CHAPTER 5 Maximizing marketing effectiveness through computer-mediated communication

Clive Hoey

Maximizing marketing effectiveness

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Clive Hoey

Introducing the author – Clive Hoey

"Maximizing the marketing effectiveness of computer-mediated communication" was written by Clive Hoey in 1997. At the time of writing Clive's role was Vice President: Internet Marketing, responsible for managing the upkeep, development and marketing of MCB's Internet initiatives.

The research focused on the nature of marketing communications in the electronic environment, and in particular on the relationship between the Web site environment and the marketing mix. Furthermore, the study highlighted the phenomenon of "virtual community" in relation to marketing efforts, and took a detailed look at MCB's own customer base in terms of its adoption of electronic communication.

The study concluded that the Web site environment, complete with exposure to MCB's electronic product offerings, "information rich" online portfolio, and "connectivity" provided through value added Internet resources (e.g. Internet conferences and forums), holds great potential from a marketing perspective. Clive surmised that by building, sustaining, promoting and developing this environment in a structured and customer-focused manner, MCB could expect to attract members of the value chain into the arena of its Web site, ease the process of adoption of its electronic products, and capitalize on a critical mass exposed to its product offerings and marketing communications.

Clive established that the diffusion process for acceptance of electronic media is far from complete, however. The success of MCB's electronic ventures depends on its ability to nurture and educate its customers towards the benefits of electronics, encourage them on to the electronic platform, and build and sustain relationships through "intelligent" electronic communications.

The research identified that, although communication through every available means must continue to be fully utilized (through "traditional" paper promotions, messages in the journals, newsletters, sales visits, etc.), it is e-mail that presents the most attractive media opportunities for MCB's electronic sales initiatives. E-mail has direct mass-media potential combined with information rich qualities, which are more conducive to decision making than paper communications. The recommended option arising from Clive's study was that MCB should develop and maintain an e-mail database to assist in managing high-volume, integrated and "intelligent" electronic communications with customers and suppliers, and this has since been implemented within the company.

Introduction

This study investigates how the "electronic publishing revolution" and the growth of computer-mediated communication have had an impact on the decision-making processes associated with the purchase of MCB University Press (MCB) products. To do this, it assesses the importance of electronic communication within the context of MCB's electronic publishing initiatives and marketing strategy, and provides recommendations for capitalizing on the benefits of this media.

It reviews the role of computer-mediated communication in assisting the evolutionary process involved in the "adoption" of electronic products and services by MCB's customers. Finally, it makes recommendations for enhancing the effectiveness of direct electronic communication for marketing purposes.

MCB University Press is managing its evolution towards the realization of an electronic publishing vision. The goals, parameters and operations for achieving this vision are clearly defined and a supporting company infrastructure is in place to facilitate this. The benefits of electronic delivery of published material are an integral part of most MCB products, and technological advancements have enabled the creation and accessibility of new markets and product development opportunities.

To fully reap the rewards of its efforts, MCB must also effectively manage the evolutionary process of bringing the "key players" (customers and authors) together on the electronic platform. To achieve this, the company requires an understanding of the effects of electronic products and channels of communication on both the members of the supply chain and the decisionmaking dynamics of its customers. MCB also needs a clear vision of the future in terms of how these key players are likely to develop and interact within the electronic environment – and how as a company it may orchestrate and influence this.

This requires a detailed understanding of the current "state of play" in terms of customers' adoption and use of electronic media, the trends and future developments in the electronic market-place, and the marketing effectiveness of present electronic communication activities. MCB must acquire this knowledge in order to find the best path to achieve its goals.

The ultimate aim of this project is to provide MCB University Press with a clear strategy outlining how the purchasing decisions in the electronic age may be influenced. In this goal, I am concentrating on the following questions:

- What are the changes and future trends in the decision-making process in the light of both the advent of electronic products and the use of electronic communication?
- How effective are the current electronic communication activities and how can they be made even more effective in influencing sales?

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• What are the recommendations for the future in terms of accelerating the adoption of MCB's electronic initiatives?

This study will help MCB build on its current strategies by defining the impacts of electronic communication developments on the purchasing behaviour of its customers. Providing this understanding, and outlining options and recommendations for capitalizing upon these developments, should help MCB to manage the evolutionary process necessary to encourage participation in its electronic initiatives more effectively.

I do not intend through this project to challenge MCB's electronic publishing strategies insofar as they are currently defined and asserted. MCB's view of the future, in terms of its publishing and marketing strategies, customer base and product range, has been thoroughly researched and documented.

Rather the study aims to complement the existing strategy and marketing framework by "filling in the gaps" in current experience and knowledge pertaining to the use, effectiveness and evolution of electronic communication. I have chosen to concentrate on the electronic media which will have the greatest impact on the business and its customers over the next five years – namely Internet media and electronic mail.

This project is not written as an "end in itself", but rather as the foundation for further action and learning. To facilitate this, I have chosen to focus on providing a factual basis and clear picture of the current market situation and company activities, which, combined with a calculated vision of future electronic communication impacts, will pave the way for implementation.

MCB and the electronic publishing revolution

MCB has enthusiastically embraced the electronic publishing revolution and this has had significant impact on the company's product offerings, operations and logistics, marketing strategies, organizational structure and communication activities. The "revolution" of electronic publishing has, of course, been brought about by new technologies which have transformed the publisher's ability to capture, manipulate and distribute information. The result is the most significant change in the dissemination of the printed word since the development of the printing press. Electronic publishing is defined by Wills (1996) in the context of MCB University Press as:

The exploitation of electronics in any and every cost effective and cost beneficial way that can facilitate the process of publishing. And we then let publishing, for our purposes mean: Conceiving, creating, capturing, transforming, disseminating, archiving, searching and retrieving academic and professional knowledge and information.

The infrastructure to achieve this goal is in place. In June 1996, the business was separated into three areas:

- (1) Electronic Publishing Division (EPD) responsible for pursuing opportunities, developing electronic products and services, and applying relevant sales, marketing and distribution strategies, totally unfettered by traditional measures.
- (2) Paper ++ Division responsible for traditional paper publishing with electronic enhancements.
- (3) Common core services responsible for serving both Paper ++ and electronics.

By creating a division specifically to address the development and success of electronic products, the company is able more effectively to identify and exploit the electronic publishing opportunities, and enjoy wider dissemination through electronic products and services.

The flexibility and delivery options offered by electronic capture and tagging of articles have provided a wealth of opportunity to MCB in terms of its product offerings. The possibilities include articles which can be relatively easily "bundled" together to provide new products, or sold individually, and journals which can be grouped together to form a product "suite". Access to these can be provided individually or collectively through network licence agreements.

MCB University Press has integrated electronic elements into the majority of its existing products. The philosophy for the development of "traditional" paper journals involves providing the customers with a "multiplicity of access" which includes archival CD-ROM, Internet continuous publishing (whereby the

Clive Hoey journal is updated more frequently on the Internet than in print), and an Internet archive. This enables the customer to enjoy the unique benefits of the various media, as well as the cost advantages of inclusive multi-user site network licences.

The elements of "multiplicity of access" subscription packages are not sold individually, as it is MCB's intention to encourage customers to move away from paper journals towards electronics. It is believed that the electronic platform, facilitated by the Internet, will provide the prime opportunities for future customer development.

To encourage further the acceptance and use of the electronic elements of the journals, MCB has provided Internet conferencing facilities for all titles. More recently the company has developed pioneering online information resources and communities of interest known as "forums". Both conferences and forums provide added value to the subscriber through both provision of information and "connectivity" with other subscribers, authors, editors and other people with the same interests and information needs.

EPD currently "owns":

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- Emerald, which is an electronic database of full-text articles from more than a hundred academic and professional journals, primarily published by MCB. Delivery is online via the Internet, and on CD-ROM. An Emerald subscription is priced at £18,000, and includes the provision of printed journals up to this value.
- Emerald suites, which are "bundles" or "collections" of journals covering specific subject areas, such as marketing or human resources, within the Emerald database, and are priced to maximize the potential for customers who already subscribe to a number of journals within the suite to "up-sell" to the whole collection. Customers are granted electronic access to the remaining journals, and printed journals up to the value of the suite.
- Anbar Electronic Intelligence, an electronic abstracting service that creates products and services which provide rapid access to the world's best published literature. Anbar Management Intelligence contains abstracts from 400 management journals, accessible by CD-ROM, over the World Wide Web, in hard copy, by reading the user magazine or by joining specialist listservers. Anbar Management Intelligence includes a number of "derivative" products covering specific areas of management. Also within the Anbar Electronic Intelligence portfolio are Computer Abstracts and a range of civil engineering titles.

Future product opportunities for the EPD include:

- (1) Creating new products and reaching new markets:
 - exploiting the electronically held database of articles to create "niche" journals from material also published in a number of different journals;

- allowing the database of abstracts to be searched as a "research tool" (this is being prototyped as a "\$15 library", whereby subscribers will pay a monthly fee to search and view the abstracts).
- (2) Providing new services:
 - an "alert service" has been developed to notify customers and prospects by e-mail when their journal has been updated;
 - "management updates by e-mail", whereby a selection of abstracts relevant to specific chosen keywords may be mailed out to subscribers.
- (3) Enhancing existing products through:
 - more timely updates of the journal online;
 - multi-user site networking, bringing the "cost per use" of the journal down and thereby increasing its value to the librarian;
 - provision of access to the "wider literature" from complementary journals;
 - greater provision of online "connectivity" services.
- (4) Product exposure and access through non-MCB channels:
 - deals with subscription agents for "single point of access" virtual libraries;
 - the potential for integrating MCB products with other databases.
- (5) Adding value to online services through the provision of "free" content and current awareness to enhance online forums and "meeting places" that are facilitated by MCB's Internet site.

It can therefore be seen that the EPD is presented with an array of possible product offerings which it may consider for the future development of the business. This process has to be carefully managed, however, in order to maximize the potential of future product enhancements and customer development, and also to minimize any adverse affect on the "traditional" side of the business. Maximizing marketing effectiveness

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The theory behind the practice

My initial research focused on the following areas:

- Marketing communications: in order to explore the theory surrounding marketing communications, so that the use of computer-mediated communication can be placed in context.
- Computer-mediated communication: as a relatively new medium for MCB, a greater understanding needs to be gained in term of concepts, theories and applications.
- Virtual communities: the development and potential of virtual communities, as the "crystallization" of business on the Internet, must be studied in order to capitalize on the opportunities presented.
- Diffusion of innovation: in order to provide an understanding of the diffusion processes and how effective communication can be made possible through the various "stages".

Marketing communications

Communication has been defined by William Schram (1955) as: "The process of establishing a commonness or oneness of thought between a sender and a receiver". Communication is a process which has elements and relationships that can be modelled in a structured manner (Delozier, 1976). Kotler and Armstrong (1991) observe that the two main parties in communication are the sender and receiver, the communication tools are the message and media, and the four major functions involved are encoding, decoding, response and feedback.

Delozier (1976) states that "commonness of thought" implies that there must be a "sharing" or "understanding" relationship between sender and receiver. The role of marketing communications is to "share the meaning of a company's total product offering with its customers in such a way as to attain their goals, and at the same time, move the company closer toward its own goals".

In the past, promotion was viewed as a firm's communication link with its customers. It is now evident that promotion is only one part of the overall communication a company has with customers (Delozier, 1976; Kotler and Armstrong, 1991). The "promotional mix" includes elements such as advertising, personal selling and publicity. Other communications elements with which promotion must be co-ordinated are price, product, retail outlets and all other company activities which affect the product offering.

The primary tasks for to be undertaken by the marketing communicator are defined by Kotler and Armstrong (1991) as:

- identify the target audience;
- determine the response sought;

- · choose a message;
- · choose a medium through which to send the message;
- select the message source; and
- collect feedback.

Once the target audience has been defined, the marketing communicator must decide which response is sought. Kotler and Armstrong (1991) observe that the _____ target audience may be in any one of six "buyer readiness states":

- (1) awareness of the product's existence;
- (2) knowledge about aspects of the product;
- (3) opinion in terms of liking or disliking the product;
- (4) preference in terms of alternative products;
- (5) conviction that the product will fulfil a need;
- (6) purchase.

