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The Internet - strategies for optimal utilization in South Africa

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1 Introduction

The Web, the Net, the information superhighway, etc. are terms being bandied about from children in kindergarten to managing directors in the corporate boardrooms. For the uninitiated, these terms sound like jargon. However, for businesses these terms could spell either success or failure in the current global economy.

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2 Methodology

With the hype surrounding e-commerce and e-business, and the sudden rush of South African companies to get on the Internet, the study explored this new medium and determined whether the move to electronic business was justified. The aim was to determine whether the Internet was being optimally utilized. To obtain a balanced perspective, a dual approach was used: management and consumer samples were studied.

A sample of 294 consumers was drawn from a tertiary institution in Durban with a population of 1096 employees. The sample was composed of 71,1% males and 28,9% females. Of the sample, 84,7% was academic staff and 15,3% was non-academic staff. The majority of the sample (73,8%) used the Internet daily. The tertiary institution was chosen because the majority of the staff had access to and used the Internet. Data were collected using a Web-based questionnaire developed by the author. Statistical analysis revealed that there were a number of significant relationships between biographical data, frequency of use of the Internet

and reasons for using the Internet, among other things. A salient feature of this study was that only 0,7% of the sample used the Internet for purchasing.

The second sample of 79 managers were drawn from 10000 companies in South Africa with an Internet presence. The companies ranged from small to large enterprises and operated in a number of different industries. A mail questionnaire, which was also developed by the author, was administered to the managers. The management results revealed that the Internet made a significant contribution to the businesses that participated in this study in respect of cost saving.

This study revealed that although making significant contributions, the Internet was not being utilized to its full potential, due to a number of obstacles.

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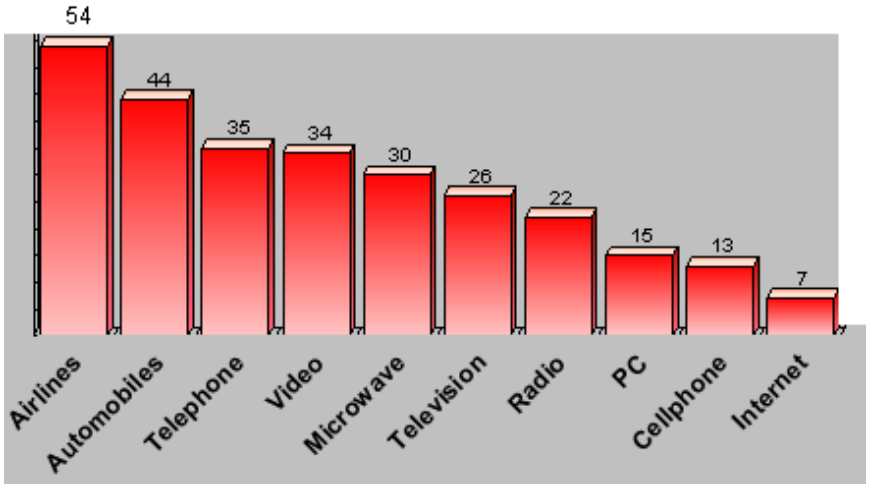
3 Background and literature review

The Internet is a mechanism for information dissemination and a medium for collaboration and interaction between individuals and their computers, without regard for geographic location (Leiner, Cerf, Clare, Khan, Kleinrock, Lynch, Poster, Roberts and Wolff 2000:1). Gaining a strategic edge over competitors requires innovative use of information technology (IT). The Internet is changing the way businesses are operating and how IT supports business operations (O'Brien 2000).

The Internet is the fastest growing technology in the world. It has taken just seven years to reach a 25% market share, as opposed to the telephone that took 35 years, and the television which took 26 years (Figure 1).

Figure 1 Time taken for technology to reach 25% market share



The impact of the Internet on business has been phenomenal. 'There are those on the net, those who are thinking about going on the net, and those who are probably going out of business' (Impact of E-Business 2000:2). These statements, especially the latter, create new challenges for organizations.

According to Moodley (2000), the traditional 'bricks and mortar' business is rapidly being replaced by 'clicks and mortar' businesses, referring to business being conducted at a click of the mouse. Radebe (2000) is of the opinion that businesses that do not get on the Internet and do not have an Internet presence will be out of business within the next three years. This is a

controversial statement in the South African context and for other Third-World countries. This statement may be true for business-to-business transactions, however, the corner store located in a middle to low income suburb could not possibly face closure if the majority of its market is computer illiterate and do not own computers. Presently only 2,4% of the South African population are Internet users. It has been reported that Internet kiosks will be opened for the lower income groups to have access to the Internet, but this initiative will have little effect on the small corner store because a large portion, that is, 45% of the South African population, is illiterate (Aitchison:1998). Why then should businesses be on the Internet?

