CHAPTER 5

PROBLEM STATEMENT, RESEARCH OBJECTIVES AND HYPOTHESES

5.1 INTRODUCTION

Chapters 2 and 3 provided a theoretical foundation for the study where the areas of consumer behaviour and consumer decision-making were examined. The objective of Chapter 4 was to integrate the consumer decision-making process with the Internet as a buying and communications medium, focusing on how the Internet can possibly influence the decision-making process.

Chapter 5 will focus on the problem statement of the study and hypotheses for the study will be formulated. The chapter will be concluded by indicating how the formulated hypotheses relate to the objectives set for the study.

5.2 PROBLEM STATEMENT

According to Burns & Bush (1998: 62), defining the problem is the single most important step in the marketing research process. Forrest (1999: 3) and Burns & Bush (1998: 83) agree and add that a precise problem definition is critical in setting the direction for all subsequent phases in the research process and assists in ensuring that the research yields pertinent information.

The problem statement and definition of the research problem is therefore critical to meeting the objectives set for a research study. The problem statement for the study can be derived from considering the theoretical foundation captured in the preceding chapters.
Chapter 3 provided an in-depth discussion on the consumer decision-making process. The discussion highlighted the complexity of the process by providing a detailed discussion on each of the stages of the process together with the various sub-components associated with each stage. From the discussion in Chapter 3 it could be concluded that for marketers to draft effective marketing strategies, it is important to understand the complicated consumer decision-making process that could possibly be influenced at various stages of the process.

Chapter 4 contained a discussion on the possible influence of the Internet on the consumer decision-making process. Only one Internet-based consumer decision-making model was found in literature and the researcher's reservations towards the foundations and theoretical base of the proposed Internet-based model were noted. From the discussion in Chapter 4 it could be seen that marketing literature lacks both theoretical literature and proven and tested models of the consumer decision-making process applicable to the Internet.

The relatively little literature available regarding the Internet and the consumer decision-making process is also true for consumer behaviour. The following statement by Tan (1999: 165) supports this view: "... more research is needed not only to examine the Internet's role and effectiveness as a new marketing medium, but also to study consumer behaviour arising as a result of the change from in-store to virtual shopping."

The relative lack of literature is even greater from a South African Internet user perspective, since very little literature could be found on consumer behaviour and the decision-making process of South African Internet users. The only information available from a South African perspective on Internet users' buying behaviour, documented in reports from research organisations, identify products purchased and focus on general spending trends of South African Internet users.
with some reference to possible reasons why these Internet users do not purchase via the Internet.

Listing some views expressed by South African research organisations regarding consumer behaviour (including consumer decision-making) and the Internet highlights the problem statement for the study:

- Key to Online success is an understanding of consumers' Online behaviour, preferences and concerns (BMI, 2000a: 7);

- Proper profiling and monitoring of consumers are of critical importance to enable the marketer to convert "browsers" into "shoppers" and more importantly into regular shoppers (BMI, 2000a: 7);

- Understanding consumer needs and wants significantly enhances the chance for success in the Internet environment (Webchek, 1999: 21); and

- If marketers don't understand the needs of their customers, it will be difficult to know where to focus their energy, effort and capital. It could also lead to organisations having to make significant (often expensive) changes to Websites after the launch thereof (Webchek, 1999: 21).

The views expressed above indicate that marketers need to understand the buying behaviour of South African Internet users to be successful in this new marketing and communication medium. It is, therefore, extremely important to conduct research among Internet users in South Africa to contribute to the body of knowledge that is needed to sensitise marketers to understand the dynamics involved when pursuing the Internet as a marketing channel.

5.3 RESEARCH HYPOTHESES

Tichenor (in Stempel III & Westley, 1981: 24), defines a hypothesis as: "... a statement of relations, based on the best that can be derived from more general
assumptions and prior evidence”. Stated more simply, hypotheses are statements describing the speculated relationships among two or more variables (Burns & Bush, 1998: 112).

According to Cooper & Schindler (1998: 45), the most important function of a hypothesis is that it guides the direction of the study, since a frequent problem in research is the proliferation of interesting information. Cooper & Schindler (1998: 45) caution that unless the researcher avoids the urge to include other elements, a research study can be diluted by trivial concerns that do not answer the basic questions posed.

Cooper & Schindler (1998: 45) add the following functions of a hypothesis:

- it is used to limit that which shall or shall not be studied;
- it identifies facts that are relevant and those that are not;
- by identifying the relevant facts, it suggests which form of research design is likely to be the most appropriate; and
- it provides a framework for organising the conclusions that result.