Having defined the desired response (awareness, knowledge, etc.) the communicator has to develop an effective message. This should get attention, hold interest, arouse desire and obtain action. Obviously the message should be appropriate to the medium.

Marketing communications are defined by Delozier (1976) as "the continuing dialogue between buyers and sellers in the market-place". Staudt and Taylor (1965) concluded that marketing effectiveness depends significantly on communications effectiveness because any market-place is "energized" by information flows. The information available on the product offering (and the buyer's reaction to this) influences the buyer's perception of the product. Hence all elements of the marketing mix must be effectively communicated through relevant channels of information.

Broadly speaking, there are two types of communication channel (Kotler and Armstrong, 1991), namely:

- (1) personal, where two or more people communicate directly with each other allowing for personal addressing and feedback; and
- (2) non-personal, which includes media, atmospheres and events.

Early thinking on the flow of information and influence attributed great power to mass media in directly affecting audience behaviour. However, Kotler and Armstrong support Delozier's theory that there is the intermediary influence of "opinion leaders". These individuals are crucial to the effects of mass communications. They are characteristically more exposed to mass communications and carry messages to people who are less exposed to the media. People tend to pick up ideas from others like themselves, who are opinion leaders. Kotler and Armstrong (1991) state that "mass communicators should aim their messages at opinion leaders, letting them carry the message to others". Maximizing marketing effectiveness

Clive Hoey Once the desired communication channels, media and target market are established, the optimum promotional mix can be utilized. Factors that will affect this are:

- type of product and market;
- "push" or "pull" strategy (i.e. "push" through members of the distribution channel, or "pull" by targeting the end users directly);
- the state of "buyer readiness"; and
- product life-cycle.

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Computer-mediated communication

Handy (1993) speculates that the "communications revolution" is the first clue to the future of organizations. He observes that computer-mediated communication (CMC) is, in general economic terms, becoming cheaper, as well as more adaptable and relevant to the company's needs. This is in comparison to physical distribution costs which are constantly increasing. CMC is explained by Rudy (1996), as "any kind of communication involving the transmission of electronic signals between computers".

Businesses use a wide variety of media to communicate with their customers. Hoffman and Novack (1996) observe that this traditionally follows a "one to many" communication model, whereby "a firm reaches many current and potential customers, segmented or not, through marketing efforts that allow only limited forms of feedback from the customer". It is this ideal with which MCB is most familiar, as the company has for many years promoted its products primarily through the use of direct mail.

The Internet, on the other hand, facilitates an interactive multimedia "many to many" communication network, thus radically altering the way in which firms can do business with customers and suppliers. A model presented by Hoffmann and Novak (1996) outlines interpersonal and computer-mediated communications. This model incorporates a feedback view of interactivity, and is representative of both e-mail communication and electronic communication that is facilitated via an Internet site. Both allow immediate response and the opportunity for the recipients (or readers) to add their own "content" through the relevant medium.

Hoffman and Novak recognize the fact that the full implications of this model will be played out in as yet unknown ways for years to come. In the meantime, however, it is evident that marketing managers must form a greater understanding of the true nature of commerce on the Web, particularly from the perspective of using it as a marketing communication medium. This is illustrated by Berthon *et al.* (1996) who state that the Web is not a transient phenomenon and warrants the serious attention of both marketing academics and practitioners. They postulate that "among other key activities, academics will need to build models and theories of how the medium works and how

buyers will interact with it; practitioners will need to set objectives for their use of the medium as a corporate communication tool and measure their progress toward reaching those objectives".

Clearly, the key difference between computer-mediated communication and "traditional" mass media is the element of interactivity. Blattberg and Deighton (1991) define this as "the facility for individuals and organizations to communicate directly with one another regardless of where they are or when they wish to communicate". Hoffmann and Novak (1996) identify the key distinguishing feature as "person-interactivity", which may be unmediated, as in the case of face-to-face communication.

To assess the nature and possibilities of this interactivity, it is necessary to look more closely at the "hypermedia environment" which is provided via the Internet. Hypermedia is explained by Bornman and von Solms (1996) as the combination of hypertext, which allows the user to connect information together via different paths or links, and multimedia which allows interactive access to both static (text, images, graphics) and dynamic (audio, video, animation) content. Thus the medium can also provide the content. Hoffmann and Novak (1996) place the interactivity both with the medium and through the medium, and offer a model for marketing communications in a hypermedia environment through the medium of a distributed computer network. Thus the communication is possible both person to person and through the media, as well as potentially supporting one-to-many mass communication.

Having explored the basic principle of CMC, the two key areas relative to MCB are Web site communication and marketing, and e-mail communication and marketing. Obviously there is substantial cross-over and interaction between these (i.e. Internet conferencing), but both have different characteristics and advantages.

The Web site and the marketing mix

Sandelands (1997) observes that marketing managers and researchers are using the Internet like never before, as it is now "being embraced by a plethora of providers and users". Indeed, in the space of just a few years, the Internet has been transformed from a research-oriented network for scientists and academics into something that Paterson and Brown (1996) describe as "the most powerful global network on the planet, linking people and organizations from all walks of life".

Hoffmann and Novak (1996) suggest that the Internet is an important focus for marketers for several reasons, the first of which is that consumers and firms are conducting a substantial and rapidly increasing amount of business on the Internet. Berthon *et al.* (1996) estimated that the Web had well over 30 million users around the globe, was growing at about 50 per cent per month, and the number of sites doubling every 53 days. Modhal (1995) forecast that the total core economy for electronic commerce on the Internet would approach \$45.8 billion by the year 2000. Currently, the total Internet economy is estimated at \$2 billion.

The second reason is that the market prefers the decentralized, many-tomany Web for electronic commerce to the centralized, closed access environments provided by the online services (i.e. America Online, Prodigy, Microsoft Network, etc.). In reaction to this all the major services now offer Web access to their subscribers.

Thirdly, the Web provides an efficient channel for advertising, marketing and distribution of certain goods and information services. Verity and Hof (1994) suggest that the cost of undertaking direct marketing via the Internet may be only a quarter of that performed through conventional channels.

Having realized the astonishing growth and importance of the Internet, the challenge for marketers is to integrate it effectively into their marketing communication mix. Berthon *et al.* (1996) describe the Web as a cross between an electronic trade show (with buyers and sellers browsing, searching and interacting) and a community flea market (which is open and informal). They describe the Web site as a marketing medium in the contexts of buying and selling processes and industrial and consumer marketing, and further describe the Web applications for the marketing mix as:

- providing detailed product information and specifications;
- gaining access to previously unknown or inaccessible buying influences;
- projecting a favourable corporate image;
- fostering and encouraging customer involvement with the product range;
- establishing interactively, offering product samples and building a customer database; and
- providing product distribution.

All of these are fundamental to MCB's marketing communications activities.

E-mail and the marketing mix

Like the Internet, e-mail is a relatively new tool for the purposes of marketing communications, although it predates the Internet (and has more users). With the explosion of the World Wide Web, e-mail has soared to dizzying heights in terms of its adoption by both businesses and consumers. Over 30 per cent of US households are now equipped with PCs and 45 per cent of these have modems (Armstrong and Hagel, 1996).

As the Internet continues to diffuse on a global scale, so too will e-mail availability and usage. Sullivan and Rayburn (1993) suggest that the preference for using e-mail in routine communication tasks will increase along with its ease of use and efficiency. Richard Topping (1996) states that "falling prices and corporate acceptance have made e-mail the most prevalent communications tool for companies competing on a world stage".

Sullivan (1995) assesses e-mail in terms of "media richness" (based on work by Daft and Lengel, whereby media are described as either "lean" or "rich").

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Sullivan surmises that "face-to-face provides the 'richest' form of communication, while other mediated channels are relatively 'leaner' [sic] due to the limitation that each medium places on the full scale of communication behaviours". Communication channels are ranked by Trevino *et al.* (1995) in the following order of richness: face-to-face, telephone, electronic mail, letters, notes and memos. E-mail falls between telephone and letters because it facilitates interactivity, even though it is a written form of communication.

Sullivan (1995) states that the different communication activities in which people engage can influence a person's preference for e-mail. Rice (1993) ranks communication activities on the degree of social presence. On this scale, decision making demands considerable personal interaction, while electronic document delivery requires little. This suggests that e-mail is more influential in the decision-making process than paper communications (because of the richness provided by interactivity).

E-mail, in marketing terms, is generally seen as another string to the marketing communications' bow, and of considerable importance because of its unique attributes and one-to-many capabilities. Topping (1996) generalizes that "e-mail doesn't necessarily replace the telephone or the fax. It is an additional form of communicating." This is supported by Wills and Wills (1996) who state that "computer mediation in marketing is not an end in itself; it is one more, and uniquely different, element of the marketing mix".

Commercial e-mail (dubbed d-mail) has come a long way since the early days of the Internet, yet marketers need to proceed with caution. Griffith (1996) prophesies that d-mail will define itself over the next few years, and believes that if companies step lightly, it could turn into a sophisticated way of targeting likely clients. On the other hand, misuse could lead to an adverse and potentially damaging reaction. The danger is of "information overload" which is viewed by Rudy (1996) as the "invasion" resulting from more contact than a person desires; less contact than desired leads to "isolation". Rudy states that the introduction of new media to the mix must be "implemented with a clearly defined vision and strategy, and put into practice with guidelines that your staff understand, and with which they agree".

Virtual communities and cybersociety

In order to understand how best to utilize CMC for marketing purposes, it is necessary to explore the social phenomenon facilitated by the Internet, which is dubbed "cybersociety" by Steven Jones (1995). Just as the telephone and TV have influenced society, in terms of communications, social interaction, community, entertainment and business, so will the Internet. Jones observes that, frequently, fewer comments are being made about the wonders of technology and more about the new forms of community brought about by CMC, and he explores, in great depth, the nature of society online. The key point relevant to MCB is, as explained by Sproull and Kessler (1991), that "the

Clive Hoey organization of the future will depend significantly not on just how the technology or networking evolves, but on how managers seize the opportunity it presents".

Communities formed by CMC are described by Stone (1991) as "incontrovertibly social spaces in which people still meet face to face, but under new definitions of both 'meet' and 'face". Armstrong and Hagel (1996) believe that electronic communities will emerge in the next 12 months to revolutionize online services.

Armstrong and Hagel (1996) also observe that electronic communities have existed for many years. However, in general, these are non-commercial and exist for communication, entertainment and information. The authors believe, however, that new kinds of community that are more commercially focused will soon emerge. This will happen as communities more effectively integrate communication, information, entertainment and transactions. As this happens, dominant communities will emerge in each topic area. Armstrong and Hagel (1996) state that:

companies that learn how to merge communications with other content in a commercial environment will be well positioned to become early organizers of strong communities. These first movers will also enjoy a more enduring competitive advantage, since they will have a head start in building a critical mass of community members.

Armstrong and Hagel (1996) identify four basic types of community among online users, namely:

- (1) communities of relationship (amongst people with commonalties);
- (2) communities of transaction (trade focus);
- (3) communities of fantasy (entertainment environments); and
- (4) communities of interest (defined by subject matter).

In terms of value creation, there are also four basic models:

- (1) access-based (via time-based usage fees);
- (2) content-based (allowing access to desired information);
- (3) commerce-based (drawing on transactions and advertising for revenue); and
- (5) synergistically based (taking advantage of synergies with other businesses).

Neither the types of community nor those of value creation are mutually exclusive.

Companies wishing to capitalize on the opportunities presented by virtual communities must tackle the issues of identifying target communities, designing the community, managing the community, planning a competitive strategy, and devising ownership and participation structures. It is believed, however, that communities will have a "profound effect on marketing in

general" (Armstrong and Hagel, 1996) as they will become a highly effective way to reach customers and allow them to move seamlessly from finding out about the product to making a sale.

Diffusion of innovation

Diffusion is a special type of communication, defined by Rogers (1983) as "the process by which an innovation is communicated through certain channels over time among members of a social system".

The relevance to this project is two-fold. Firstly, there is the innovation of a "new" media environment facilitated by computer mediation. It is necessary to explore the way that this is likely grow in order to contextualize the impacts on MCB's future interaction with its customers and suppliers (and how they will interact with each other). Secondly, there is the innovation in terms of MCB's new and future product offerings, which also capitalize on the developments, acceptance and growth of computer-mediated communication.