The United States Commerce Department reported that one third of its 1996 real economic growth came from information technologies. It has been projected that the United States business-to-business market will generate more than $6 trillion in on-line trade by 2005 (Benefits of using the Internet 2000). South African on-line spending is much less than the in United States. In 1999 South African consumers spent R2,7 billion on Internet purchases and business-to-business transactions amounted to around R3,9 billion. The South African spending pales in relation to the American figures. However, this could be because geographically the United States market is much larger and more people have access to computers and the Internet. Businesses do not need to limit themselves to local markets, since they are now able to exploit a potential 40 million overseas customers. Based on these figures, businesses should not be asking if they should be on the Internet, but when (Impact of E-Business 2000).

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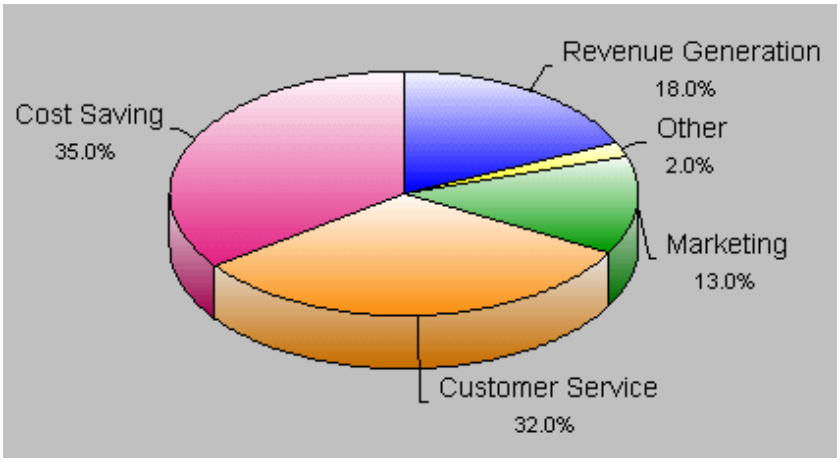
4 Business value of e-commerce

It is clear that the Internet has tremendous potential and exposes new business opportunities for organizations. Figure 2 summarizes the tangible benefits of the Internet to America's top 100 organizations using the Internet.

Figure 2 Value generated through the Internet by America's top 100 organizations using the Internet



Cost saving is an objective of every organization. The Internet makes cost saving possible by using e-mail, which is cheaper than postal and fax services. Furthermore, Web pages are capable of carrying detailed information. Therefore, organizations can reduce the cost of printing brochures and the excessive costs of advertising on traditional media. Revenue generation only contributes 18% value to organizations. However, this could be due to the infancy of e-commerce, consumer resistance to change, the inaccessibility of computers and the Internet, and a lack of an organizational infrastructure for e-commerce.

Further reasons for businesses to be on the Internet include the following:

- Establishing a presence. With the ever-increasing number of netizens (Internet users), it is important for businesses to be a part of this community to invite new business.
- Networking. The Internet makes it possible to invite new business contacts 24 hours a day. Even while executives are asleep, their details are available on the Internet as an electronic business card or as part of a Web page. A prospective client or business partner could use the information to initiate contact by e-mail, which could result in a mutually beneficial 'chance meeting.'
- Reaching a highly desirable demographic market. Netizens are usually college educated or are receiving tertiary education and earn or have the potential to earn high salaries, making them the prime target of Internet sellers.
- Staying in contact with employees. Travelling salespeople may require additional information to conclude an important deal. This information could be accessed from the Web site, for presentation to the client.
- Reaching specialized markets. The most narrowly defined market niche could be represented in large numbers, for example collectors of African pottery may represent a small number on the local market. However, collectively on the Internet these people represent a large number. Sophisticated search engine technology makes it possible to find organizations selling specialized merchandise such as African pottery (The original 20 reasons 2000).

4.2 Internet marketing

The marketing equation (Figure 3) expresses the central themes that emanated from the various definitions of marketing.

Figure 3 Marketing equation

The common themes that emanated from the various definitions of marketing are need identification, need satisfaction and profit. Internet marketing is no different; profitability is achieved by identifying customer needs and satisfying those needs using Internet technology.

4.2.1 Need identification

Need identification is quicker due to the Internet. Using traditional marketing research methods such as questionnaires, marketers have to administer the questionnaire at shopping centres or use the postal service to send out questionnaires and wait for responses. Stopping shoppers in the middle of their shopping is both intrusive and annoying. Responses are generally hurried and can result in inaccuracies. Postal research is also unreliable due to post being lost, non-return of responses and the slow postal service. The Internet makes data collection more reliable when questionnaires are sent directly to the customer. Responses are returned almost immediately. However, this is dependent on the customer's willingness to fill in the questionnaire and to return it.

Information can be purchased on the Internet from organizations such as Answers.com (any research), Smart-mktg.com (marketing research) and srds.com (behaviour, lifestyle and media usage profiles). Information is also available cost-free on-line from some organizations such as Statistics South Africa and the South African Institute of Race Relations. Internet service providers and other Web-based organizations are willing to sell information or provide it for free.

