How and why credibility-based company logos are effective in marketing communication in persuading customers to take action: a multiple case study toward a better understanding of creativity in branding

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HOW AND WHY CREDIBILITY-BASED COMPANY Logos
ARE EFFECTIVE IN MARKETING COMMUNICATION IN
PERSUADING CUSTOMERS TO TAKE ACTION: A
MULTIPLE CASE STUDY TOWARD A BETTER
UNDERSTANDING OF CREATIVITY IN BRANDING

SOUTHERN CROSS
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MANAGEMENT, SOUTHERN CROSS UNIVERSITY, LISMORE, AUSTRALIA, IN
PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
CERTIFICATE

I certify that the work presented in this thesis is, to the best of my knowledge and belief, original, except as acknowledged in the text and that the material has not been submitted, either in whole or in part, for a degree at this or any other university. I also certify that, to the best of my knowledge, any help received in preparing this thesis, and all sources used have been acknowledged in this thesis.

William L. Haig
(Date)

Endorsement

----------------------------------------  Date: _____________________
Associate Professor Shankar Sankaran

This thesis has been edited by Maxine Elizabeth James, BA (Monash)
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ABSTRACT

This thesis continues to explore guidelines for logo designers to more effectively plan and create company logos. Also, how the current low trust in company Web Sites can be improved with the company logo.

Credibility-based logo design is introduced as the underlying principle for both logo design and Web Site improvement. As such, this thesis explores the application of source credibility studies in communication persuasion to the planning and creative development of company logos. Credibility-based logo design theory is developed in a multiple case study which includes applying credibility-based logo design to improve the effectiveness of company Web Sites.

The study has two stages. The inductive stage of this case study develops the credibility-based logo design theory, including actual development of company logos based on this theory. The deductive stage tests credibility-based logo design using the Internet and Web analytics for data collection. The research accomplishes two purposes:

1. To validate credibility-based logo design theory for marketing communication persuasion effectiveness.
2. To validate that credibility-based logo design will increase the effectiveness of company Web Sites by giving the visitor trust and confidence in the company to take desired action toward a purchase decision.

The case study results support the hypothesis that credibility-based logo design theory can be applied to creating more effective company logo design. And, company Web Sites with a credibility-based logo design are twice to four times more effective compared to Web Sites with a non-credible logo. ‘More effective’ means more clickthrough action on the Web Site navigation bar to achieve various company goals, most often a purchase decision.

In summary, there are two major contributions:

1. Advancing the knowledge of company logo design through effective logo planning and design creativity based on source-credibility principles.
2. Advancing the knowledge of Web Site effectiveness through a company credibility-based logo design.
A third contribution is in advancing the knowledge for using the Internet to conduct ‘live action’ research and data collection. This has further implications for testing Internet advertising and other visual on-line and off-line marketing elements.

The results of this study are important for logo designers, company managers, and Web Site designers.

As an epilogue, this thesis extends the credibility basis for creating logos to creating all marketing communication to achieve a total brand personality as credible for a given company. This is termed Brand Credibility with implications for a better measurement of brand equity.

This thesis builds on the important logo design work by Pamela Henderson, Joseph Cote and Jim Hutton; and the important branding work of David Aaker, Kevin Lane Keller, Jennifer Aaker, and Tulin Erdem.
“How and Why Credibility-Based Company Logos are Effective in Marketing Communication in Persuading Customers to Take Action: A Multiple Case Study Toward a Better Understanding of Creativity in Branding”

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The Earth revolves around the sun.

The speed of light is constant.

Apples fall to Earth because of gravity.

Source-credibility principles are linked to company logos.

Credibility-based logos are linked to Web Site effectiveness.
1.0 Structure of Chapter One

1.1 Introduction

This chapter will introduce the research of the thesis together with the background outlining the field of study. A gap in current theory will be established, along with justification for the research and a brief explanation of the methodology. The chapter also includes working definitions and delimitations of scope. An outline of the thesis, which also appears at the start of each chapter, follows.

