peattie and Peters 1997; Ranchhod and Hackey, 1996; Leverick et al., 1998). Palihawadana and Delfino (1994) found that the use of IT in marketing was 'still quite patchy' and 'still in its infancy'. More positively research does show that marketing intends to adopt IT further (Bruce et al., 1996; Shaw, 1994).

The use of IT by marketing has had a predominantly automational focus, used for routine and tactical activities to improve efficiency (Teng et al., 1994; Bruce et al., 1996; Leverick et al., 1998; Peattie and Peters, 1997; Hewson and Wilson, 1994). It can be argued that marketing development was limited by the lack of speed and applicability of IT, but that as connectivity, speed, power and diffusion issues are overcome, marketing personnel will see the real impact and benefits of IT (Ranchhod and Hackey, 1996; Peattie and Peters, 1996; Butler et al., 1997; Mooney et al., 1995).

Though research centring on IT and marketing is scarce, there are numerous studies on the general impact of IT in business (see Leverick, et al., 1996). They contend that the impact of IT on marketing is similar to its impact on other functions. Other disagree and emphasis that marketing is different, citing the creative nature of marketing (Evans, 1992), that marketing people are different (Holtham, 1994), that marketing staff have limited knowledge of technology (Shaw, 1994), but the ultimate difficulty may lie in the fact that IT threatens traditional marketing approaches (Martell, 1988).

**Is IT Marketing's Saviour?**

Though the introduction of IT into companies is predominantly assumed to be positive, many companies in actuality find IT baffling, and to some extent it appears that expectations are high and actual benefits are low (Bird, 1994; Brynjolfsson, 1993; Hitt and Brynjolfsson, 1996; Peppard and Rowland, 1995; Van Grembergen and Van Bruggen, 1997; Walsham, 1993; Iarl and Feeney, 1997) with many risks, costs and problems hindering the successful introduction and use of IT (Capon and Glazier, 1987; Drummond, 1998; Galliers and Baets, 1998).

Douzou and Legare (1994) argue that network technologies can actually serve to reinforce existing practices rather than to change them, and that IT on its own will not
change practices. This was also affirmed by Bjorn-Andersen (1994) who contends that the introduction of IT showed only marginal effects on structure and performance. Applegate (1994) emphasises that organisational change must occur first and only then can IT enable change. Davies and Mitchell (1994:243) emphasis the dual nature of IT as an enabler but equally as a constrainer of organisational change. They state categorically that IT 'has no singular inherent ability to enhance or control organisational transformation'. An important aspect of IT is the power and control of IT and the dominant authority on the level and use of IT within firms. Scarbourough (1996) found that many of the decisions on marketing related IT, came from the IT specialist, related to technical specifications, rather than from marketing. This has enormous implications for marketing and its use of IT as Gronroos (1996:9) states, 'computerised systems and IT ... have to be designed from a customer-service perspective and not only or mainly from internal production and productivity-oriented viewpoints'.

Some firms are reaping benefits from IT, but mainly where it reinforces good existing management approaches (Willcocks, 1996). Ultimately there are limits to what IT can do without the benefit of good marketing (Burnstein and Kline, 1995). IT based systems 'cannot work miracles. They will not offset a poorly conceived or poorly executed marketing strategy. They will not compensate for an inferior sales force, and they will not sell inferior products' (Moriarty and Swartz, 1989,186). IT on its own will not deliver benefits, what is need is a transformation in marketing activities to harness the opportunities from IT (Ward et al., 1996). Ultimately with IT 'the wisdom of its use, depends on the wisdom of the user' (Glaser, 1997:251).

So though it is generally argued that IT is radically altering marketing practices 'what is less clear is, inter alia, the extent to which such changes are being realised, the implications of such changes for marketing management and strategy, and the costs of such changes in terms of finance, resources and time' (Bruce et al., 1996:194).

**Research Methodology**

This exploratory study, which is part of a larger study, with the aim of assessing the use of IT in marketing, was conducted through a quantitative postal survey of 500 marketing personnel in Ireland. The sample was selected randomly from the membership database.
of the Marketing Institute of Ireland. The questionnaire was pretested with 15 marketing managers. The final version was sent to marketing managers and 204 usable questionnaires were returned, yielding an effective response rate of 41%. The firms, were predominately medium to large in employment numbers, consisting of 39% manufacturing and 61% service companies.