4.2.2 Need satisfaction

The Internet serves as an invaluable help tool in the consumer's search for information when buying or after purchasing a product. It also plays a lesser role in the evaluation of alternatives and the actual purchase. Making business information available is one of the most important ways of satisfying customers (Benefits of using the Internet 2000). The Internet makes information easily accessible and gives the customer greater control over the purchase (Peters 1999).

The Internet as a means of mass information dissemination is invaluable to organizations pursuing a low-cost strategy. The Internet is one of the cheapest forms of advertising. The detailed information assists the customer in making an informed decision. The Internet also makes the information search easier with the multitude of search engines that can locate sites containing the necessary information. One of the benefits of the Internet is that it provides the consumer with price comparisons, which is most beneficial to price-sensitive customers.

4.2.3 The marketing mix

The Internet has had a major impact on the marketing mix. All four components of the mix have been affected.

Product

Customers do not purchase a product, they purchase the benefits. The Internet makes it possible for a company to extol the benefits of its products or services. More detailed information such as specifications, alternate uses, demonstrations and instructions are available for the consumer. As much as product information is important to the consumer, so too is knowing where to find that information. Getting the customer to use a firm's Web site is the challenge for e-marketers. According to Moodley (2000), establishing e-brands and, more importantly, brand loyalty is an extremely difficult task. This notion has been supported by Cohen (1999), who is of the opinion that the Internet defies all brand logic; what is successful off-line, does not enjoy the same success on-line.

Price

The rules for pricing on the Internet are no different from the traditional rules of pricing. Cost recovery is still paramount for the success of the Internet organization. Web pricing levels the playing field when dealing with manufacturers and retailers, and the Internet may turn out to be a price equalizer rather than a price cutter. Internet pricing is transparent (Kotler and Armstrong 1999); the Internet provides customers with instant price comparisons, forcing Internet retailers to have a price orientation. According to Lambin (2000), the Internet market is too perfect for products because consumers have full knowledge of prices and worldwide comparisons of sellers' offerings. Therefore, competing on price is not enough - sellers have to develop strong brands to ensure continued sales.

Place

Several hundred manufacturers are using Web sites for marketing, buying or selling goods and services to other businesses. The Internet is more than just a new sales channel. Cybermarketing is the term to describe Internet marketing, and it means selling in market space rather than in a market place (Kotler 1999:1). Virtual stores and virtual organizations are mushrooming every day. According to Haag, Cummings and Dawkins (2000:87), 'virtual organizations are a network of independent vendors linked together by information technology to exploit market opportunities by sharing skills, costs and market access.' The Internet has made it possible to bring stores and manufacturers closer to the customer. In fact, the Internet has made the physical distance between buyer and seller immaterial (Rai, Chandra and True 1999:6).

Direct selling as a means of satisfying customers is logistically unsound. However, the Internet makes direct selling a more viable option. Dell Computer Company is able to keep ahead of its competitors because of its effective use of the supply chain (King and Conner 2000). Dell

Computers does not have a manufacturing plant or stores in every country in which it operates; it has become a logistics operation that links independent manufacturers with the customer using the Internet (Moodley 2000). The Internet has made it possible to eliminate the middleman.

Promotion
Guiltinan and Paul (1991) define promotion as the activities associated with marketing communications. Grant (1999) collectively calls marketing communications MARCOM. She further states that MARCOM is one of the business areas that is experiencing dramatic changes in strategy and execution due to the Internet. The Internet is also disrupting American business (Graham 2000:1). It serves as a new channel for marketing communication and is changing the nature of what can be done to promote a company and its products (Grant 1991).

Sales promotion
The effectiveness of sales promotions on the Internet is no different from normal promotions. Net promotions also rely on incentives in the form of electronic coupons, special offers, free accessories and contests, among other things, to generate sales. Taste testing, however, is not possible and could affect the sale of new food products.

Electronic coupons can either be printed and used in normal stores, or they can be redeemed on-line at virtual stores. Loyalty awards can be accumulated for Web purchases (Grant 1999). Net organizations could offer customers rewards for introducing new e-customers.

Advertising
Internet advertising is especially effective as a medium to transfer large volumes of information to a select audience. There is instant feedback at the lowest cost, and the advertising's effectiveness is measured almost instantly. However, the reach of Internet advertising is limited to those who can afford the technology. It is a very effective advertising tool, but not the best medium. It does, however, have the potential to become the best medium once it is available to everyone.

The Internet has and will continue to affect the marketing mix. The effect has been positive, both for business in general and specifically for marketing.

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5 Findings of the study

5.1 Internet user profiles
One of the reasons cited under the theoretical framework for businesses being on the Internet, was to reach a highly desirable market of netizens with a college education, who are earning high salaries or have the potential to earn high salaries (SA Internet user 2000). A method of classifying a Web user is generally based on education level, gender, age, income, frequency of use and purpose for using the Internet. The profile of a typical Internet user as revealed by this study would be Asian males, aged 25 to 34, with a postgraduate qualification, earning in excess of R4000 per month, and who use the Internet daily. It is evident that this profile closely matches the description as expressed in the theory.