Figure 1.1 Chapter Outline

1.1.1 Research objective.

This thesis develops a source credibility communication persuasion framework for planning and creating company logo design. The term used for this throughout this thesis
is credibility-based logo design. The theory is that credibility-based logo design is an effective change agent supported by source credibility studies in interpersonal communication persuasion. The core of this thesis is that credibility traits defined for a given company can be translated non-verbally into design forms which communicate these traits as a company logo. This theory is developed and validated using the Internet for testing to demonstrate that credibility-based logo design increases the effectiveness of company Web Sites. The test results have an implication for further theory that the extension of source credibility principles can improve the planning and creative development of all company marketing communication, most importantly advertising.

Thus a rational single creative approach to improve marketing communication persuasion based on source credibility is developed in this thesis. The key take-away is that creativity is source-oriented to communicate company credibility traits, not receiver-oriented to establish common ground with the target customer as is often the practice in logo design, advertising and other marketing communication.

To establish this source-credibility theory, the researcher takes one element of marketing communication, the company logo, to focus the research as a multiple case study in two stages. First is an inductive stage to establish source credibility-based logo design theory. The premise is that company logos must have source credibility traits in order to be effective, basing this possibility on well researched source credibility studies in communication persuasion. Second is a deductive stage to test how a company’s credibility-based logo design can increase the effectiveness of the company Web Site.

Many authors are reviewed and referenced throughout this thesis. In particular, this thesis builds on the previous logo design theory work of James G. Hutton, Pamela Henderson and Joseph Cote. This thesis builds on the previous brand personality and brand equity work of David Aaker, Kevin Lane Keller, Jennifer Aaker, Chris Janiszewski and Tulin Erdem. This thesis builds on current work conducted on Web Site credibility by B.J. Fogg. This thesis builds on advertising and integrated brand promotion work of Thomas C. O’Guinn, Chris T. Allen and Richard J. Semenik. Finally, this thesis provides new insights for improving communication effectiveness in marketing communication borrowing from early studies in source credibility communication persuasion theory by Berlo, Brock, Crutchfield, Haiman, Hovland Katz, Kretch, Lasswell, Lazarsfeld, Lemert, McCrosky, Mertz, Osgood, Schramm, and Rogers.
Chapter One  Credibility-Based Logo Design  Introduction

The credibility-based logo design theory is researched as a case study in two stages: an inductive stage in three parts which includes the researcher’s experience, interviews with logo design experts, and planning and design of credibility based logos for companies; and a final deductive stage researches the credibility-based logo in an online test on company Web Sites to demonstrate that a company logo has persuasion effectiveness to induce positive action. The research objective is twofold: (1) to support the credibility-based logo design theory, and (2) to support the premise that company credibility based logo designs will increase the effectiveness of company Web Sites. The researcher develops the objectives of this thesis from an education in the social sciences, particularly interpersonal communication and psychology, and from over forty years working in logo design strategy and branding, including work with logo design legend Saul Bass (creating logos for AT&T, United Airlines, Rockwell International among others).

In summary, this research is about the application of social science theories specifically in source credibility and communication persuasion to the art of designing a company logo. Credibility-based logo design theory is developed in the inductive research stage. The deductive research stage is that company credibility-based logo design will increase the effectiveness of company Web Sites. Further, the application of credibility-based logo design theory as a single rational creative approach to all marketing communication is discussed in Chapter Six as an epilogue.

1.1.2  The credibility principle basis to this research

The underlying theme throughout this thesis is that source credibility principles in communication persuasion applied to non-verbal graphic design forms to express the company personality, also known as the company image. This was referred to earlier by the researcher as credibility-based logo design. Most research in source credibility has been in interpersonal, or people-to-people, communication. This research is in source credibility in company-to-people communication, with the company as the source. An early study in source credibility research relative to company to people communication was the researcher’s MA thesis (Haig 1979), Credibility Compared to Likeability in Marketing Communication: A Study of Company Symbols. The conclusion was that company logos which were perceived as predominately credible would have more persuasion value than company logos which were perceived as only likeable. The thesis

What is meant by source credibility or source credibility communication persuasion? In its simplest terms, credibility means trustworthy (sometimes referred also as believability.). People are more inclined to purchase from a company or a salesperson if they believe the company or person is trustworthy and hence honest. Credible sources have attributes of expertise/competency and are believable/trustworthy. Credible sources are high or low in these attributes, meaning a range of dynamism. For example, a successful speaker would be competent about the subject being discussed, is trustworthy, and have a dynamic delivery. Company personalities are often discussed in terms of people metaphors. Thus a successful company would be competent relative to its core business, trustworthy, and use its logo to communicate these traits as a dynamic non-verbal graphic design message.