In conclusion it should be noted that one of the objectives of research should always be to choose among different possible hypotheses, since if all hypotheses considered for a specific study were known to be true in advance, there would be little reason to conduct the research (Aaker & Day: 1990:37).

5.3.1 Hypotheses formulated for the study

Keeping in mind the discussion and guidelines regarding hypotheses provided above, the researcher formulated 11 hypotheses from the theoretical foundation of the study. The hypotheses were evaluated and refined after insight was gained from a pre-test group (main findings attached in Appendix 6), which was
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held as part of the research process (discussed in Chapter 6). The 11 hypotheses formulated for the study are discussed below.

a) Hypotheses 1, 2, 3 and 4

Research conducted by Webchek (1999: 24) found that the length of time being an Internet user was one of the major variables influencing whether or not Internet users have purchased via the Internet before. In another research study conducted among South African Internet users, BMI (2000a: 74) found that 46% of current non-Internet shoppers had no intention to purchase via the Internet in the future, with an additional 22% indicating that they will only purchase within two years.

A possible reason why Internet users don't purchase (or do purchase) via the Internet, is based on factors which influence the decision whether or not to purchase. Security is a major reason listed why Internet users don’t purchase via the Web (BMI, 2000a: 75 and Webchek, 1999: 53). Another factor (which could possibly be grouped under security reasons) is privacy risk, whereby consumers envisage a loss of privacy owing to information collected by sellers as they shop (Strader & Shaw, 1999: 82 – 92). Kolesar & Galbraith (2000: 424 – 438) and Prabhaker (2000: 158 – 171) add to the above by stating that an increasing number of Online consumers decide not to purchase via the Internet when they are required to divulge personal and credit card information.

Based on their research findings, Furnell & Karweni (1999: 380) caution that although non-Internet shoppers exhibited a greater level of concern regarding Internet security than Online shoppers, security concerns are not the only factor that should be considered as a possible reason why non-Internet shoppers do not shop Online. Other factors that can possibly influence the decision whether or not to purchase via the Internet are: reliability, convenience, price of products or services and ease of finding products on the Web (Webchek, 1999: 53).
Considering the discussion, together with the findings from the pre-test group and the theoretical overview provided in the study, the researcher formulated the following hypotheses:

**H₁** The decision to purchase via the Internet is significantly influenced by factors consumers consider prior to purchase.

**H₂** The factors Internet shoppers consider prior to purchasing via the Internet are significantly influenced by the period of Internet usage.

**H₃** The period of Internet usage significantly influenced the decision to have purchased via the Internet.

**H₄** The period of Internet usage significantly influences the decision of non-shoppers to purchase via the Internet in the future.

**b) Hypotheses 5 and 6**

The Internet, as an information source, offers **consumers** a low-cost search tool that can be used to search for alternative and substitute products, resulting in greater price competition among sellers of products and services (Rowley, 2000a: 20 – 35).

**Traditional, non-Internet sellers** of products and services also benefit from creating a Web-presence, since more traditional sellers of products and services are moving to the Internet to offer more ways to purchase from them. The advantages of doing so include an additional sales channel to consumers and instant credibility to the seller (Nunes et al. 2000: 20 and Gulati & Garino, 2000: 113).
From a **Web-context** there seems to be very little distinction between choosing and purchasing via the Internet once a consumer has decided what to purchase, since it is so easy for the consumer to purchase Online with the click of a few buttons (Windham & Orton, 2000: 95).

Based on the discussion and findings from the pre-test group and the theoretical foundation of the study, the researcher formulated the following hypotheses:

\( H_5 \) The period of Internet usage significantly influences the decision to search for product or service information on the Net prior to purchasing from non-Internet based sellers.

\( H_6 \) There is a significant difference between Internet shoppers and non-shoppers in their decision to search for product and service information on the Internet prior to Offline purchases.

c) **Hypotheses 7 and 8**

Research by Phau & Poon (2000: 102 – 113) indicated that consumers, more specifically consumers in the Asia and Pacific Region, are not ready to purchase expensive goods via the Internet.

Bickerton et al. (2000: 149) and Greenbury in Maruca (1999: 160) add to the above by stating that not all products and services are equally suited to be sold via the Internet and that consumers will increasingly want to shop for at least a certain range of products and services on the Internet.