5.2 Reasons for using the Internet
The reasons cited for consumers using the Internet included communication, research, banking and actions like auctions and investments (Figure 4). Further analysis of the usage statistics, applying the t-test, revealed that there was a significant difference between gender and reasons for using the Internet in the categories gender and banking ($p = 0{,}000$), and gender and communication ($p = 0{,}024$). This is summarized in Table 1.

Figure 4 Reasons for consumer use of the Internet

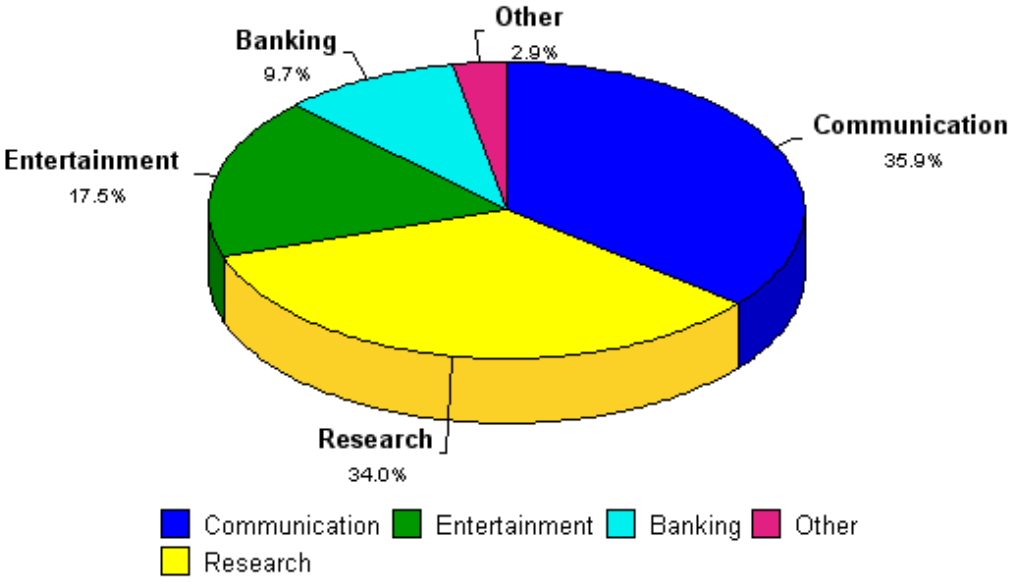


Table 1 Mean analysis: reasons for using the Internet, gender

Variable	Mean	Std. deviation
Banking Male Female	0,833 1,744	1,399 2,072
Communication Male Female	3,603 3,732	1,529 1,144

It is evident from Table 1 that females used the Internet more often than males for banking (0=1,744) and communication (0=3,732).

5.3 Reasons for not shopping on-line

A striking feature of the consumer results was that only 0,7% of the sample used the Internet for shopping. The reasons cited for not conducting on-line shopping are summarized in Table 2.

Table 2 Reasons for not shopping on-line

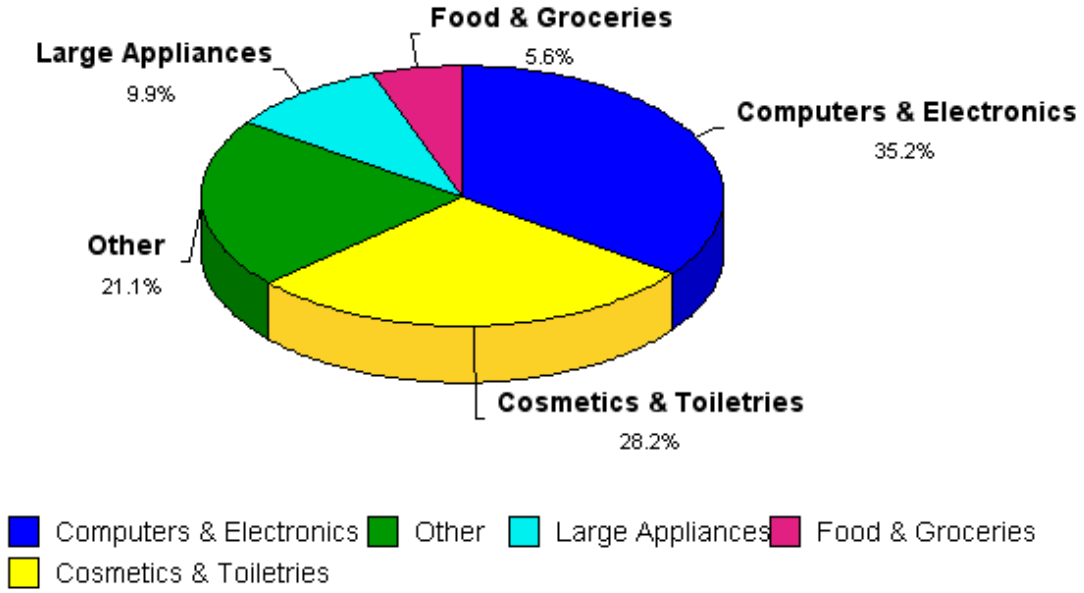
Variable	Mean	Std. deviation
Do not have sufficient knowledge or confidence to shop on-line	3,276	1,732
Afraid that products will not arrive	2,452	1,782
Afraid to use credit card on the Internet	2,356	2,202
Too costly	1,353	1,272