When discussing source credibility applied to company logos it should be pointed out that there are four categories of credibility (Fogg and Tseng 1998; Fogg 2003). It is important to note that logos fit into the 'surface credibility' category initially, but can be part of any category ultimately.

**Surface credibility** includes non-verbal visual cues, such as expressed in graphic design, to infer that the source is ‘believable/honest’ and ‘competent/expert’.

**Presumed credibility** occurs when the receiver interacts with a source and presumes from stereotypical generalities that the source is credible, or not credible. For example, car salespeople are generally not considered credible, while other stereotypes are generalised as being credible, such as the clergy, or physicians.

**Reputed credibility** is based on source labels, such as an MD or PhD following one’s name or other endorsements such as awards, referrals and reports on people or things.

**Experienced credibility** is based on one’s first hand experience with a source over time.

Specifically, *surface credibility* refers to *credibility-based logo design* theory for the purposes of this research.
1.1.3 Credibility-based logo design theory

The first research objective of this thesis is to increase the knowledge about company logos and their relationship to source credibility principles in communication persuasion. The theory is that credibility-based logo design acquires its effectiveness from source credibility principles in communication persuasion. Further, credibility-based logos are endorsers of company messages, thereby giving the company message the possibility for more attention. The result is greater message acceptance and, therefore, more action by the receiver. This is further explored in source>message>channel>receiver (SMCR) models in Chapter Two. Thus, the company logo can be part of the economic success of a company when it is created to be credible and thus persuade. The study of credibility-based logo design involves two important elements: credibility traits and non-verbal graphic design expression of these traits. All company logos express company traits, good, bad or neutral. These traits are expressed non-verbally through graphic design elements creatively expressed by graphic designers. To be effective, credibility-based logo design is first defined, planned and created to communicate traits appropriate for each company.

In summary, this research builds on the previous research in source credibility in communication persuasion and applies this social science to the art of creating effective company logos. Company logos based source credibility principles are termed credibility-based logo design. This is the graphic design expression of credibility traits through non-verbal communication in company logos. Each company has its own planned and defined credibility traits, and hence its own distinctive credibility-based logo design. The main function of credibility-based logo design is to project the company as credible to achieve its business goals.

1.1.4 Credibility-based logo design increases Web Site effectiveness

Source credibility expressed as the company’s credibility-based logo design is explored relative to increasing the effectiveness of company Web Site action. The research methodology measures increased effectiveness of company credibility-based logo design on company Web Sites compared with non credibility-based logos. This research develops the credibility-based logo design theory. In addition this research develops the credibility-based logo contribution for increased effectiveness in Web Site action. The implication for increasing the effectiveness of company Web Site action has important financial
considerations. This is because of the vast growing numbers of Internet visitors, the lack of Web Site trust and the need for better E-commerce effectiveness.

The need for better effectiveness is explored further in Chapter Two. A brief discussion is helpful to put this thesis research into perspective. The Internet is the new communication medium. In a little more than a decade it has been transformed from a technological newcomer, to a place where millions shop every day, where they go for news, and where they will do serious business, commonly referred to as E-commerce. According to Jacob Nielsen (Nielsen 2005) the Internet is growing at 18 per cent each year, and now has one billion users. Nielsen speculated 36 per cent of Internet users are now in Asia and 24 per cent in Europe, with only 23 per cent in North America. Nielsen predicted that less than 15 per cent of Internet users will be Americans by 2015, although Americans will spend about one-third of the E-commerce revenue, leaving two-thirds of the revenue coming from other countries. Today, in the year 2006, the E-commerce total revenue in the United States is $1.3 trillion. Nielsen (2005) also speculated that the next billion users will be added by 2015, less than ten years. China and India alone will add another billion of these Internet users. To be effective within this huge user base, the Internet’s usability needs to be improved according to Nielsen. Source credibility expressed as the company credibility-based logo design seems not to have international boundaries, as will be explored later.