Rogers states that the main elements of the diffusion of new ideas are an innovation which is communicated through certain channels over time through a social system.

Technological innovation creates uncertainty because of its newness to the individual and, according to Rogers, motivates the individual to seek out information by which the idea may be evaluated. This is termed "innovation-evaluation information" and leads to a reduction in uncertainty about the consequences of "acceptance". This is key to MCB's marketing communications, where the company is dealing with both the diffusion of electronic media and the acceptance of electronic journal delivery. The innovation-evaluation information must be inherent in the communications mix in order to overcome uncertainty.

The attributes of innovation are summarized by Rogers (1983) as relative advantage, compatability, complexity, trialability and observability. These are affected by:

- Re-invention: the degree to which an innovation is changed or modified by the user in the process of its adoption and implementation.
- Communication: it is necessary for MCB to capitalize on the various media choices available at different stages of the diffusion process. Rogers states that mass media channels are more effective in creating knowledge of innovations, while interpersonal channels are more effective in changing attitudes (thus influencing the decision to accept or reject).
- Time: innovation decisions are made through a mental process in which the individual (or decision-making unit (DMU)) passes from awareness to a decision-forming attitude toward the innovation, then to a decision to either adopt or reject. This process has an obvious time implication, which also follows on to the rate of adoption once a decision has been made. The steps involved in this process can be identified as knowledge, persuasion, decision, implementation and confirmation.

Clive Hoey The rate of adoption (the relative speed with which an innovation is adopted by members of a social system) can be measured in terms of the number of individuals who adopt a new idea within a specific period.

In addition to the "perceived attributes of innovations" (such as the innovation's relative advantage), the adoption rate is also affected by the type of decision, communication channels, nature of the social system and the efforts of "change agents".

It is generally believed that an individual-optional decision will be adopted more rapidly than when an innovation is adopted by an organization. Obviously, in an academic library environment there can be a number of people involved in the DMU and, as a central resource, the decision to adopt can, either directly or indirectly, affect the entire organization. Rogers (1983) suggests that one route to solving this problem is to attempt to reduce the number of people involved. This means directly identifying, focusing on and targeting the decision makers (Hoey, 1994). MCB cannot influence the internal purchase mechanics of its customers. It can, however, attempt more specifically to identify and communicate with the DMU in an attempt to speed the diffusion process.

The effects of communication channels on the diffusion process need to be further explored. Delozier (1976) surmises that interpersonal and mass-media channels perform different functions in the diffusion process, although both are essential to the rapid adoption of innovations. He states that mass media are composed of impersonal, one-way channels that do not allow for instantaneous feedback, and that these are of most use at the "knowledge" stage when less detail is required. However, I appreciate that the advent of computer-mediated communications has created opportunities which allow for interactivity within a mass-media environment. This is in addition to the provision of information both through and with the medium.

Bass (1969) defines two groups of adopters, "innovators and imitators". Flett (1992) sees innovators as influenced by mass-media communication (external influence) while imitators are influenced by word of mouth. Also, innovators can and do adopt at any stage in the diffusion process.

Interpersonal communication with change agents was found by Rogers (1983) to be more effective for innovations that are complex and/or involve a change of attitude. Indeed, MCB has recently found that messages pertaining to complicated product packages (for example, the cost/benefits associated with customers "up-selling" from journals to the electronically delivered product suite) have been less than successful through mass communication media, but have received considerably more interest as the result of personal visits. Delozier (1976) builds on this, by observing that there tends to be a greater pay-off from change agent activity at certain stages of an innovation's diffusion. Obviously this is most effective when the change agent is able to influence an opinion leader directly.

The degree to which an individual adopts new ideas relatively early compared with other members of a social group is known as "innovativeness". Broadly speaking, there are five "adopter" categories (Rogers, 1983):

- (1) Innovators keen to try new ideas and sufficiently well-off to take risks; they will import the innovation into their social systems.
- (2) Early adopters the next to catch on; they are major opinion leaders, as they are only just ahead of their peers, and will be sought by the change agents to speed up the diffusion processes.
- (3) The early majority adopt new ideas just before the average number of people in their social system.
- (4) The late majority tend to adopt due to economic necessity or increasing work pressure.
- (5) Laggards tend to resist innovation, preferring tradition.

The distribution of these categories within a social group offers a basic picture of the innovation adoption over a period of time which is essential to the timing, methods and subsequent success of the marketing communication process.

A review of findings

In summary, a number of issues are seen as fundamental to the success of MCB's current and future CMC activities.

- The promotional mix has been placed within the context of the overall marketing communications process. This shows how promotional activities fit within the "big picture" of dialogue between buyers and sellers in the market-place. The impacts of personal and non-personal channels of communication in terms of influence have been explored in terms of their effectiveness. The main learning point from this was the influential effect of media-exposed "opinion leaders" on the flow of communications.
- The interactive nature of CMC has been identified, whereby content is provided both with the medium and through the medium, and retains characteristics and benefits of both personal and mass communication. In terms of the marketing communications mix, corporate objectives must be set to ensure that CMC is complementary to the "traditional" activities and processes.
- The role of the Web site has been questioned in terms of buying phases and processes in relation to selling objectives and tasks. It has been established that communications through the site need to have high mass-media effectiveness at the prospecting, need recognition and awareness stages, moving to increased personal communication at the evaluation, purchase decision and post-purchase stages.

Clive Hoey 288	• E-mail, as a marketing communications tool, has been evaluated in light of increasing acceptance and use by both consumers and businesses. It is a unique medium in that it is comparatively "rich" as a result of its interactive properties. Because of this, it is more likely to be used for decision making than are paper media. Companies must use e-mail with caution, however, for although it has great potential for marketing, misuse could prompt an adverse reaction.
	• The social phenomenon of community on the Internet provides marketing managers with a prime opportunity to capitalize on the information needs of emergent interest groups. Early organizers of communities who can provide value to "focus groups" with connectivity, communication, trade, information or entertainment will be best

• The process of diffusion can often be seen to follow a recognizable model in terms of the "rate of adoption". A number of variables have an impact on this, including the channels of communication in terms of both interpersonal communication and mass media. These become effective at different stages of the diffusion process.

positioned to take advantage of the inherent marketing opportunities.

Exploring market forces

The research underpinning my study included feedback from a series of unstructured interviews with members of MCB-UP drawn from all levels up to and including board members, and covering all areas of electronic publishing, IT and sales. The views of librarians and authors were then sought through a questionnaire. This targeted all key customers worldwide, a random sample of other libraries, and a sample of authors selected from MCB's database.

A key customer is defined as an MCB subscriber with an account in excess of £10,000. There are currently 27 key customers worldwide, who account for £2,225,000 revenue. These comprise MCB's most significant customer group, and represent the "top" library subscribers

The random sample of other libraries sought to examine the DMU structure of other "non-key" customers to establish whether there are any significant differences, and also to broaden the initial sample frame. An equal number of academic and corporate libraries were selected from the UK, North and South America, and Australia. These areas were chosen as they are the largest sales regions in the English-speaking world. This selection was performed on an "Nth name" basis to provide a truly random sample of customers.

The author sample was introduced to reflect the "reader" influence on the decision-making process. The selection consisted entirely of academic authors, who are mostly lecturers, professors and heads of department. It is believed that these individuals have most influence on the decision-making process. I had originally intended to select authors only from the same institutions as those to which the library mailing was being sent. Unfortunately, because of the data structure, it was not possible to do this. Instead a number of the most recently published authors were selected.

Two questionnaires were constructed: one for librarians and one for authors. These were designed to meet the following objectives:

- to establish the impact of electronic journal delivery on the library decision-making unit, in terms of DMU composition, influence of members and information for decision making;
- to find out the extent to which MCB authors (who will often have influence on purchasing decisions) are adopting electronic media, and are using these to publish their articles and communicate with their peers;
- to identify the current impact and level of dissemination of electronic communications in relation to other promotional media; and
- to establish the attitudes and perceptions of both librarians and faculty members towards electronic journal delivery, Internet and e-mail.

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Unfortunately the rate of response to the questionnaire was lower than anticipated, with only 31 library questionnaires (8 per cent) and 30 author questionnaires (16 per cent) being returned. While the value of quantitative analysis was therefore limited, the response gave a useful indication of current attitudes to and opinions of electronic media, together with an idea of their use and adoption.

The rapid growth and acceptance of the Internet appear to be following a Rogers-style diffusion curve, albeit at an alarming speed. The total number of Internet hosts expanded from 1.3 million in 1993 to 2.2 million in 1994 – up 69 per cent; to 4.9 million in 1995 – up 119 per cent; to 95 million in 1996 – up 195 per cent, with estimates of total users at 30 million and higher[1].

Based on the evidence to hand, it would not be foolish to believe that computer-mediated communication will have as great (if not greater) an impact on global communication and society as telephones and television.

There has been considerable speculation within academia, the business community and the popular press about the growth of the Internet and the resultant impacts from global enterprise on the individual users. Electronic communication, through the global platform of the Internet, changes the way that academics and practitioners can communicate.

To capitalize fully on these developments in terms of maximizing the potential and effectiveness of marketing communications in CMC, however, it is necessary to have a clear picture of current realities and attitudes, combined with a realistic vision of the future.

The change in the market-place for MCB products is most evident in the growth of "digital libraries". This is observed by Kessler (1996) who has documented the transition of libraries in the United States from the traditional "paper-based" information warehouses, through electronic cataloguing (in the 1970s), then to the widespread use of sophisticated information storage and retrieval systems in the 1980s. At this time regional consortia formed to pool resources and avoid duplication of effort. Early examples are the Ohio Colleges Libraries Consortium[2] and the Research Libraries Group. The result was the "birth" of the database (and "databases of databases") which became the first incarnation of the digital library.

Kessler (1996) notes that by the early 1990s "digital libraries were both actively under construction and already in intensive use by traditional media libraries". The platform of the Internet has provided a common interface between libraries, and has become "more and more the practice not only for those maintaining databases but for the public wishing to reach and use them as well" (Kessler, 1996).

The growth of the digital library, in the truest sense, has had most significant impact in "developing" nations of Asia, Africa and the Far East. Here, countries faced with the task of widespread dissemination of global knowledge do not have the financial resources, or the inclination, to build "traditional libraries". It is these nations that are most enthusiastically embracing digital libraries, and the emergence of the truly virtual library is prominent.

The element of "change retarders" must not be overlooked. Wills and Wills (1996) state that the major change retarder is "the institutional infrastructure already in place of librarians, traditional publishers and information gatekeepers". Their roles in the traditional sense are changing beyond recognition, as are their priorities, budget control tasks and in some cases physical location (Kessler, 1996). All of this takes time and motivation. Those who have not yet "caught up" are not necessarily laggards or even the late majority, as it can be seen that even the exponential growth of the Internet has not yet shown signs of nearing its peak.

The most difficult and significant task for MCB is to orchestrate the development of its customers and authors onto the electronic platform. To do this, the company must recognize (and empathize with) the vast majority of its customers who do not yet utilize, accept or fully comprehend the benefits of electronic information dissemination. MCB's computer-mediated marketing communications cannot hope to be effective without this understanding

To achieve this, it is first necessary to analyse the current situation in terms of the adoption of electronic media within the key market groups and the impact on the decision-making processes therein.

Electronic media: the current situation

It has already been established that the prime opportunities for MCB sales are in the academic library market, and it is here that attention must be paid to the impacts of CMC. An obvious clue to the acceptance of electronic media within libraries and academia is the extent to which they use the Internet for aspects of their work.

The availability of scholarly academic electronic journals and newsletters has experienced exponential growth alongside the Internet. This is documented in a research paper by McEldowney *et al.*[3] which shows an increase in electronic journals from 110 in January 1991, to 1,689 in May 1996. This involved an increase of 150 per cent in the last year alone.

Research conducted by Barker[4] on the attitudes towards CMC amongst MCB's academic authors and editors who are actively involved in the publishing process, indicated that this group is particularly well "connected". Barker found that 89.9 per cent of respondents had access to the Internet at their place of work and 37.2 per cent had access at home.

The extent to which this group uses the Internet is illustrated in Figure 5.1.