It is evident from Table 2 that the greatest obstacle to on-line shopping was insufficient knowledge and confidence. The fear of non-arrival of purchases and the fear of using credit cards on-line ranked very closely as the other reasons. Cost was not seen as a major obstacle.

5.4 Potential products

Respondents who did not shop on the Internet indicated that if they did shop on-line, they would purchase computers and electronics, cosmetics and toiletries, other (which were specified as sports equipment, books and music), large appliances, food and groceries (Figure 5).

Figure 5 Products that on-line shoppers would purchase



5.5 Banking

The respondents (9,7%) who used the Internet for banking, ranked in descending order of importance the following reasons for banking on-line: convenience, speed, safety, low cost and other (Table 3).

Table 3 Reasons for banking on the Internet

Variable	Mean	Std. deviation
24-hour convenience	4,247	0,716
Quicker	4,012	1,436
Better personal safety	3,383	0,582
Cheaper	1,048	0,463
Other	0,444	1,140

5.6 Reasons for not banking on-line

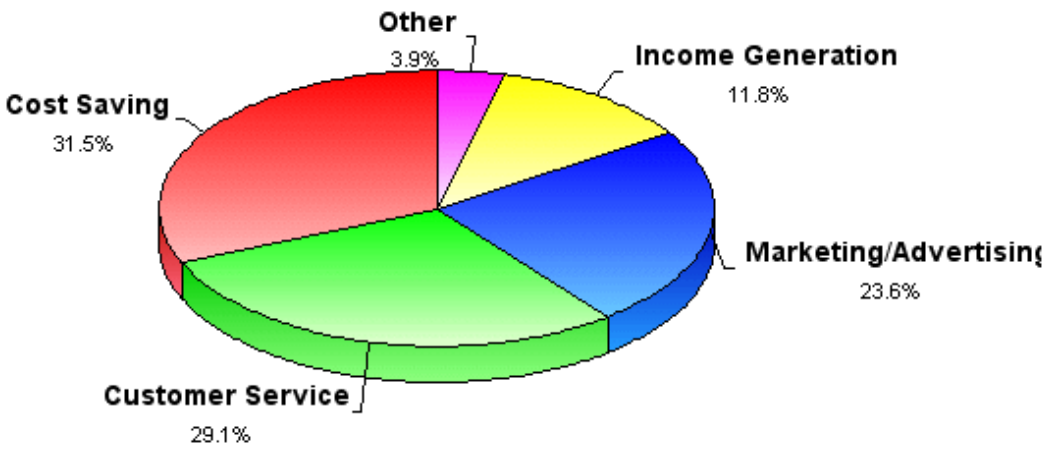
The reasons cited for not banking on-line included unsafe, lack of knowledge and confidence, cost, slower processing and other which included fear of hackers (70%) and the unavailability of the service (30%).

5.7 Reasons for businesses using the Internet

Based on the results, it is evident that consumers are not utilizing the Internet to its optimal potential, either for shopping, or banking. However, the following results suggest that businesses are satisfied with their on-line trade results.

To determine the reasons businesses used the Internet, the model in Figure 2, as proposed by Gow (1997) was used in developing the questionnaire. The results of the current study are strongly related to Gow's findings, as illustrated in Figure 7.

Figure 7 Reasons for business usage of the Internet

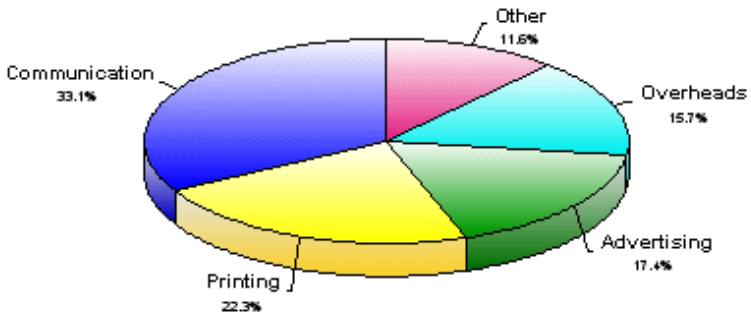


Although differing in actual values, South African organizations are using the Internet for the same reasons as America's top 100 companies, namely for cost saving (31,5%), customer service (29,1%), marketing and advertising (23,6%), income generation (11,8%) and other 3,9%.