The hypothesis of this thesis is that a company credibility-based logo with specific credibility traits for the given company, will add ‘trust’ when it appears in the familiar upper left corner of the company Web Site. Company messages on the Internet for the most part are lacking in trust. The company credibility-based logo has the opportunity to serve as its Web Site trust endorser. This thesis will demonstrate that a company’s credibility-based logo produces more ‘click-through’ action on the company’s navigation bar. The nucleus of this research is credibility-based logo design. A multiple case study supports the credibility-based logo design premise of this thesis:

1. New theory of applying credibility principles in communication persuasion to the planning and design of company logos.
2. Credibility-based logo design theory is established and developed in principle as graphic design elements.
3. The theory is tested on actual company Web Sites to demonstrate increased effectiveness as positive action as a result of the credibility-based company logo on the home or index page.

1.1.5 Credibility-based logo design within branding concepts

It is impossible to study credibility-based logo design without placing this work within the larger context of company branding. The credibility-based company logo is demonstrated to have an effect on company Web Site action. However, the larger implication for credibility-based logo design theory associated with Web Site effectiveness is the application of credibility principles as a rational single creative approach to all marketing communication.

In summary, the basis of this research is the study of source credibility principles in communication persuasion. The researcher explores the application of the social science studies in source credibility in communication persuasion for application to the art of designing company logos. This is first developed as credibility-based logo design theory. Then the contribution of the credibility-based company logo is researched relative to increasing the effectiveness of company Web Site action. As an epilogue, the researcher extends the effectiveness of credibility-based logos on company Web Sites to the broader implication of source credibility principles to developing a single rational creative approach for all marketing communication.

A model of this thesis is as follows:

**Figure 1.2 Thesis Model**

Develop theory for credibility-based logo design

\[\downarrow\]

Apply theory to increase Web Site effectiveness

\[\downarrow\]

As an epilogue, extend theory to creative development of all marketing communications

1.2 Background to the research

While logo design has been popular since the early sixties as pioneered by IBM and others, little is known about how logos are designed to be effective. The logo design industry is by and large bound by the creative talent of an individual designer or by the experience of
the entire design firm normally headed by a persuasive industry icon. Logo studies are usually rules-oriented in terms of what the logo should do: ‘be memorable’, ‘be distinctive’, or ‘be harmonious’. Hutton (1997) provided a broad-based theory for company corporate-identity programs which described preliminary insights as to how these programs influenced consumers, giving designers and company managers the beginnings for a frame of reference. The first objective of this thesis is to build upon the work of Hutton and others to provide a frame of reference to support guidelines for logo design based on source credibility principles.

The Internet is a new medium and a new industry which is widely used, but is also widely fraught with distrust. Few Internet users say they can trust Web Sites. The University of Southern California’s Annenberg Center for Communication released a report in October 2004 (www.annenberg.edu) which claimed that the credibility of the Internet was dropping.

The credibility of information on the Internet rated high among users through the first three years of the Digital Ten Year Future Project, and that credibility rates fairly high in year four. Nevertheless, the project found that the high credibility level for information began to fall in the third year of the study, and fell even further in year four.

Based on responses from a telephone survey of 1500 Internet users, Fogg and Tseng (1998) concluded that less than one quarter of the people who visited Web Sites that sell products or services, believed them. This is surprisingly low compared to the 58 per cent who say that they trust newspaper news, and 47 per cent who say they trust the Federal Government in Washington, D.C. Internet users want the sites they visit to be credible. They want to trust and believe the information they read. Web Site owners want to know how to build a credible site in order to better sell or educate. This is in part due to cases of misinformation, computer hackers, and plain amateurism in creating Web Sites. Web Sites, and the whole idea of the Internet, are losing their aura as a new medium even though this is the fastest growing communication medium in recent history.

Research reviewed further in Chapter Two is generally limited to the more obvious functional requirements, such as ease of navigation, company name, and author identification. Users want to know who operates the site, so it is not surprising that they want to know the company address and phone number. But these are just operational and
verbal cues. The important visual cues, or how the Web Site looks, gives the viewer confidence. Singh (1999 p.91) stated that web pages should be related to advertising and other persuasion communication:

> Indeed, by turning to persuasive communication we should be able to understand some characteristics pertaining to the design of attractive and effective sites. We should indeed organise information in the most efficient and persuasive manner, and set the mood to attract and engage viewers.