Barker's findings are supported by an extensive survey of North American universities by Cohen (1996) that established that more than 95 per cent of faculty members had access to a computer at home or in their offices. Of these, 71 per cent had access to network connections.

Clive Hoey	In order to establish the complete picture of Internet use within the academic
-	environment, I put the same question to the sample of librarians. Figure 5.2
	shows the response.
	It can be seen that both academics and librarians make substantial use of the
	Internet. Although the librarian group demonstrated a higher proportion of
	individuals who access "less than weekly", they also have a greater proportion
292	of "high frequency users". This suggests that librarians who have become
	"adopters" of the Internet have a propensity to make full use of the medium.
	The librarians and academics were asked their opinions regarding electronic

The librarians and academics were asked their opinions regarding electronic journals. It was found that although 52 per cent of librarians and 89 per cent of academics stated that they strove to embrace the benefits of electronic journals, 52 per cent and 67 per cent (respectively) indicated that they would not put particular emphasis on acquiring these. Therefore, although there is a high appreciation of the benefits, the majority of respondents are not yet at the stage where they would deliberately seek to purchase electronic journals over "traditional" journals.

Having established the widespread (albeit varying) use of the Internet and attitudes towards electronic journals amongst librarians and academics, it is necessary to paint a picture of the use of CMC within academic institutions. By



understanding the trends in how material is published, networking is facilitated and the editorial/reviewing process is evolving, it may be possible to see how electronic communication can be made most effective.

Cohen's (1996) survey found that faculty members used CMC activities to save themselves time in several activities, to seek help from others, to facilitate committee work, to share manuscripts with others and to discuss manuscripts with journal editors. It is appropriate, however, to look specifically at MCB's group of academic authors to gain a first-hand understanding of the situation.

The results of the primary research are summarised in Table 5.1 (the raw data is shown as the low response could be misleading when transposed into percentages).

This shows that, in general, the quantity of articles published only in print format is remaining the same. Overall, 39 per cent of respondents indicated an increase in publication in "electronic only" and "combination of print and electronic" journals. Those who did not indicate an increase in publication

	Increasing	The same	Decreasing	I don't use this medium	
Published material					
Your papers published in "print only" format	5	19	5	0	
Your papers published in "electronic only" format	9	3	0	15	
Papers published in a combination of print and electronics	9	4	0	10	
Networking					
Formal communication via e-mail	21	4	0	4	
Informal communication by e-mail	23	3	0	4	
Formal communication via paper	2	21	6	1	
Informal communication via paper	3	11	14	1	
Through Internet newsgroups/ conferencing	9	5	0	14	
Through electronic networks facilitated by publishers	6	2	0	22	
Through formal face-to-face discussions	3	18	7	1	
Through informal face-to-face discussions	7	19	3	1	
Through face-to-face seminars/ lectures	6	20	3	1	
Reviewing/editorial					
Receiving papers through the post	5	17	5	3	
Receiving papers via e-mail	10	5	Õ	12	Table
Face-to-face discussions with editors	0	8	1	17	Chan
Electronic communication with editors	8	4	0	14	preferences amo faculty men

Maximizing marketing effectiveness Clive Hoey through electronic means stated that they did not use the medium at all. The fact that approximately 50 per cent of respondents are at least in the early stages of adoption of electronic publishing bodes well for MCB's EP development strategies.

In terms of networking, it can be seen that for the vast majority of respondents, both formal and informal e-mail communication is increasing. Paper communications are, in the main, either staying the same or decreasing (and evidently being "replaced" by electronic media).

The primary research shows a slight increase in communications facilitated by Internet networks (for both newsgroups and publishers' forums), although a larger proportion of respondents indicated that they do not currently use these media. However, given the level of Internet use among this group and supporting evidence about the evolution of virtual communities, there is a distinct possibility that use of these media may increase dramatically over the next few years. When asked, in a separate question, their opinion of whether Internet conferencing and newsgroups are becoming an increasingly useful research tool, 77 per cent of respondents indicated that this was the case. This is supported by the fact that the total number of newsgroups and Internet discussion areas for scholarly communication has increased from 517 in January 1991 to 3,118 in May 1996[3].

The level of face-to-face communications mostly remains the same, which implies that CMC has made its greatest impact in replacing paper-based activities. It can also be seen that as regards editorial and reviewing activities, the volume of papers circulated by mail is largely unchanged, although there has been a general increase in their receipt via e-mail. Similarly, respondents have indicated an increase in communication with editors via electronic media.

Having established the extent to which electronic media are used by MCB's "prime" customer base (the general trend pointing to "more electronics, less paper"), the next step in identifying how CMC can be used effectively is to look at the decision-making environment affecting the purchase of MCB products.

Decision-making in libraries

In order to contextualize the nature of electronic communication within the decision-making environment, and to further define its benefits and uses, it is first necessary to look at the communication channels for purchase decision making in current terms.

Previous research (Hoey, 1994) conducted on the dynamics of decision making among MCB's library customers reinforced the long-standing belief that the decision processes in the most significant customer group are influenced by many factors and a variety of individuals. Both formal and informal communication structures and methods had a bearing on how the decisions were made.

It was found that the majority of librarians have substantial input into the purchasing decision, although only a small percentage have total

responsibility. Also involved were heads of faculty, lecturers/professors, finance controllers and "other" librarians (i.e. chief librarian, specialist subject librarian, etc.).

Pels (1992) identifies these "influencers" as a "decision-making unit" (DMU), which is defined as "an informal sub-unit, composed of members drawn from diverse functional areas and representing different levels in the organization".

The problem identified in my previous research was that sales into MCB's primary market were influenced by individuals other than the "named contact". The librarian is both the customer and broker, purchasing on behalf of others, who may either directly or indirectly influence the decision (Hoey, 1994).

Since the time of that research, the increased availability and use of electronic communication and products has influenced the DMU structure, hierarchy and membership. MCB must now look both at the components of the new decision structure and at the "dynamics of influence" that are an essential element in the diffusion process.

The evolving DMU

It is essential for the effectiveness of MCB's communication activities that the company is aware of how the DMU is evolving. To highlight any differences in the composition of the DMU between electronic and paper products, and also any variance in terms of "influence" of the individuals involved, the samples of librarians and academics were asked the following: *Please indicate, on the scale of one to five, the degree to which individuals are influential in the decision-making process for acquiring/renewing journal subscriptions for your library (1 = not involved, 5 = highly influential).*

The results are summarized in Table 5.2.

This highlights the number of occurrences (frequency) of the various job titles, where "degree of influence" is scored between 2 and 5. This is also shown as a percentage of total respondents. The average "score" for each job title is shown beside this.

The results indicate that both the librarians and the academics paint a very similar picture of the DMU, with the most frequently occurring and influential members being: chief librarian, librarian, lecturers and heads of faculty. Other job titles occur less frequently, but still show a moderate to high degree of influence.

Although the number of responses to this questionnaire was relatively low, it does illustrate the range of individuals who are significantly influential in purchase decisions. It also confirms the fact that there are differences between paper and electronic journal decision making. The same range of individuals is involved in both, but the librarians currently have more influence over electronic journal decisions than their academic colleagues. It was also found that seven (23 per cent) of the libraries had a specialist librarian to deal with electronic products.

Clive Hoey		Pa	aper journal	s	Elec	tronic journ	als
		Frequency	Response (%)	Average score	Frequency	Response (%)	Average score
	Librarians' list						
	Chief librarian	11	37	4	8	27	4
296	Librarian	13	43	4	11	37	4
290	Business librarian	3	10	5	3	10	4
	Subject librarians	5	17	4	4	13	5
	Head of information services	6	20	4	6	20	4
	Electronic librarian	1	3	2	2	7	4
	Acquisitions librarian	6	20	3	6	20	3
	Collection development officer		13	5	2	7	4
	Technical services librarian	4	13	3	4	13	3
	Heads of faculty	10	33	4	8	27	4
	Lecturers	14	47	4	9	30	3
	Students	11	37	3	8	27	3
	IT department	2	7	4	2	7	3
	Academic's list						
	Chief librarian	12	39	4	9	29	4
	Librarian	14	45	4	13	$\frac{23}{42}$	4
	Business librarian	10	32	4	7	23	3
	Subject librarians	9	29	4	8	26	4
	Head of information services	8	26 26	4	7	23	4
	Electronic librarian	6	19	3	8	26	3
	Acquisitions librarian	6	19	3	4	13	3
	Collection development		10	2	4	13	3
	Technical services librarian	6	19	3	7	23	3
	Heads of faculty	14	45	4	9	29	4
Table 5.2	Lecturers	20	65	4	11	35	4
Influence on journal	Students	7	23	3	6	19	3
decision making	IT department	3	10	3	5	16	4

It should be noted, however, that no two questionnaires were identical in terms of the people involved and their "degree of influence". This is an important point as it illustrates the need for an "intelligent" approach to marketing communications.

Influence over budget allocation for the journals is also of particular importance to MCB as it indicates the people who need sufficient awareness and knowledge of the products at the early stages of the buying process. Again, I put this question to both librarians and academics to gain the broadest picture of the current situation, with the results shown in Table 5.3.

This table shows the combined responses of the samples of librarians and academics. For both electronic and paper journals, the librarian and chief

	Paper journals		Electronic j	ournals	Maximizing		
	Response (%)	Rank	Response (%)	Rank	marketing effectiveness		
Librarian	16	1	11	2			
Chief librarian	11	2	20	1			
Head of information services	7	3	10	3	297		
Heads of faculty	7	3	8	4	291		
Lecturers	7	3	7	5			
Business librarian	7	3	2	6	Table 5.3		
Subject librarians	5	4	2	6	Influence over budget		
Electronic librarian	0		2	6	allocation		

librarian most frequently have the primary influence over budget allocation. It is interesting to note that the chief librarian has more influence over the budget for electronic journals, whereas the librarian has more influence over the paper budget.

Although, from the limited response to the questionnaires, it would be unwise to assume that this profile fits all MCB customers, it does reinforce the results of previous research (Hoey, 1994) which suggested that journal budgets are primarily the domain of the librarian, with a lesser degree of influence wielded by heads of faculty and lecturers.

As far as the budgets are concerned, it was discovered that 68 per cent of librarians considered price to be the most important factor in the purchasing decision (only 35 per cent of academics agreed that this is the case). By way of contradiction, however, the same percentage of librarians stated that the needs of the reader are a more important factor in the purchasing decision than journal price. This suggests that although price is clearly of paramount importance to the librarian, as the budget holder, other factors will still be taken into account.

Targeting the DMU

Speculation regarding the changing role of the librarian (Corral, 1995) prompted me to question the "point of contact" for marketing communications. The results of my survey indicate that 80 per cent of academics would prefer publishers to send product information direct to them, rather than via the librarian. To support this, only 40 per cent of librarians preferred to be the initial recipient of product information.

This is a targeting issue which applies to both e-mail and direct mail: without the names and details of the academics in question, it is not possible to effectively bypass the librarian to communicate directly with the decision makers. Of course marketing communication channels to the librarian must also be kept open. But the solution lies in avoiding promotional "bombardment" of the librarian whilst carefully co-ordinating messages to the academic "end users". Clive Hoey MCB's paper-based marketing activities have long sought to widen the "promotional net" by targeting academics in tandem with promotions to librarians. The problem remains (as previously identified) that MCB's named contact is usually the librarian. There is a low proportion of academics on the MCB customer database, so even with the purchase of "external" lists, targeting the DMU remains a "hit or miss" affair; there are no means by which to match the academic to the library and the DMU structure is different in each institution.

As demonstrated by the primary research thus far (and also supported by the testimonies of MCB's sales representatives), today's academic institutions are at various stages in terms of their adoption of electronic journal delivery, Internet use and computer-mediated communication. This situation is further complicated by the unique political, economic and social environment of each institution, the status and mindset of their opinion leaders, and the demographics and information needs of the faculty or student body. All of this conspires to make the communication (marketing) and acceptance (sales) of MCB's electronic products a difficult task.

Information for library decision making: a background for CMC activities

Although MCB has developed a substantial Internet presence over the past few years, and e-mail CMC has been utilized for conferencing and "soft sell" messages (usually announcements) to site visitors and newsgroups, it has been only recently that CMC has been aggressively used for the direct transmission of sales messages to customers.