Research among South African Internet users also revealed some product and services categories that they have purchased before and also found some categories that many Internet shoppers would never consider purchasing from (Webchek, 1999: 39 – 41 and BMI, 2000a: 65 – 66).
Based on the discussion above and with specific influence from the pre-test group findings, the researcher formulated the following hypotheses:

**H7**  
The period of Internet usage significantly influenced the product and service categories Internet shoppers have purchased via the Internet.

**H8**  
The period of Internet usage significantly influences the product and service categories Internet shoppers and non-shoppers consider purchasing via the Internet in the future.

d)  **Hypotheses 9, 10 and 11**

The consumer decision-making process and models of consumer behaviour were discussed in detail in Chapters 2 and 3 of the study. The discussion showed how the decision-making process can be influenced, at various stages, by environmental influences and individual differences (for example, need recognition in Section 3.3 in Chapter 3).

Influences on the consumer decision-making process include, for example, the consumer’s language, geographic location, race and ethnic group, age, gender and income.

Research studies regarding Internet users also found differences when demographic variables (which could influence the consumer decision-making process) were studied, for example differences between men and women and the influence of level of education (Teo, 2001: 125 – 137) and income (Webchek, 1999: 24).

The researcher formulated the following hypotheses after considering the theoretical foundation of the study and findings from the pre-test group:
H₉ Demographic variables of Internet users significantly influence whether Internet users purchased products or services via the Internet.

H₁₀ Demographic variables of Internet users significantly influence the product and service categories Internet users purchased via the Internet.

H₁₁ Demographic variables of Internet users significantly influence the product and service categories Internet shoppers and non-shoppers consider purchasing via the Internet in the future.

5.3.2 Relation of objectives to hypotheses

Chapter 1 of the study listed the primary and secondary objectives which the researcher wishes to achieve by conducting the study. The hypotheses have specifically been formulated to ensure that usable research results will be obtained to meet the objectives set for the study. Table 5.1 lists the secondary objectives for the study together with the hypotheses applicable to each objective (the secondary objectives will contribute towards achieving the primary objective, namely to determine the buying behaviour of South African Internet users by using the Internet as an information source and buying channel).

**TABLE 5.1 RELATION OF OBJECTIVES TO HYPOTHESES**

<table>
<thead>
<tr>
<th>Secondary objective</th>
<th>Applicable hypotheses</th>
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<tbody>
<tr>
<td>i) Determine the factors Internet shoppers and non-shoppers take into account when considering whether or not to purchase via the Internet</td>
<td>H₁, H₂</td>
</tr>
<tr>
<td>ii) For non-Internet shoppers, determine whether or not they will purchase via the Internet in the future and which product and service categories they consider purchasing from</td>
<td>H₄, H₈</td>
</tr>
<tr>
<td>iii) For non-Internet shoppers not considering to purchase via the Internet in the future, determine whether or not they would consider purchasing via the Internet if more, well-known South African businesses offer products and services via the Internet</td>
<td>H₄, H₈</td>
</tr>
<tr>
<td>Secondary objective</td>
<td>Applicable hypotheses</td>
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<tr>
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<tr>
<td>iv) For current Internet shoppers, future Internet shoppers and non-Internet shoppers who do not consider to purchase via the Internet in the future, determine whether or not they use the Internet as information source to search for product and services information prior to purchase from non-Internet based sellers.</td>
<td>H_5, H_6</td>
</tr>
<tr>
<td>v) For current Internet shoppers, determine the relationship between the length of time being an Internet user and factors considered before purchasing Online.</td>
<td>H_1, H_2</td>
</tr>
<tr>
<td>vi) For current Internet shoppers, determine the product and service categories they currently purchase from and the product and service categories they consider to purchase from in the future via the Internet.</td>
<td>H_3, H_7, H_8</td>
</tr>
<tr>
<td>vii) Determine the relationship between the demographic variables of Internet users and the decision whether or not to purchase via the Internet, as well as the product and service categories they currently purchase and consider to purchase from in the future.</td>
<td>H_9, H_10, H_11</td>
</tr>
</tbody>
</table>

As can be seen from Table 5.1, all the objectives set for the study are being addressed by the formulated hypotheses. The questions that will be included in the final questionnaire will match the formulated hypotheses to ensure that the objectives set for the study are achieved.

5.4 SUMMARY

The research problem was discussed in this chapter and the research hypotheses for the study were formulated. The chapter was concluded by providing a matrix indicating how the formulated hypotheses will address the objectives set for the study.

Chapter 6 will focus on a theoretical discussion on research methodology and the research process. Chapter 6 will also indicate how the theoretical basis for the research project will be used to conduct the research part of the study.