Part of the Web Site visual experience is the company logo. Most Web Sites have a logo, good or bad. Credible logos identify businesses in other marketing communication such as advertising. Therefore the **second objective** is to determine if the credibility-based logo design theory can be applied in the design of the company Web Site to increase trust, and therefore action. The overall objectives of this research then are to advance credibility-based logo design theory per se, and credibility-based logo design theory applied to Web Site design to increase Web Site effectiveness.

In summary, the foregoing outlines company logo design and company Web Site effectiveness as the two fields of study and focuses on the dual research problems to be undertaken in this thesis.

### 1.2.1 Research issues, brief gaps, research questions, and contributions

Having described the dual research problems, the research issues for this study are:

4. *How and why are company credibility-based logos effective and can they be designed with credibility traits to influence respondent action? As a follow up, what is the difference between credibility-based logos and non credibility-based logos?*

5. *How and why does credibility-based logo design have an influence on the effectiveness of Web Site action?*

This research issues build on the logo design research of Hutton (1997), Henderson and Cote (1998), Henderson et al. (2003) and Janiszewski and Mayvis (2001). This thesis also builds on the Fogg (1998) research conducted on Web Site credibility, particularly the large-scale Stanford University Persuasion Technology Lab study on Web Site credibility. Specifically in the Stanford study, many credibility variables other than the company logo were explored relative to enhancing the credibility of a Web Site. The ‘owner’ of the Web Site was identified by its name, address and phone number, however the company Logo
identity was not measured, nor its contribution to Web Site credibility determined. Finally, this thesis builds on the branding studies by David Aaker and others relative to brand personality ‘quality’ as the single important brand trait. Quality is a credibility trait, but not all companies have quality as an important credibility trait to emphasise when other credibility traits are deemed more important. An epilogue is presented in Chapter Six discussing brand personality as a range of credibility traits specific for a given company.

Research issues

The research issues derived from the research problem, research questions, and contributions are stated as four research objectives, which are:

RI – 1 Validate the credibility-based logo design theory.
RI – 2 Validate the differences between credibility-based logos and logos which are not credibility-based.
RI – 3 Validate that the credibility-based logo design theory can be used to design logos effectively with actual cases as examples.
RI – 4 Validate that credibility-based logo designs will be effective on company Web Sites to achieve company goals.

The research issues are undertaken in two stages, an inductive and deductive stage. The first stage, the inductive stage, is the initial theory building phase. Research issues RI -1, 2, and 3, are covered in this stage confirming or disconfirming the basic theory that credibility-based logos are an important part of communication persuasion. The second stage is the deductive stage. Research issue RI-4 confirms or disconfirms the 'initial theory' in the first stage. The research methodology is discussed in section 1.4.

Expected contributions

The research objective of this thesis is to fill research gaps to broaden the knowledge of creativity in marketing communication. The research proposes to make four contributions to creative theory and practice. The first is to add to the knowledge about how source credibility theory can be applied to creating logo design. Within source credibility theory is the important distinction that creativity is source-oriented not receiver-oriented. That is, the non-verbal cues depict the credibility traits of the source rather than the receiver. There is too often the tendency by designers to emulate the receiver in their design work in order to relate or achieve common ground. The second contribution is to provide a framework
for creating logos. This framework begins with the source-oriented theory, but adds that source credibility is trait specific for the given source. Further these traits can be defined for each source as a company then planned for inclusion in the creative development of the company logo. Thus the term credibility-based logo design is provided by the researcher. The third contribution is to demonstrate that credibility-based logo design theory can be tested on the Internet. A methodology is developed by the researcher to test logos using 'real life' respondents visiting test Web Sites to determine: (1) the effectiveness of credibility based logo design per se; and (2) the contribution a credibility-based logo design will have to increase the effectiveness of a company Web Site. The fourth contribution is to extend the possibility of credibility-based logo design theory to all marketing communication as a rational single creative approach. Improving advertising creativity is a particular need, bringing the ‘poets’ and ‘killers’ together, producing more effective advertising results.