Direct promotion via this medium is relatively new to MCB, so it is necessary to explore the context in which it must be made effective. It is the library decision-making environment which provides the framework (however varied and diverse) for the generation of the most significant proportion of MCB sales.

It has already been made apparent that for MCB successfully to speed up the process of adoption of its innovatory products, it must concentrate its efforts on those people who are deemed, in Delozier's (1976) terms, to be "opinion leaders". It is the opinion leaders who are the most receptive and influenced by mass communications (especially in the awareness and knowledge stages). They tend to be the "early adopters" and are instrumental in changing the attitudes of their "near peers" (Rogers, 1983) or "imitators" (Bass, 1969).

McClure (1980) observes that the extent of the influence of such individuals is affected by their political power, which depends on formal authority, charisma to obtain recognition and interact effectively, and the ability to contact and select information sources of value to affect organizational decision making. It is the provision of information to key individuals, through selected channels of communication, that is the prime opportunity for MCB to "influence the influencer".

McClure also notes that librarians differ substantially in the number of information sources that they contact related to their job, organization or

profession. Librarians who wish to affect the political process (i.e. bring about change) can be identified by their contact with a greater number of information sources. These people can be dubbed the "information rich", and according to McClure are more likely to be involved in the decision-making process.

To establish whether any patterns are emerging in the collection and dissemination of product information in terms of both paper and electronics, I put the following question to both the librarians and the academics: *Who tends to find and disseminate the information on journals for the purpose of decision making, and how often does this happen?* (1 = never, 5 = constantly).

The results are summarized in Table 5.4.

This highlights the number of occurrences (frequency) of the of the various job titles, where "frequency of dissemination of product information" is scored between 2 and 5. This is also shown as a percentage of total respondents. The average score for each job title is shown beside this.

It can be seen that the most significantly "information rich", for both electronic and paper products, are the librarians and lecturers. All elements of the DMU, however, can be seen to play some part in finding and disseminating the information. The differences between the paper and electronic results further illustrate the fact that the roles of individuals vary from organization to organization.

Of course, an information rich librarian might not display all the characteristics of an opinion leader. McClure found that the main differences between them are that "information rich librarians attend more professional meetings, opinion leaders have substantially more involvement in university committees. Also of interest is that information rich librarians tend to emphasise more external interpersonal contact whereas opinion leaders tend to

	Paper journals			Electronic journals			
	Frequency	Response (%)	Average score	Frequency	Response (%)	Average score	
Librarian	25	41	4	16	26	4	
Lecturers	21	34	4	15	25	4	
Heads of faculty	15	25	4	8	13	3	
Subject librarians	13	21	4	9	15	4	
Chief librarian	11	18	4	9	15	4	
Business librarian	11	18	4	6	10	3	
Head of information services	11	18	4	8	13	4	
Acquistions librarian	11	18	4	6	10	4	
Students	10	16	3	6	10	3	
Collection development officer	7	11	3	3	5	4	
Technical services librarian	6	10	3	4	7	3	
IT department	5	8	4	6	10	3	
Electronic department	3	5	1	6	10	4	

Maximizing marketing effectiveness

 Table 5.4

 Dissemination of information for decision making

Clive Hoey emphasise internal interpersonal contact" (McClure, 1980). The most significant difference is that opinion leaders have much more involvement in internal reports and studies.

To establish how the flow of information has an impact on the DMU of MCB's library customers, the sample of librarians were asked for details of the media through which they become aware of relevant journals. Their replies are ranked in Table 5.5 (1 being the most common).

This illustrates the variety of information flows from both external and internal sources. It can be seen from this that electronic media are currently the least used in communicating product information. It is interesting to note that the "richest" types of communication (face-to-face meetings, telemarketing, etc.) are ranked mid-way between paper (generally towards the top) and electronics. Informal discussions, however, are ranked as the highest "internal interpersonal medium", which is consistent with McClure's description of opinion leader characteristics.

The librarian, as the named contact on MCB's subscriber list, is usually the focal point for "customer development" marketing communications. As a result of this exposure, they should be, at least, rich in information about MCB's products. To examine how this information is disseminated to faculty members (i.e. other members of the DMU) in relation to other media, the sample of librarians were asked how they provide others with information on suitable titles. The results are shown in Table 5.6.

It can be seen that there is a close correlation between the media through which librarians become aware of journals and the means by which they provide others with information. Mailshots and advertisements/reviews remain at the top of the list.

The sample of academics were asked for details of the media through which they become aware of relevant journals. The results are shown in Table 5.7.

	Medium	Rank
	Mailshots from publishers	1
	Purchase request from other departments	2
	Advertisements, reviews, etc.	3
	Informal discussions with colleagues	4
	Mailshots from agents	5
	Mailshots forwarded by colleagues	6
	Formal decision-making meetings	7
	Searching on the Internet	8
	Telemarketing from agents	9
Table 5.5	Telemarketing from agents	10
Ranking of most	E-mails from publishers	11
common media by	Internet newsgroups	12
which librarians are	E-mails forwarded by colleagues	13
made aware of relevant	E-mails from agents	14
journals	Intranet discussions	15

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It is evident that direct mail remains the dominant promotional medium for both paper and electronic products. The high placing of "informal discussions with colleagues/peers" reinforces the need to win over opinion leaders, especially in the case of innovatory electronic products. In the case of the academics, this is also necessary from the "supply" side of the relationship, as they are also encouraged to submit articles for electronic journals.

An unexpected result is the almost negligible comparative increase of the promotion of electronic journals via electronic media. I had assumed that the promotion of electronic products would be more prominent through e-mail and the Internet, especially given the high level of Internet access demonstrated by both librarians and academics.

Another characteristic of both information rich librarians and opinion leaders is that they have "substantially greater interpersonal contact with those not involved in decision making" (McClure, 1980). This agrees with the Bass (1969) model of diffusion which states that the imitators are more likely to be

	Never	Sometimes	Frequently	Constantly	Rank
Forward mailshots to them	3	7	5	5	1
Forward e-mails to them	5	5	1	0	5
Send your own e-mails to them	3	10	2	0	4=
Send paper memos	4	8	3	0	4=
Send copies of advertisements, reviews, etc.	2	11	5	2	2
Through Internet/Intranet newsgroups	8	1	1	0	5
Through informal discussions	3	8	5	0	3
Through formal decision-making meetings	6	5	0	0	7

Media	Paper journals (%)	Electronic journals (%)
Direct mailshots from publishers	94	48
Informal discussions with colleagues/peers	74	42
Mailshots forwarded by colleagues/peers	52	26
Advertisements, reviews, etc.	45	32
E-mails forwarded by colleagues/peers	29	29
Searching on the Internet	26	29
E-mails forwarded by the library	19	19
Formal decision-making meetings	19	13
Direct e-mails from publishers	16	19
Mailshots forwarded by the library	13	10
Telemarketing from publishers	10	6
Internet newsgroups	10	16
Intranet discussions	10	10

Maximizing marketing effectiveness

Table 5.6How librariansdisseminateinformation to faculty

Clive Hoey	influenced by word of mouth. Kotler and Armstrong (1991) suggest that
	communications should be targeted initially at the opinion leaders. It then
	becomes a two-stage process of which MCB must be aware when focusing its
	promotional mix.
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Research conducted by Nan Lin (1976) describes the member components of communication networks as:

- opinion leaders (to whom individuals go to seek information);
- · participants (who seek information); and

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• isolates (who do not seek information from others).

The opinion leaders may or may not be members of the DMU. However, their influence is vital, especially as concerns the adoption of innovations by the other key individuals.

It has already been noted that no two academic organizations are identical in terms of the participants in the decision process, their level of influence and their rate (and methods) of adoption of electronic media. However, armed with this investigation into the scope of composition of the library DMU, the channels of information, and the effect of information rich "influences", it is now possible to understand better the use and effects of CMC on the decision-making process.

The importance of CMC as an aid to the decision-making process is evident in the high percentage of librarians and academics who claim that they access the Internet more than once a day. CMC facilitates interactive transmission of product information from publishers and provides DMU members with the means to discuss, evaluate and compare product options.

The role of the Internet site and interactive electronic environments in terms of information provision will be discussed in the section "EPD sales and marketing strategy". The research thus far, however, has demonstrated that the most "popular" form of CMC amongst librarians and faculty members is e-mail. Evidence presented in "The theory behind the practice" indicates that e-mail usage is likely to become even more widespread over the next few years.

E-mail communications to "receptive" customers are likely to be much more effective than less "rich" media, such as direct mail. It is therefore necessary to investigate further customers' attitudes towards e-mail communications, in order to establish the possibilities for marketing communications.

Opinions on e-mail communications

The sample of academics and librarians were asked their opinions on the use of e-mail. The majority of librarians (71 per cent) and academics (77 per cent) stated that they increasingly used e-mail messages for communications with colleagues. Also, the majority of librarians (58 per cent) and academics (66 per cent) believed that, in general, they attached priority to e-mail communications. This reinforces the importance (and acceptance) of e-mail as a means of communication within the academic community.

The potential of e-mail from the marketing communications perspective is also supported by the fact that 58 per cent of librarians and 70 per cent of academics stated that they would be happy to forward relevant e-mails to their colleagues.

In terms of how receptive the customers are to receiving e-mails from publishers, 58 per cent of librarians and 66 per cent of academics stated that they are receptive to e-mail communications about products to which they subscribe; 41 per cent and 36 per cent, respectively, stated that they wanted to receive e-mails about relevant products. It should be noted, however, that 36 per cent of librarians and 40 per cent of academics also felt that e-mail is an inappropriate medium for publishers to use for communicating information on products and services.

The sensitivity surrounding e-mail is further illustrated by the fact that 39 per cent of librarians and 43 per cent of academics found unsolicited e-mails offensive, even if they are of interest to them. It is clear that there is a risk of offending customers through unsolicited e-mails. To reduce this risk, I believe that e-mail communications must either be limited to matters of direct relevance to the customer's subscription, or ideally be by "invitation", containing sufficient inherent value (i.e. providing value added content over and above that of a basic product promotion) to be of genuine benefit to the recipient.

Summary of findings and implications for MCB

This section has provided an understanding of the rate of Internet growth and the level of adoption amongst libraries and the academic community. It has shown that the Internet, as a common platform for information dissemination, has had a significant impact on academic libraries worldwide. This is in terms of product choice (journals versus databases), budget allocation, the evolution of library consortia, and the changing roles of librarians' and faculty members' purchasing influence. The diffusion process is well underway, and the indications are that the adoption of electronic information by libraries is set to continue apace.

Most academic libraries have some element of digital information retrieval ranging from the truly "digital library" (with little or no resources of printed material) to libraries with only superficial access to electronic information.

Use of CMC amongst the academic community, as a means of communicating with peers, is widespread and still increasing, as is the acceptance of electronic journals as a means of disseminating information, and the use of the Internet as a serious research tool. CMC is far from being the dominant form of communication, however, and the level of adoption varies considerably. Rogers (1983) states that the rate of dissemination of knowledge about an innovation is more rapid than its rate of adoption, and so time must be taken into account. As the diffusion process continues, the evidence suggests that the late majority will catch up in the near future, although this will not happen over night.

So far, my analysis has confirmed MCB's belief that the future of the business lies in the ability both to capitalize on the benefits of electronic publishing and to communicate electronically with customers and authors. More importantly, for the purposes of this study, it has highlighted the varying levels of adoption amongst MCB's customers, and given a "snapshot" of the scope and influence of the evolving DMU.

This understanding is vital for MCB's ideal of nurturing customers and authors onto the electronic platform, and also to maximize the effectiveness of marketing through CMC. The key point is that no two academic institutions are identical in terms of their rate of adoption of electronic media or the composition and dynamics of the DMU affecting this. Customers have in addition shown different attitudes towards e-mail as a means of communicating product information, which must also be taken into account.

The theories behind the roles of opinion leaders and information rich individuals in assisting the diffusion process and influencing purchase decisions also highlight the need for a more intelligent approach to marketing communications. This should also include the facilitation of some form of "connectivity" between the influencers and their followers to further assist the diffusion process and ultimately increase sales.