5.8 Cost saving

Of the organizations that used the Internet for cost saving, 81% experienced a 0 to 9% cost reduction, while 19% experienced a 20 to 29% cost reduction. These reductions were achieved through savings in communication, printing, advertising, overheads and other unspecified means, as illustrated in Figure 8.

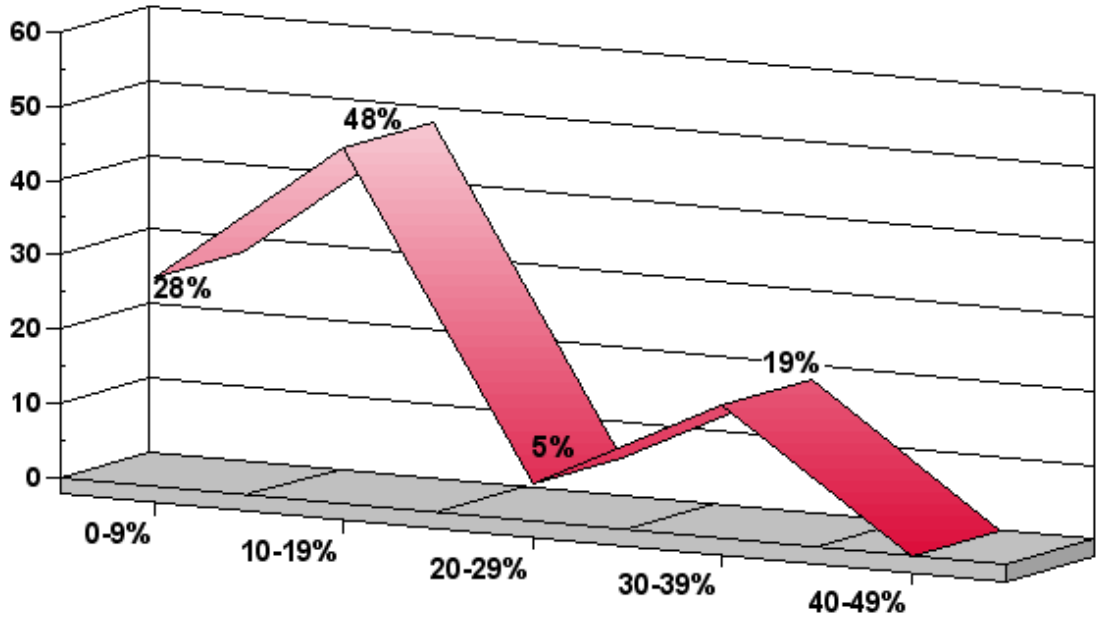
Figure 8 Factors that contributed to cost reduction



5.9 Advertising and promotion

A significant feature of on-line business is that traditional advertising costs increased as depicted in Figure 9.

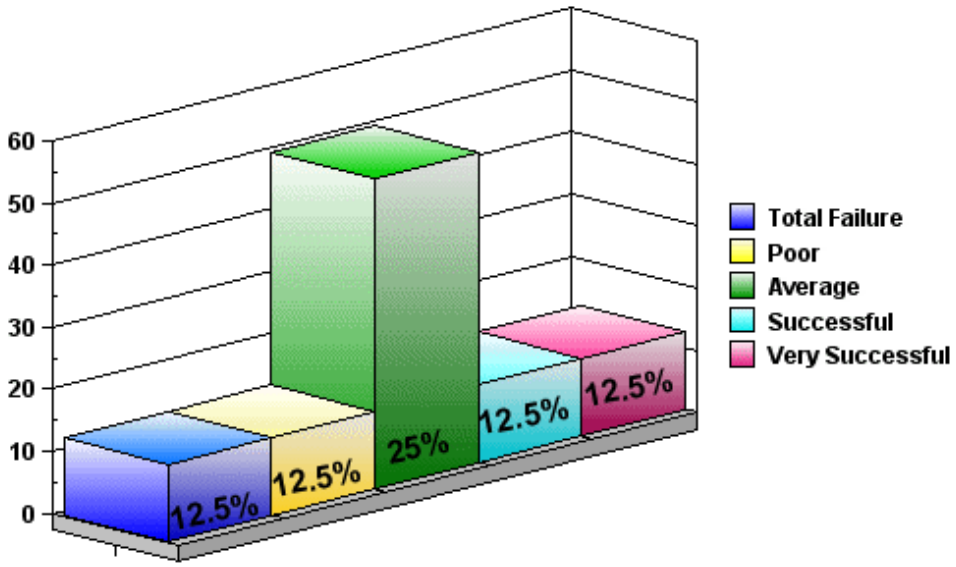
Figure 9 Increase in traditional advertising costs



It is evident from Figure 9 that 28% of the companies saw an increase of 0 to 9% in advertising expenditure, 48% of the companies experienced an increase of 10 to 19%, 5% experienced an increase of 20 to 29% and 15 companies experienced an increase of 30 to 39%.