1.3 Research justification

Logo design is an important marketing tool requiring a frame of reference for better planning and creative development. Hutton (1997) provided an important conceptual framework. Henderson et al. (2003) stated that logo research needed to be based on company or brand personality traits, but did not define these traits as being credibility-based. Aaker and Joachimsthaler (2000) stated that brand personality must have a ‘quality’ image which is only one of many credibility traits, but a credibility trait nonetheless. Erdem and Swait (2004) stated that brand credibility impacts on brand choice
consideration when making purchase decisions. How brand credibility is expressed non-verbally is yet another level of creative expression of brand credibility. Brand credibility, brand personality, and creative expressions of specific company credibility traits through graphic design, advertising layouts and other non-verbal communication elements are vastly unexplored.

The primary justification for the research in this thesis is to develop the credibility-based logo design theory for design development, then to enable its practical application by Web Site planners, writers and designers to create more effective Web Sites using the company logo in order to increase trust. As an epilogue, in Chapter Six the researcher extends the credibility-based logo design theory to the possibility of developing all marketing communication as a working brand system with appropriate credibility traits first determined in the company logo. This final chapter builds on the important work in branding by Aaker (1996), Aaker and Joachimsthalter (2000), Aaker and Davis (2000) and Aaker (2004).

1.4 Methodology

The researcher’s case is a multiple case study using a mixed-methods approach to collect data. There are two stages, an inductive stage and a deductive stage. The inductive stage has two phases. The first phase is the initial theory phase which is conducted in three steps to collect qualitative data. The purpose of the first phase is to build the credibility-based logo design theory. The second phase, consists of seven cases which are actual companies participating in the logo design development and testing. One of the cases is a pilot case to determine and correct problems with processes used in designing logos according to the credibility-based logo design theory. The purpose of this second phase is to confirm or disconfirm the initial theory developed in the first phase.

The second stage is the deductive stage. This is the testing stage which triangulates the findings in the first stage that the process for developing credibility-based logo design in the inductive stage is valid. The case study methodology follows the research approach advocated by Yin (2003) but modified to a method used by Leonard-Barton (1988) for investigating innovations. The unit of analysis for this research is the company credibility-based logo design. A brief description of the methodology is as follows. The inductive stage establishing the theory of credibility-based logo design is based on prior research and
experience of the researcher, interviewing experts in the field and creating actual logo designs based on the theory. The deductive stage research collects quantitative data to measure the effectiveness of specific company credibility-based logo designs live in a 'real world' setting on actual company Web Sites.

In essence, the methodology is as follows:

1. Seven companies are purposefully selected from a range of business fields. A pilot test with one of the companies is conducted first. Modifications are made to the testing process. Then six more companies are tested. Three trials are conducted to collect quantitative data during the deductive stage to verify the testing process leading to the final test.

2. A text only Web Site is created for each company with very basic information about the company product or service, including basic information on the site's navigation bar. The navigation bar contains the action responses the company wants of the visitors, usually a response to purchase. Otherwise, the site resembles a very basic Web Site with a test company logo prominent in the upper left hand corner on the home page. The company logo is intended to be the only visual stimulus of credibility, or no credibility.

3. One credibility-based and three non credibility-based logos are rotated consecutively after between 100 and 200 visitors access each logo within the six company Web Sites. When a logo is on the test Web Site, it is measured for navigation bar action. That is, how many clickthroughs on the navigation bar the credible or non-credible logo induced. This is a function of imparting company credibility or non-credibility communication through non-verbal communication of the logo’s credibility traits. The test Web Sites are actual companies applying the actual credibility based logo design developed for each company. The credibility-based logos designs are created by international designers as directed by the researcher.

4. The credibility-based logo is tested for greater Web Site effectiveness in comparison to three non-credible logos. The hypothesis is that the credible logo designs will produce a higher number of click-throughs for more information than the three non-credible logos. A further hypothesis is that non-credible logos visually infer that the company behind the Web Site is less credible, therefore less persuasive.

5. Respondents are self-selected visitors who use key words on search engines, and then find the test sites through Google AdWords. The data is collected by a Web analytics
service, SmarterTools, and provided to the researcher. The data obtained is evaluated for significance applying the Chi Square statistic. Chapter Three describes the methodology in more detail.

1.5 Definition of terms

Definition of terms is important to the understanding and purpose of the research project. The following terms help to understand the boundaries and findings of the research contained in this thesis. To assist the reader, they are in alphabetical order. (Note: the researcher added ‘aka brand image’ or a similar statement in parenthesis to reposition the current definition.)