Of interest to this paper are the levels of communication and information sharing IT in marketing, the perceptions of marketing managers to IT in marketing and the major beneficial usage of IT in marketing.

Automation, Information and Transformation
Within the research a three stage framework of automation, information and transformation (Zuboff, 1988, Mooney et al., 1995), was utilised to track the impact of IT. These stages are similar to Haeckel’s (1985) efficiency, effectiveness, unthinkable, and Hammer and Mangurian’s (1989) efficiency, effectiveness and innovation and traces business benefits from IT. The transformational stage defines a company with new business operations and practices and it is at this stage that marketing reap the most benefits (Brady et al., 1999).

Enhanced Communication and Information Sharing through IT
A range of information and communication technologies (ICT) were researched. a sample appears in figure 1.
Table 1: ICT Use and Type of Use by Marketers in Ireland

<table>
<thead>
<tr>
<th>Communications</th>
<th>Use</th>
<th>Automate</th>
<th>Informate</th>
<th>Transformate</th>
<th>Valid Number of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email for internal use</td>
<td>80%</td>
<td>15%</td>
<td>44%</td>
<td>41%</td>
<td>163</td>
</tr>
<tr>
<td>Email to customers</td>
<td>64%</td>
<td>14%</td>
<td>41%</td>
<td>45%</td>
<td>128</td>
</tr>
<tr>
<td>Own company website</td>
<td>62%</td>
<td>4%</td>
<td>74%</td>
<td>22%</td>
<td>129</td>
</tr>
<tr>
<td>Helplines</td>
<td>35%</td>
<td>9%</td>
<td>63%</td>
<td>28%</td>
<td>71</td>
</tr>
<tr>
<td>Computer Links</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with suppliers</td>
<td>33%</td>
<td>26%</td>
<td>33%</td>
<td>41%</td>
<td>69</td>
</tr>
<tr>
<td>with customers</td>
<td>43%</td>
<td>21%</td>
<td>36%</td>
<td>43%</td>
<td>84</td>
</tr>
</tbody>
</table>

Use of information and communication technologies are growing but with widely different stages of development and benefit. Email is popular and as expected is used more for internal communications than links with customers and is probably indicative of the fact that certain customer bases do not have email. Email for internal and customer use provided information but was also transformational, which leads us to contend that it is starting to alter the way that marketing is performed, rather than simply used for efficiency gains (Thomas, 1993).

Computer links is a focus on specialised company to supplier or company to customer links, including EDI. Computer links with suppliers is low, predominantly manufacturing companies with a cross section of automational, informational and transformation benefits. This highlights the slow development of external networks and online links, and the delayed realisation of the incredible business potential of EDI, while also confirming the varied rate of adoption and impact across different sectors and types of organisation (see Naude and Holland, 1997). Computer links to customers are higher and but with no difference between manufacturing and service companies.

Customer on line development is growing and this is indicated here, and with a stronger...
transformational benefits though these findings also highlight the growth in manufacture/distributor links.

Own company website were predominantly viewed as providing information. This may be explained by the lack of e-commerce and trading over the Internet, highlighted in previous reports (Ellis, 1998; Brody, 1995). Finally helplines are used mainly for obtaining information about the customers. As customer helplines can be perceived as an opportunity for direct contact with customers and a forum for discussion of the customers’ problems and concerns, we would have expected this technology to be used for knowledge creation and decision making. This research has shown that this is not the case. It seems that although helplines provide additional information on the customer base, they are not perceived as transforming the relationship.

It must be noted that previous research on the main uses of IT by marketers did not show any internal communication uses of IT by marketing (Bruce, et al., 1996; Higby and Farah, 1991, Shaw, 1994) though external links (EDI) were mentioned (Bruce, 1996). This research shows a greater ICT focus and use by marketers in Ireland.