Only 20,3% of the organizations used on-line promotions, the successes and failures of which were evenly balanced, with the majority of organizations (50%) showing average success, as seen in Figure 10.

Figure 10 Success of on-line promotions



5.10 Overall impression

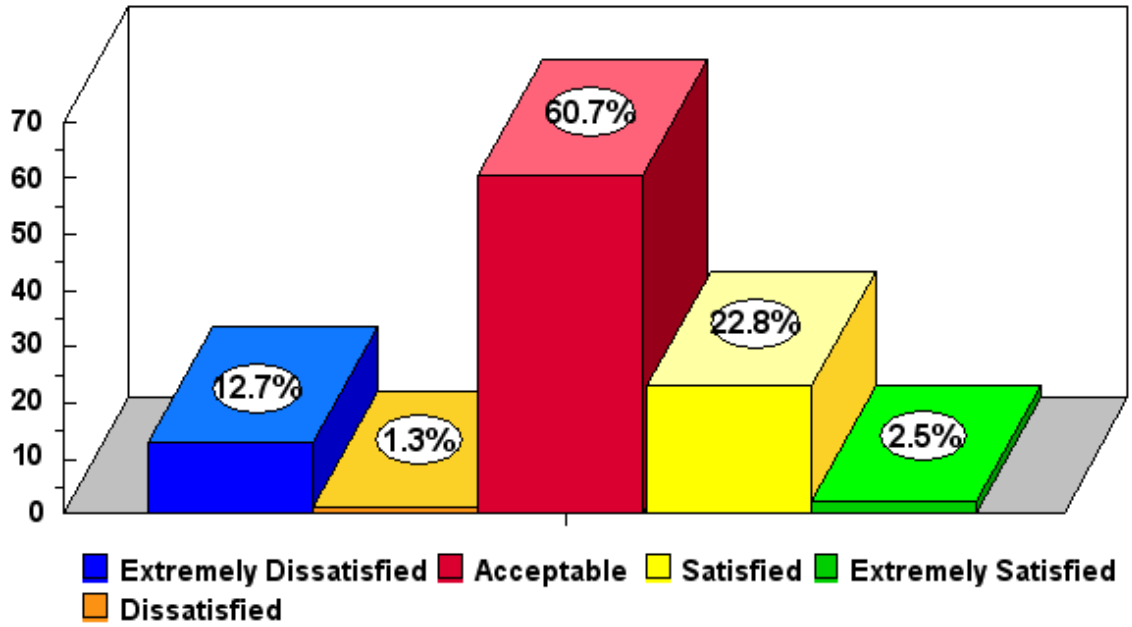
Figure 11 represents the management respondents' ratings of the impact of the Internet on their businesses.

The majority of respondents (60,7%) found the Internet's impact acceptable, followed by 22,8% who were satisfied and two managers (2,5%) who were very satisfied. Ten managers (12,7%) were extremely dissatisfied, while 1,3% was dissatisfied. Cumulatively, the impact of the Internet tended towards the positive end of the scale with 86% of the respondents reflecting

varying degrees of satisfaction.

It is evident that managers perceive the Internet as beneficial to their organizations. However, the results also show that the Internet is under-utilized and can provide greater benefits to organizations.

Figure 11 Overall impression of the impact of the Internet on business



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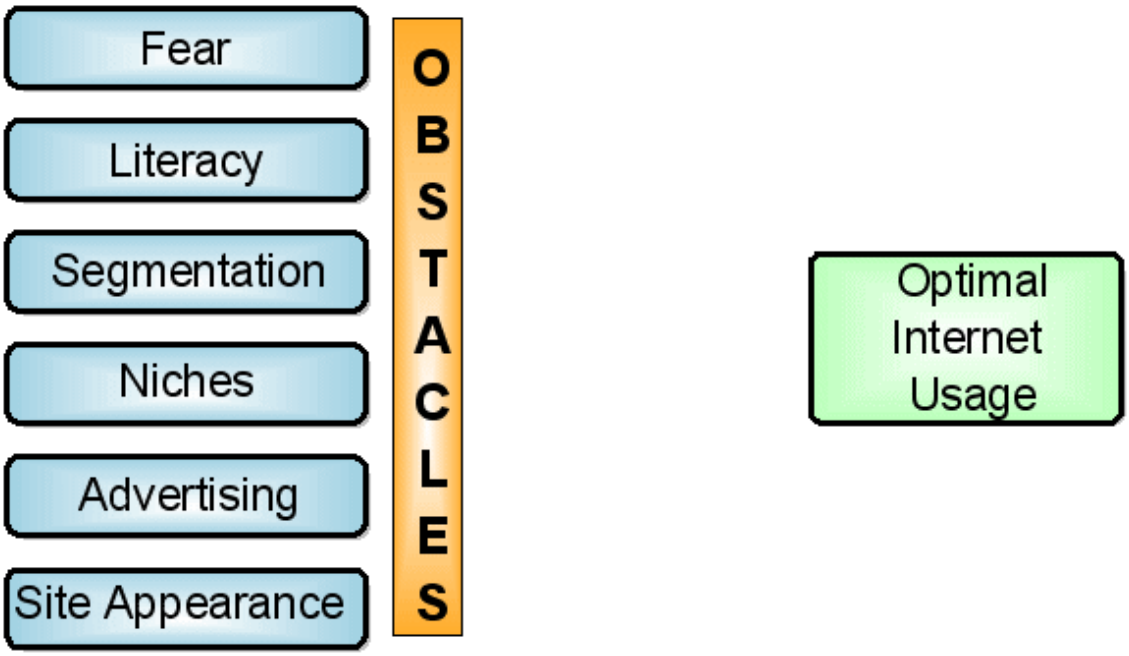
6 Discussion and recommendations