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EPD sales and marketing strategy

The overall sales and marketing strategy of the Electronic Publishing Division is to "optimize the current customer base by providing superior electronic product propositions" (Strategy Document, 1996, Electronic Publishing Division). It is a strategy of introducing subscribers to the benefits and cost efficiencies of electronic publishing, with the deliberate intention of weaning customers onto an electronic platform.

Sales activities include:

- the generation of new EPD product sales to both customers and prospects;
- "up-selling" existing customers to either collections of journals or the entire Emerald portfolio by upgrading their CD-ROM or online access;
- · cross-selling and up-selling Anbar Electronic Intelligence products; and
- customer retention by providing full electronic access to the Emerald portfolio to high-value customers (i.e. those whose sales value exceeds the full $\pounds 18,000$ price of Emerald).

Indirect sales revenues are generated through the provision of electronic product enhancements, which justify price increases and aid customer retention for journals that have been traditionally published in paper format. This process also aids the customers' transition onto an electronic platform.

MCB is in the early stages of knowledge and experience in terms of marketing its electronic products. Already the EPD marketing strategy has evolved as the company feels its way along a new route to communicating with its customers and providing online product delivery.

One such "evolution" involved the decision not to offer the discounted "upsell" of individual journals on an electronic-only format. It was felt that this would have an adverse effect on traditional revenue streams and cause confusion about MCB's pricing strategy. The solution was to offer the sale of electronic "suites" of journals at a fixed price. The targeting would be to selected customers to maximize the up-sell potential and reduce the likelihood of "cannibalizing" existing revenue streams.

Another example of strategy evolution is a shift of resources to accommodate an increase in personal sales visits by MCB's sales manager and a newly appointed sales representative. As demonstrated by Rogers (1983), innovations that are complex or involve a change of attitude are best communicated by interpersonal means. MCB has found this to be the case, and has adapted its strategy accordingly.

This fits within an overall "relationship sales strategy" which is defined as "the development, exploitation and implementation of a relationship selling Maximizing marketing effectiveness

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Clive Hoey	strategy to ensure the transition of our customers to electronics and prevent the defection of our customers to competitors" (EPD paper presented at the March 1997 board meeting). Tactics to date have included:	
	key customer correspondence;	
306	key customer telephone contact;	
	• gap analysis of the major UK institutions;	
	• sales visits;	
	• presentations to groups and consortia;	
	 presentation of product briefs at conferences; and 	
	• e-mail data capture in terms of the person ordering the subscription, the	

• e-mail data capture in terms of the person ordering the subscription, the person registering for online access, and the e-mail numbers of "users".

It can be seen that the strategy is one of focused objectives and a flexible, responsive approach.

Current direct sales operations for electronic products

MCB's Internet site (at http://www.mcb.co.uk) is the focal point for the entire enterprise. It is the one place where all of those who have an impact on the business, from the supply side (authors, editors) to the demand side (agents, librarians, "end users"), may be brought together, which consequently provides a unique opportunity for the company to add value through the provision of information, connectivity and current awareness

The Internet site is MCB's "global shop window", providing comprehensive and customer-focused information on all products and services. Each journal has its own homepage including a "product overview" benefits statement, delivery details (i.e. paper, CD-ROM and Internet) and benefits, price and ordering information, access to recent contents pages and abstracts, editorial information, calls for papers and links to Internet conferences. This is supported by online "free trials" of electronic journals and ordering facilities for sample copies of paper journals.

As a "provider of information", the advantage of MCB's being online is that the company is in a position to facilitate the collection, processing, promotion and supply of articles electronically through the platform of the Internet. The Internet site provides a central infrastructure for content delivery, marketing communications, sales support, operational information, and the additional benefits that can be supplied by interactivity, community and customerfocused information resources.

The following core functions are provided:

- product information;
- · customer services information and support;
- information and support for agents;

- information and support for librarians;
- · Internet conferencing (for all journals); and
- global forums (being developed for all interest areas).

MCB actively promotes the site through all the available media opportunities in order to maximize site "traffic". References to the Internet site are included in journals (and "e-fliers" included therein), leaflets, promotional letters, newsletters, and in all communications with authors, agents and suppliers. In addition, all individual products and services are promoted heavily online through registration with search engines, databases of electronic journals, and the use of reciprocal hypertext links with complementary Internet resources.

MCB's Internet site and the marketing communications mix

Delozier (1976) presents a definition of marketing communications as:

- (1) the process of presenting an integrated set of stimuli to a market target with the intent of provoking a desired set of responses within that market target; and
- (2) setting up channels to receive, interpret and act upon messages from the market for the purpose of modifying present company messages and identifying new communications opportunities.

MCB's CMC activities provide the stimuli (current awareness, content, added value and interactivity) and channels of communication (through forums, conferences and e-mail) to facilitate this.

All aspects of the marketing mix are communicated through the site. Comprehensive product information is provided through journal homepages and "product forums" (i.e. Anbar and Emerald). Price lists are available for each product and these are supported by information on pricing strategies. "Place" is communicated through online ordering details, customer services information, and also through the provision of journals online (cyberspace connecting product and place).

Promotion within the site is largely facilitated by its "navigability". This is the combination of benefits statements and hyperlinks together with a customer-focused structure, which provide cues or pointers (together with instant accessibility) to the most relevant products within the customer's area of interest. This is supported by added value information for key groups, providing the incentive to log on through access to current awareness and resources.

In terms of the Berthon *et al.* (1996) model of "Web effectiveness in buying and selling activities", MCB's operations can be assessed as shown in Table 5.8. This demonstrates the extent to which the Internet site assists the buying and selling process throughout all the various stages, and to this end is an extremely valuable marketing tool.

The site supports marketing communications from traditional media and provides its own marketing communication messages through its content and Maximizing marketing effectiveness

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Clive Hoey	Buying process	Seller objectives	Internet operations/tasks (examples)
	Awareness of needs	Generate awareness	List server mailings, search engine registration, directories, communication through agents' online activities, reciprocal links
308	Information processing Evaluation of	Feature comprehension Lead generation	Information from journal homepages, exposure to the products through forums Forum vistors, requests for information, requests
	purchasing	Leau generation	for "management updates", online sample copy requests, requests for online trials, cross-selling to customers Online trials, online connectivity with opinion leaders/near peers, "management update" subscribers, sample copies
	Purchase decision	Performance comprehension	Online trials, interaction with current subscribers and authors, "seed" organizations
	Purchase	Negotiation of terms	Customer services and ordering facilities (and negotiation with key clients, offers, etc.)
Table 5.8MCB's Internet site'seffectiveness in termsof buying and selling	Post-purchase evaluation	Reassurance	Benefits statements on the journal homepage, exposure through the forums, measurement of usage, quality ratings, online journal meeting place, e-mail update service

interactivity. The Web site is much more than a computer-mediated "shop window" and communication link with customers (although this is an essential part), but provides an opportunity to develop and exploit a "virtual value chain".

Exploiting the virtual value chain

Bruce (1996) surmises that an organization's value chain is defined as the collection of activities that produce, market, deliver and support its products or services. This is a series of value adding activities that links activities and participants from supply to demand (Rayport and Sviotka, 1995). Bruce observes that the information industry is undergoing a significant change, and that companies are beginning to change their roles in the value chain. This can be summarized as follows:

- (1) Content owners (such as MCB) acquire, produce, package and market the information.
- (2) Aggregators and resellers source, package and sell the content. Players include UMI, Information Access, Dialogue and, more recently, the four main subscription agents (Swets, Blackwell, Faxon/Dawson and EBSCO) through online journal access.
- (3) Data transporters (such as BT and AT&T) who provide the transmission infrastructure.

- (4) End-user technology developers (Reed Technology, Microsoft) who provide search and retrieval technology.
- (5) Customers (libraries, academics, practitioners) who translate the content into use.

The key difference between the physical and virtual value chains is that the virtual value chain treats supporting information as a source of value in itself, not just an auxiliary element of the value adding process. Rayport and Sviotka (1995) state that supporting information can become a source of value through the "mirror" of the real value chain in cyberspace. The two chains must be managed distinctly but also in concert.

Through the platform of its Internet site, MCB interacts with chain members and provides a framework of supporting information (resources) specifically for each chain member. The interconnectivity of the site allows specific resources to add value to the activities of the other chain members. Figure 5.3 illustrates how this is achieved, using a simplified illustration of the supply chain as an example.

Here, each element of the chain is provided with, and provides, value added information through both their own resources and the resources of the other members. Web connectivity is further facilitated by forum networks and conferences which are underpinned by journal content.

The result of this connectivity is to "energize" the information flows between the key players, which has a profound impact on MCB's marketing effectiveness (Staudt and Taylor, 1965). Information on the product offering, through the marketing communications mix, is inherent in the hypermedia



Figure 5.3 MCB's virtual value chain created from and managed by information and connectivity in hyperspace

Clive Hoey structure that is provided, and as a consequence is further exposed to the market "traffic". This is consistent with the Hoffmann and Novak (1996) model which shows the content both in and with the medium.

Creating value through connectivity

MCB, as the owner and maintainer of this environment, is able to orchestrate the "coming together" of chain members, provide them with added value, and extract its own value from the new relationships that have been created. It is essential for the success of MCB's computer-mediated marketing activities that a user-friendly, beneficial and inviting environment is created to facilitate such interconnectivity.

The two prime opportunities for achieving this are the company's Internet conferences and forums.

Internet conferencing

MCB provides Internet conferencing for all its journals through a Virtual Conference Centre (http://www.mcb.co.uk/confhome.htm). The aim of this is "to provide a journal sponsored forum to offer academics and professionals the opportunity to meet virtually and discuss the current issues in their subject area" (Heal, 1997). Conferences may be convened only by subscribers and those working in subscribing organizations. However, participation by anyone interested in the field of study is welcomed.

Internet conferencing allows MCB to capitalize on the interconnectivity provided by the Internet and its virtual value chain. It connects authors and subscribers, and adds value to both as a result. Figure 5.4 demonstrates the inputs, outputs and connectivity of virtual conferencing.

It can be seen that this model of Internet conferencing presents a "feedback loop" between authors, the journal and the subscribers. To cement this, the proceedings of the completed conference are published in the supporting journal. The connectivity between authors and subscribers therefore has an impact on the published content.

Learning in respect of the subject of Internet conferencing has so far included the fact that "Internet conferencing as a means for disseminating and discussing concepts, ideas and problems has almost unlimited potential"



Figure 5.4 Connectivity created by virtual conferencing (Keller *et al.*, 1996). Heal (1997) observes that there are thousands of newsgroups devoted to all manner of subjects; however, few afford the opportunity for thorough recording or analysis. This is the key to the conferencing strategy.

Other lessons learnt include the fact that new discussion papers should continually be posted on the site throughout the period (to maintain interest), peer review is required to maintain academic standards, and low participation does not necessarily mean low interest.

Keller *et al.* (1996) found that the main advantages of Internet conferencing are that it:

- offers considerable savings in expense, time and inconvenience compared with traditional conferencing;
- removes physical limitations of time and space; and
- provides global bridges for discussion between academia, agencies, practitioners and the public.

MCB remains on a steep learning curve with its conferencing activities. It is clear, however, that as a means of adding value, generating content and exposing key parties to other product offerings and information, it presents great possibilities to the marketing communications mix.

Internet forums

The emergent potential of virtual communities on the Internet is viewed by Hagel and Armstrong (1996) as "the kernel of a fundamentally new business model". They believe that people are drawn into virtual communities because they provide an engaging environment in which to connect with other people. This is based on people's desire to meet the basic needs of interest, relationship, fantasy and transaction.

The concept of community on the Internet is the crystallization of social behaviour patterns in hyperspace, and the comparison is made by Wills and Wills (1996) to the theories of "central place" and "retail gravitation". This is supported by the conclusion that "most academics and managers have many other better things to do with their working hours than search or surf the Internet". People need a "one-stop shopping mall", which can provide, upon regular visitation, access to everything that they need or want to know.

Wills and Wills (1996) state that the benefits of electronic publishing to readers are founded on two predominant motivations:

- (1) to stay up to date and aware of developments in their areas of interest; and
- (2) to search the body of knowledge on a given topic.

As such, MCB has resolved to champion communities of interest (forums) focused not on journal products *per se* but on the broad frame of current awareness within which the latest articles in any one of them falls.