**Benefits of IT within Marketing**

Linking to the discussion on marketing and change, most respondents felt that marketing had changed. Contrary to much of the previous discussion marketing managers considered themselves to be very technofriendly with the majority agreeing that IT in marketing had made marketing easier and better, and that IT in marketing contributed to their success. It was interesting that only half of the respondents felt that marketing was highly dependent on using IT. More importantly the marketers who were highly dependent on using IT were the companies who were experiencing transformational use of IT. There is a contention that IT is increasingly viewed as simply a part of normal business operations (Van Der Zee, 1997; Willcocks, 1996; Webber, 1993; Furness, 1996) and a majority of respondents agreed with this.

**Benefits to Marketing from IT**

Increased information and increased efficiency and effectiveness were perceived as the major IT contributions, which indicates the movement through the trajectory of IT
benefits (see figure 2). It is heartening from a marketing point of view that improved customer relationships were mentioned, but with a low score. The advances in internal communication shows increased contact via IT from the marketing department to other departments and vice versa. This could be indicative of the marketing concept in operation with more open communication between departments and concurs with the Bruce et al. (1996) study which showed an increased visibility of marketing and increased demands on marketing from other departments.

**Figure 2 - Main IT benefits to Marketing**

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased information</td>
<td>34%</td>
</tr>
<tr>
<td>More efficient and effective</td>
<td>24%</td>
</tr>
<tr>
<td>Improved customer relationship</td>
<td>18%</td>
</tr>
<tr>
<td>Improved internal communications</td>
<td>16%</td>
</tr>
<tr>
<td>Product development</td>
<td>6%</td>
</tr>
<tr>
<td>Access to International markets</td>
<td>4%</td>
</tr>
</tbody>
</table>

With a more specific focus on actual marketing practices and IT, the ability to hone in on target markets was highlighted. Increased targeting ability has been suggested as the main benefit of IT and the required marketing focus of this era (Schmitz and Rovner, 1992; Furness, 1997; Komenaar, 1997). Other benefits related to efficiency and effectiveness of the marketing function and the speed and access to information and improved customer relationships were mentioned.

**Figure 3 The Main Benefits to Marketing Practices**

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>More target marketing</td>
<td>24%</td>
</tr>
<tr>
<td>More efficient and effective</td>
<td>22%</td>
</tr>
<tr>
<td>Increased information</td>
<td>18%</td>
</tr>
<tr>
<td>Improved customer relationships</td>
<td>8%</td>
</tr>
<tr>
<td>Tracking and monitoring of results</td>
<td>4%</td>
</tr>
</tbody>
</table>

**Discussion of Results and Implications**

This research explores the use of IT in marketing in Irish firms. This was initiated by the fact that despite widespread acceptance of the benefits of IT for marketing, our knowledge of the way marketers use IT and its eventual benefits for marketing are not well understood. Following Zuboff's (1998) framework we can conclude that IT is prevalent in Irish marketing, but not all marketers make use of the full potential of some of the technologies. The vast majority of IT is still used for automation and information.
purposes. We would not deny that this is a critical step towards any efforts to increase the marketing knowledge of the firm (Norris, 1996, Zuboff, 1988). Yet, for transformation to happen, firms need to approach IT as a means for questioning marketing assumptions and existing practices.

In general the research portrayed a very positive attitude to IT and its influence on marketing. The benefits of IT to marketing must centre on successful IT management, changes in processes (Fletcher, 1995), the use of unfamiliar and challenging IT, and creative innovative strategies to cope with this different and dynamic market (Schlegelmilch and Sinkovic, 1998).

We can state that, business use of IT is only at the development stage and there will be further challenges, difficulties, opportunities and benefits (Galliers and Bects, 1998; Komenar 1997; Peattie and Peters, 1997). As Leverick et al (1997:92) states 'many of the more adventurous IT applications (virtual stores, customer participation in product design, and so on) apparently remain to be exploited.' With this continued development, marketing and relationship marketing needs to embrace IT for marketing benefit and realise 'given that change is inevitable, the real issue for managers is whether that change will happen belatedly, in a crisis atmosphere, or with foresight, in a calm and considered manner ... whether transformation will be spasmodic and brutal or continuous and peaceful' (Hamal and Prahalad, 1994: 128). IT is imperative as we enter the new millennium that marketing can 'encompass all of the new market and organisational contexts to which it is now being applied' (Brownlie et al., 1994:10), and links to and uses IT to this end.

References


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