The Internet and its related technologies are here to stay. To remain competitive and to exploit the technology, businesses need to fully understand the Internet and its users. The technology itself is not enough to develop an advantage. It is merely an enabler which requires proper planning and manipulation in to generate results.

6.1 Strategies for business

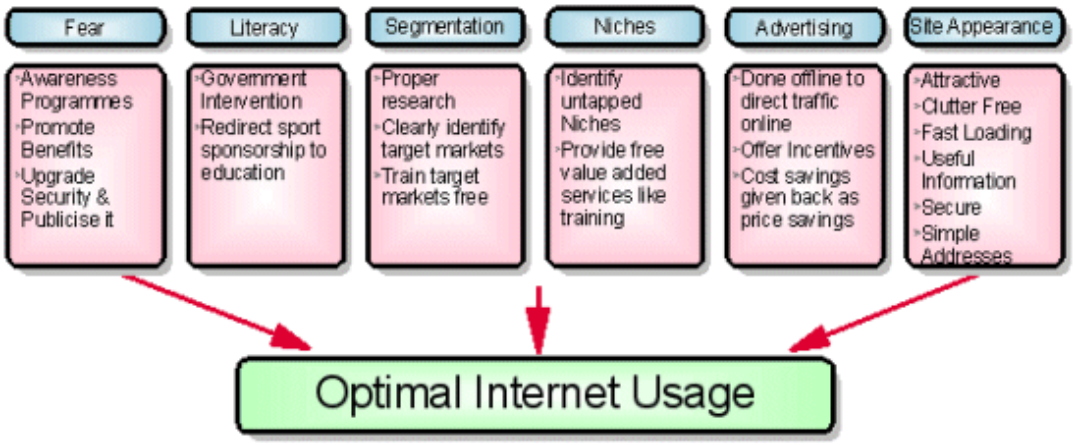
This study has highlighted a number of obstacles to the optimal utilization of the Internet. Some of these are fear, literacy, segmentation, niches, advertising and site appearance and are depicted in Figure 12.

Figure 12 Obstacles to the optimal use of the Internet



It is, however, possible for organizations to overcome these obstacles by employing effective strategies, as illustrated in Figure 13.

Figure 13 Strategies for optimizing Internet usage



6.2 General recommendations

- Organizations considering an on-line presence need to develop a proper, sound business strategy. The Internet strategy should follow the business strategy.
- The Internet should be used as an enabler to achieve low-cost production strategy and to differentiate or focus on niche markets.
- To reduce phone and fax expenses, businesses need to encourage customers to communicate on-line using e-mail.
- Monitoring of site performance, using hit rate monitors to see how many people visited a site, analysing daily on-line sales, analysing customer feedback and conducting questionnaires are vital to the success of a site.
- Managers must be realistic and expect low returns on investment in the short term. However, they need to proactively search for a means of improving returns.

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7 Conclusion

Is Internet marketing effective? The results of this study suggested that, from a consumer perspective, Internet marketing is ineffective. A potential market of over 1000 people earning over R4 000 per month is being overlooked. Marketing is defined by Kotler (1991) as 'the art of identifying customer needs, and creating solutions that deliver satisfaction to the customer.' It is clear from this definition that businesses are not identifying the customers needs and it probably explains why on-line businesses are not achieving results that are more in line with Dell Computers' $1 million per day. To become more marketing orientated, on-line businesses need to conduct more marketing research to determine and serve new niche markets.

However, according to the managers, Internet marketing is effective. Based on the results of the study, organizations are clearly meeting the needs of some markets as sales of ± R21 million was generated in December 2000. Furthermore, they are targeting the correct markets. The use of promotions as suggested by the experts is inappropriate. Nevertheless, managers have indicated that they are satisfied with the results of their on-line businesses.

E-commerce is still in its infancy and businesses are bound to make some mistakes. Businesses that plan properly and study and understand their markets are bound to become prosperous while serving the needs of the consumer.

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