Clive HoeyMCB has pioneered the creation of forums that complement the core
management disciplines in which it publishes. These are complemented by
industry focus forums that have been created to serve specific groups (initially,
those industries for which MCB publishes journals, and several others
connected with International Management Centres (IMC)). In addition,
"supporting forums" for authors, editors, librarians, agents and customers
provide community, interest and information for the key players in the supply
and value chain. There are also strategic links with "alliance" forums created
by other organizations.

The current list of existing and planned (*) forums is as follows:

- (1) Product forums
 - Emerald Showcase (forum for the Emerald database)
 - Anbar Management Forum
- (2) Core discipline forums
 - Global Qualnet (quality management)
 - HR Global Forum (HR management)
 - TopMan Global Forum (strategic management)
 - M&L Global Forum (marketing and logistics management)
 - Library Link (library management and professional development) (also a "supporting forum")
 - Production Management, Operations and Logistics *
 - Materials Science & Technology *
- (3) "Industry focus" forums
 - Property Management Forum *
 - Hospitality & Tourism Global Forum *
 - Policing *
 - Health and Environment Forum *
 - Airport Management (IMC forum)
 - Petro Chemicals (IMC forum)
- (4) *Supporting forums*
 - Library Link
 - Literati Club (for authors)
 - Editors' Forum
 - Agents' Forum
 - Customer Services Forum
 - Internet Free Press (facilitating independent publication of ejournals)

- Forum Convenors' Forum
- Internet Research Forum
- (5) "Alliance" forums (not "owned" by MCB)
 - International Management Centres
 - Virtual University Press
 - Asia Pacific Management Forum

The structure and content for the core discipline and industry focus forums represent the ideal model that MCB is striving to adopt. Current awareness is generated through the connectivity of social interaction in the hypermedia environment, together with the timely provision of valuable "grey literature", such as news, reviews and editorials, that would not necessarily be captured in electronic journal databases. These are often extracted from the "supporting journals" (i.e. the journals that are relevant to the forum). "Buzz" is further created through the role of a forum convenor or subject guru who generates interaction between forum members, and keeps the forum both lively and attuned to interesting changes and developments within the subject area.

The resources archive of the body of knowledge is provided through journal content (in the traditional sense) accessible electronically to journal subscribers. Non-subscribing forum members are catered for with "Forum Manager" selections of abstracts and articles from the Anbar and Emerald databases.

Each forum is being developed to have, as a minimum:

- current awareness on global issues as they happen;
- · ongoing virtual conferences on key issues;
- a virtual meeting place for each supporting journal;
- annual reviews and trends;
- focused/targeted action learning forums and workshops;
- links to accredited Coolsites elsewhere on the Internet;
- archival literature by Anbar Electronic Intelligence;
- · any number of associated professional services via advertising.

The relationship between forums, journals and conferences is illustrated in Figure 5.5.

Critical mass is vital for the success of the forums. It is anticipated that this will be generated from:

- journal subscribers the forums are to become an integral enhancement to the journals, and therefore an incentive for them to log on for current awareness and networking;
- the "customers" of the supporting forums (librarians, authors, etc.) who need MCB-specific information to do their jobs, and also to benefit professionally/ academically from the opportunities presented by the interest forums;



- · cross-disciplinary interaction between forums;
- · searchers for current awareness who will gravitate towards the location.

It is then expected that the forums will gather momentum as they become the "talked about spot" and "the place to go and be" (Wills and Wills, 1996).

This will be complemented by awareness generated by traditional communications media, together with comprehensive online marketing and "interception" through strategically placed hyperlinks.

It is recognized that the structure and content, together with the basic routines for forum management, must be in place and strictly adhered to if the forums are to become consistently useful and credible. The need for this is highlighted by Baym (1995), who states that "community is generated through the interplay between pre-existing structures and the participants' strategic appropriation and exploitation of the resources and rules those structures offer in ongoing interaction".

The "pre-existing structures" of MCB forums must therefore offer an environment that facilitates the "interplay" (interaction) and exploitation of resources (through ease of navigation, consistency of layout, customer focus and clear benefits). To facilitate this, it has been agreed that the interest forums will be regimented by the ISO 9002 quality standard.

Forums create the prime opportunity for MCB to enhance its marketing communications through the hypermedia environment. As Armstrong and Hagel (1996) observe, "virtual communities not only gather potential purchasers together, but they also arm them with far more information than they have typically been able to access conveniently and cost effectively in the past". By adding value through the provision of content (and facilitating information flows between members), MCB can both draw customers in and expose them to the elements of the marketing communications mix. Figure 5.6 shows a simplified picture of how this may be achieved.



Each supporting journal is prominent within the forum, and hypertext links transport the visitor to the journal homepage where all the relevant information awaits (together with the option for a free trial). This is augmented through high exposure to journal content which is selected from the Emerald and Anbar databases, providing added value in both current awareness and resources archive. In turn, this promotes the databases as products in their own right.

The "energizing information flows" (Staudt and Taylor, 1965) are strengthened by the conferencing and journal meeting place interactivity, thereby enhancing connectivity (and adding value) between subscribers, potential subscribers, editors and authors.

MCB's Internet site and the innovation decision process

By providing a medium for communication of the marketing mix, added value content, current awareness and "connectivity" for key groups, the Internet site also has a vital role to play in the "innovation decision process". It has already been demonstrated that MCB's customers are at differing stages of adoption in terms of electronic publishing innovations, so it is essential for MCB to be aware of how its CMC activities can affect and assist this.

The innovation decision process is defined by Rogers (1983) as the mental process through which an individual (or DMU) passes from knowledge of the innovation, to forming an attitude towards it, to a decision to adopt or reject the implementation of the new idea and finally to confirm the decision.

There are five steps to this process for MCB:

(1) Knowledge. Once an individual (or DMU) is exposed to the innovation's existence, it is necessary to gain an understanding of its functions, performance, specifications and benefits. As the most comprehensive single source of product information, the Internet site provides the ideal environment for the collection of detailed product knowledge.

Clive Hoey (2) *Persuasion.* This phase occurs once the individual forms a favourable or unfavourable attitude towards the innovation. It is at this point where the messages from the marketing mix must be most effective to reduce uncertainty. MCB's Internet site provides an ideal environment as a "one-stop" information resource for all aspects of the product. The customer is further "persuaded" through the ability to take a free trial. This may also be assisted through the exposure and access to selected product content which is provided by the forums.

- (3) *Decision*. This is brought about through activities that lead to choice or rejection. The Internet site supports the decision process by providing comprehensive product and customer service information. Also, where a number of people may be involved in the purchase decision, the Internet site facilitates "ease of access" to the information from any other parties. This is strengthened by the connectivity provided by the journal meeting places and Internet conferences, which bring together authors, editors and readers. This exposes individuals to "near peers", early adopters and opinion leaders from other organizations, with whom they would not otherwise have had contact.
- (4) *Implementation*. The product may be put to use through the medium of the Internet site, as the content can be accessed through the gateway of the journal homepage.
- (5) *Confirmation.* At this stage, reinforcement of the purchase decision is sought. This is assisted by constant exposure to the product benefits from the homepage, and also by the visible use of the products by near peers from within the forums.

It is clear that the Internet site can simultaneously assist in all stages of this process, which is evidently so important for the future success of MCB's electronic products.

Marketing communications via e-mail

Effective communication via e-mail is essential for the future success of MCB's sales strategies. The reasons for this include the following:

- It has become increasingly apparent that e-mail is one of the most direct, efficient and immediate ways of communicating with MCB's customers, authors and agents.
- The "information rich" nature of e-mail makes it a more effective medium than direct mail. It can be easily annotated and forwarded to colleagues, response can be immediate and effortless, and hypertext links within the message can transport the customer to a specific Internet location (facilitating access both directly to the product content and to all aspects of the marketing communications mix). All of these factors make e-mail a more conducive medium for decision making.

- E-mail communication has the potential to keep subscribers informed about products and services.
- It is possible to assist the journal renewal process by simultaneously informing both librarians and end-users of when their subscription will expire, reinforcing benefits messages and news about the journal and providing a seamless link to customer service facilities.
- Journal usage can be increased by e-mail update services which inform the subscriber of when their journal has been updated online. It should be noted that in the research reported here, 80 per cent of respondents felt that such a service would increase journal usage. This information can then be used by the subscriber as "post-purchase evaluation" and confirmation of the reasons for the journal acquisition.
- There is potential to develop a range of new e-mail-based products and services to complement the existing portfolio.
- As MCB develops its online portfolio, e-mail is an appropriate method of communication, which is likely to be especially effective for the sale of electronic products.

To capitalize on these benefits, MCB aims to collect the e-mail numbers of all its customers, authors and agents. A comprehensive campaign is underway to facilitate this, although currently MCB has a relatively low number of e-mail numbers for its named contacts.

There are two main e-mail activities undertaken by MCB for the direct promotion of its products and services, namely:

- (1) e-mail follow-up campaigns to online free trials; and
- (2) messages sent to "information list servers".

List servers allow a visitor to MCB's Internet site to register their e-mail number with any one of MCB's products or interest areas. Customers may also opt to join a specific list server offering a specific information service. An example of this is Anbar's "management updates by e-mail" service, which mails out selections of article abstracts.

There are currently approximately 270 list servers on MCB's site. The e-mail numbers are held in "static" lists which are not interlinked in any way (hence there are no cross-profiling facilities and de-duping between lists is not possible) and they provide no "selectable" criteria other than the name of the list. From a direct marketing point of view, this system is less than attractive. However, the advantage is that bulk e-mails can be transmitted quickly and effectively to a specified interest group.

The most successful list server campaigns have involved the provision of free content such as newsletters and management update services, rather than mere duplications of paper mailshots. These usually benefit from embedded links in the e-mail message which transport the customer directly to a specific location on the Internet site.

Clive Hoey Findings and implications for MCB

The Internet site is an invaluable support for traditional marketing communications, whereby messages from the communications mix are reinforced through detailed product information together with added value information, resources and product exposure. The site is also a substantial promotional entity in its own right, as thousands of online information seekers are drawn in on a daily basis. It assists in all phases of the buying and selling process, and provides a seamless link between the customer and the product.

The Internet site is the keystone of the business, bringing together all the elements of MCB's value chain, communicating with and connecting suppliers (authors, editors), intermediaries (agents, libraries) and customers (including authors, editors, librarians and agents). The value that is provided by this connectivity further enhances the benefits of the site to all visitors.

It is clear that the connectivity and interest-specific value provided by the forums and Internet conferences are core to the success and communications effectiveness of the site. It is this environment that provides the real value to the visitor in terms of both content and current awareness. The resultant energized information flows, generated by communications between key parties, are immersed in an environment of product content and inherent marketing messages.

The potential of direct e-mail communications has also been highlighted. It is apparent that e-mail can be an extremely powerful and effective marketing communications tool and technological advances are likely to make it even more so (recent developments include the ability to e-mail the entire Web page to the customer, although it will probably be some time before there is a critical mass of compatible software). MCB is in the early stages of learning regarding e-mail messages, however, and this, combined with mixed feelings amongst customers regarding the suitability of promotional messages, has made the integration of e-mail into the promotional mix a difficult task.

MCB is currently walking a fine line between capitalizing on the benefits of e-mail communication and the varying rate of acceptance of e-mail amongst its customers and prospects. It is necessary for MCB carefully to moderate (and learn from) its e-mail activities. It must also endeavour to provide customers with an added value service which is of genuine benefit in terms of either current awareness or provision of content. In this way customers are likely to become more receptive to e-mail communications, which will ultimately benefit the effectiveness of MCB's overall marketing communications mix.

Which way forward?

MCB's greatest contribution through its electronic ventures is to put readers and writers in touch with one another. Forum activities and Internet conferencing are now at the heart of the business as this is the most dynamic incarnation of the publisher's role:

- · to further facilitate the dissemination of published material;
- to add value through both traditional means and the focus, branding and connectivity of the forum or conference;
- to use the electronic environment to communicate both with and through the content; and
- to form an unprecedented "feedback loop" between reader and author.

It is clear that the company must enthusiastically persevere with its Internet initiatives. By building, sustaining, promoting and developing this environment in a structured and customer-focused manner, MCB can expect to attract members of the value chain into the arena of its Web site, ease the process of adoption of its electronic products, and capitalize on a critical mass exposed to its product offerings and marketing communications.

The diffusion process for acceptance of electronic media is far from complete. However, early indications suggest that widespread adoption by both the early and late majority is due in the very near future. MCB must continue to nurture and educate its customers towards the benefits of electronics, be there for them when they are ready to take the first steps, and empathize with those who are at early stages of the adoption process.

To this end, communication is the key. The "diffusion effect" (Rogers, 1983) means that until an individual has a certain minimum level of information and peer influence from his or her system environment, they are unlikely to adopt. Once the customer has been introduced to the "connective" environment provided, for example, by a forum or conference, they are exposed to a wealth of product information, and otherwise unavailable contact to "near peers" and opinion leaders who may influence the decision to purchase. The analysis has provided a strong foundation for understanding how this can be capitalized on. The first stage of the process, however, is in the effective communication of benefits – providing both the awareness and knowledge which encourage decision makers to log on.

Although communication through every available means must continue to be fully utilized (through traditional paper promotions, messages in the journals, newsletters, sales visits, etc.), it is e-mail that presents the most attractive media opportunities for MCB's electronic sales initiatives. E-mail has direct mass-media potential combined with information rich qualities which are more conducive to decision making than paper communications. This is because e-mails can be annotated, effortlessly forwarded to interested parties, and provide instantaneous access to the Internet site and ultimately the

product. It also has the potential to form a direct link between MCB and the readers of the journals, and consequently those individuals who have influence over the purchasing decision.

It can be assumed that as the diffusion process continues, e-mail will soon become a globally accepted and preferred communication medium. MCB's strenuous efforts over the next 12 months will hopefully gather the e-mail numbers of the vast majority of customers, authors and suppliers. E-mail numbers of prospects and journal users are also being collected through various "gateways" and interfaces on the Internet site (e.g. forum visitors, journal free trials and access, and conference participants). MCB must ensure that it can fully capitalize on this information for "intelligent" marketing communication purposes, to further aid the decision-making process and ultimately increase the adoption of its electronic products.

It is clear that MCB must step lightly with e-mail communications as many customers remain in the early stages of adoption. Misuse of e-mail will undoubtedly have a negative effect on future sales potential. The facilities must be in place to enable sales staff to maximize e-mail efficiencies, whilst avoiding the inherent pitfalls. The following options are intended to outline the best course of action to complement MCB's current communications activities and to provide a foundation for future marketing opportunities and product development.

Evaluation of options

Option one: list server development as "independent" e-mail communications This option reflects perusal of MCB's e-mail collection and communication activities in current terms. In other words, it means continuing to use and develop list servers to enhance products through the provision of information services, and to provide new e-mail-based product offerings. List servers provide the framework for bulk e-mail with which MCB is most familiar, so it is appropriate to assess their suitability for future marketing effectiveness.

There are many registration points on MCB's Internet site which allow visitors to join interest-specific electronic mailing lists through list servers. Currently, MCB has a separate list server for each journal, interest area, information service, conference and forum. They facilitate bulk e-mails to visitors who wish to be kept up to date with developments, product announcements, calls for papers, conference updates, added value management information services, newsletters, etc. Also, as previously mentioned, products can be enhanced by the provision of e-mail list servers which notify subscribers when their journal has been updated. Product and marketing development through list servers includes "keyword" selection from the article database – whereby articles or abstracts may be periodically e-mailed to the customer based on their pre-defined keywords.

The potential to develop list servers further as a marketing resource lies mainly in the creation of a greater number of lists, offering more specific information choice and connectivity, together with an emphasis on providing added value current awareness and content. This may involve the greater use of

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focused newsletter mailings, including examples of content drawn from journals, which have proved reasonably successful for broader management topics. The implications here relate to the time and resources needed to create real value and a sense of community amongst recipients, and the fact that the more specific the topic, the more difficult it is to provide regular high value content.

From a marketing point of view, however, the main benefit of list servers is that they are an extremely cost-effective and efficient method of mass communication. Messages can be targeted according to the name of the list, and sent out instantaneously with no direct mailing costs. They present a simple but effective communication link with customers, who in turn benefit from information tailored to the list that they have specified.

Also, other than the initial set up and moderation of interactive lists (e.g. for conferencing and journal meeting places), and because list subscribers can add or remove themselves from the service, there is very little administration involved. List servers present an "easy" solution to mass communications in the computer-mediated environment – from the point of view of both the marketer and the customer.

However, the effectiveness of list servers for "intelligent" marketing must be questioned. List servers are "dumb" mailing lists, which capture only the e-mail number and no supporting data. This means that recipients can only be selected by the name of the list, nothing more. It is not known who is on the list, or to which other lists or products they might subscribe. Also, it is possible for an individual to be on any number of list servers, which drastically increases the risk of bombardment – the danger being that customers will switch off from MCB electronic communications and thus reduce the potential for adoption of EPD offerings.

Another problem is that the information held on list servers is not sufficient to link the thousands of Internet site visitors and participants to the subscriber data held on MCB's customer database. Considering the likelihood of increased acceptance and use of e-mail services by MCB's customers, together with the need to equip the company with the means to target specific DMUs effectively (named contacts and readers) according to their information requirements, this is a serious shortfall.

It is clear that although list servers provide efficient basic masscommunication facilities, they do not allow for the level of marketing intelligence or data manipulation which MCB would hope to achieve in order to capitalize fully on this medium.

The further development of list servers as the sole platform for MCB to build its future e-mail communication activities is not recommended. Building relationships with customers and prospects through e-mail is too important an activity for MCB to rely on such a blind and non-informative communication tool. It is through e-mail that the prime opportunities for future customer development, and electronic product adoption, will be found. List servers have their place in the short term, however – as a stepping stone to more refined email data capture and marketing use.

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Option two: electronic mail and database development

This option explores the possibilities for the development of an "intelligent" communication system combining e-mail collection and services with customer information, which may assist e-mail activities and help to position the company for widespread e-mail adoption.

As highlighted in option one, list server facilities do not allow connection between e-mail addresses and marketing data. The ability to achieve this is essential for the success of future operations and product development. Marketing data can be collected along with the e-mail number; however, currently this process requires a fair degree of manual intervention and effort, which somewhat counters the advantages of list servers in terms of their efficiencies and ease of use.

Although data collection forms often accompany the list server (asking visitors to supply details such as name, organization, areas of interest, etc.), this information has to be held separately in a "flat file" (for which a special data extract program must be commissioned or manual input is required), and cannot be manipulated within the confines of the list server. To access this information, the file must be exported to an external database where it can be selected from according to variety of data collected. The data can then be "mail merged" to e-mail via a separate software package.

Currently, the only data entry points on the Internet site that collect "supporting" information via electronic means are the Anbar and Emerald "subscriber access" and "guest registration" forms. The data are exported and manipulated in order to provide "date" selections to follow up online free trials via e-mail. This represents MCB's earliest attempts to match marketing intelligence to e-mail communication, and is clearly a step in the right direction. To build on this, the process must be standardized and ideally automated as much as possible. Also, to capitalize fully on the growing number of customers and prospects who participate in MCB's Internet activities and information services, it would need to be rolled out to all data collection points.

If the list servers and all Internet registration forms (for journals, forums, conferences, etc.) were to be standardized in terms of the quality and quantity of "additional" data collection, all customer information generated from the Internet site could be collated in a central database. Technically, with the data held in this structure, it would also be possible to select using any given criterion and to move into a situation where the customers' details are held only once (as opposed to any number of occurrences on various list servers). This would help to avoid the risk of bombardment. Each record will also be accompanied by sufficient marketing information to enable intelligent marketing selections and co-ordinated communications with the customer database.

The potential advantage of this route is the opportunity (once e-mail numbers are collected) to link the named contact on the customer database to any number of Internet site visitors who are from the same institution. This can be achieved via a match with the domain name on the e-mail address, and provides true connectivity between MCB, the "information gatekeeper", and the journal readers. Here the opportunity will be to promote directly and simultaneously to all members of the DMU through information rich electronic media.

The way in which an intelligent e-mail communication system may be implemented effectively into MCB's marketing activities is very much dependent on technologies adopted by MCB. The hardware specifications for the Internet server are currently under review, and the recommended approach is to adopt a Windows NT server to run alongside the current UNIX operating system. The Windows environment is generally seen as the way forward for business Internet hardware, and also presents opportunities for MCB to implement an e-mail database, along the lines previously described, but with much less difficulty than would otherwise be encountered.

The Windows system will allow MCB to capture standard marketing data at any point on the Internet site (forum/conference registration, journal trials, requests for information, etc.). These data, along with the e-mail number, can be automatically transported into a database held online. The user interface of the database allows the marketer to perform selections and e-mail mailings, and run management reports, without any difficult manipulation of a separate data file.

With this system, data integrity is maintained by the fact that customer details are held only once (regardless of the number of activities on the site), limitations can be placed on the number of mailings within a certain time frame, and customers are able to remove themselves from the list at any time.

It is clear that by taking a database approach to e-mail communications, MCB's marketers of electronic products are presented with a more attractive situation than is currently experienced. It will enable effective targeting, enhance marketing intelligence, and provide customers with a more focused information service. It will also lay the groundwork to support effectively the future scenario of frequent e-mail communications with the vast majority of "key contacts".

I recommend that this approach be adopted.

Implementation

The implementation plan for pursuing an intelligent e-mail communication system is as follows:

- · Review the board decision on Internet development proposal.
- Discuss project findings with key staff.
- · Ensure information standards.
- Schedule implementation plan.
- Amend interface with Anbar and Emerald data capture.
- · Establish resources required for database maintenance.
- Training.
- · Review of learning.

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Conclusion

The growth of the Internet, as a common platform for information dissemination, has had significant impact on libraries worldwide. The diffusion process is well underway, and the indications are that the adoption of electronic information by libraries is set to continue apace. This said, no two academic institutions are identical in terms of their rate of adoption of electronic media or the composition and dynamics of their decision-making processes affecting this. Also, the innovation decision process is influenced by "opinion leaders" and "early adopters", who are more susceptible to mass media. This highlights the need for a more intelligent approach to marketing communications involving innovations.

Use of CMC amongst the academic community, as a means of communicating with peers, is widespread and still increasing, as is the acceptance of electronic journals and the use of the Internet as a serious research tool. CMC is far from being the dominant form of communication, however, and the level of adoption varies considerably. The rate of growth thus far suggests that CMC will soon become a preferred media choice; however, this will not happen overnight.

In recent years MCB has wholeheartedly embraced the benefits and opportunities presented by electronic publishing. It is generally believed that the future of the business is in the delivery of high added value information via electronic media. The platform of the Internet also provides the opportunity for the publisher to bring together authors and readers, and further add value via this "connectivity".

MCB's Internet site assists all aspects of the buying and selling process, communicates all aspects of the marketing communications mix, and provides a seamless link between customer and product. It brings together all elements of MCB's value chain, and this "connectivity" further enhances the benefit of the site to visitors. The connectivity provided by conferences and forums is core to the success of the site as a marketing tool. Here content is supplied both with the media and through the media, providing high value added benefits to the visitor. The resultant information flows, generated by communications between key parties, are immersed in content and inherent marketing messages. Also, through this connectivity, visitors are exposed to opinion leaders and early adopters, who will influence their propensity to purchase.

The most effective media to bring customers into this environment is e-mail, for the reasons outlined in the final section of this study with respect to its mass-media potential, information rich qualities, provision of instantaneous access to the product and its potential for a direct link between MCB and its customers.

This study concluded by appraising MCB's mass e-mail capability in light of its importance in assisting the adoption process, and by investigating the need for a more intelligent method of e-mail communications and the future possibilities for marketing via this medium.	Maximizing marketing effectiveness
The recommended option is to capitalize on planned hardware upgrades to	
provide MCB with the facilities to build an online e-mail database, using	325
standardized information-gathering formats to enhance marketing intelligence	323
and targeting.	

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Notes

- 1. http://www.mids.org/howbig.html
- 2. http://www.oclc.org

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- 3. McEldowney, Shontz and Wright (1996), "Scholarly electronic journals: trends and academic attitudes", http://poe.acc.virginia.edu/~pm9k/libsci/96/ejtables.html
- 4. http://www.mcb.co.uk/literati/editors/conference/aaec.htm

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