**Attraction**

Source and receiver share similar attitudes.

**Attractiveness**

Source attributes are liked by the receiver in the sense of physical or good personality.

**Brand**

A name, term or symbol attributed to a company which serves to identify the company. The sum total experiences a person has with a company.

**Brand attitudes**

Summary evaluations that reflect preferences for various products and brands (aka credibility-based brands).

**Brand credibility**

A possible new measure of the company brand, based on how much or how little consumers consider the company brand image to be credible. It is presumed that the more company credibility, the more successful the company will be as a change agent in persuading consumers to action (usually to buy the company product or service).

**Brand equity**

Developed by a firm that creates and maintains positive associations with the brand in the mind of consumers. These positive associations vary, and are not specifically defined by marketers.

**Brand image**

Everything known about the company from past experience (aka a new term Brand Credibility).
Brand personality

Description of a company in personal metaphoric terms, i.e. state-of-the-art, stable, high tech etc but without a frame of reference for description (aka company personality, core personality, brand image and similar nebulous terms).

Branding

The brick-by-brick development of a brand, which must be consistent and coordinated verbally and non-verbally. The strategy of developing brand names so that company management can focus consumer attention on a clearly identified brand image or Brand Credibility goal.

Case study

‘How’ or ‘why’ questions to focus on a current real-life social science research to help explain, explore and describe otherwise uncontrolled behaviour issues.

Celebrity endorsement

Advertisements that use an expert or celebrity as a spokesperson to endorse the use of a product or service, which adds to the perception of the source, and, therefore, must be compatible with particular source credibility attributes. Also known as *prestige suggestion.*

Clickthrough

A Web Site term referring to when a visitor accesses more information on the navigation bar aka menu bar (aka click throughs).

Communicator style

The manner in which the source communicates the message, and the non-verbal overtones which accompany the message content. In marketing communication, this is the design element of the message.

Communication model

Source influences the message in a channel of communication which reaches and is perceived by the receiver. The model is: source→message→channel→receiver.

Communication persuasion

The communication process to influence a positive receiver response.

Company Managers

Collective term to represent any position within the company management team.
Company personality
Terms which mean the perceived image of a particular company in the minds of the public as a result of prior experiences with the company. Some are experiences are controllable, some are not (aka company image, brand personality, or core personality).

Company-to-people communication
Similar to people-to-people communication. In this instance, this is company-to-people communication.

Consistency
Source is always perceived as being consistent with planned specific verbal and non-verbal credibility traits. The message is consistent. The channels of communication are coordinated and consistent to reach the receiver.

Coordination
Source is always consistent and coordinated between marketing communication elements. Also known as integrated brand promotion.

Creatives
Collective term to represent those involved in creativity.

Credibility
Consists of both expert and trustworthy traits. Dynamism is a third trait referring to how much expertise and trust' is expressed, or achieved.

Credibility-based brand image
A brand system developed through consistent and coordinated use of defined credibility traits. Usually a combination of verbal and non-verbal elements working together.

Credibility-based logo design
A logo which is both expert and trustworthy. Expertise is symbolised in the logo content. Trustworthy is developed with design motifs such as contemporary or traditional and the like (many trustworthy traits can be communicated with various design motifs.)

Credibility persuasion
The source of the message is perceived as trusted and competent, which enhances message acceptance by the receiver.

Deductive
To derive from reasoning.
Design form
A term used in graphic design to suggest a particular character expressed non-verbally by the design. For example a contemporary design form suggests cutting-edge, efficient and forward thinking (aka design motif).

Dynamism in credibility
How much or how little credibility a person or company communicates in a communication dyad.

Experienced credibility
Perceived credibility earned over a period of time. The most powerful form of credibility. Consistency is important, while lack of consistency causes blurred or even detrimental credibility.

False Positive
When an ill-conceived marketing practice in one area is related or unrelated to a positive result in another area. For example, the well conceived practice of ‘frequency’ or message repetition will bring results in spite of the process of creating an ill-conceived logo or advertisement. The reverse would also be an example.

Graphic design
Design most associated with creating logos and printed material such as annual reports and brochures. Also known as two-dimensional design as compared with environmental design (such as exhibits) which is three-dimensional.

Heterophily
Source and receiver perceive each other as dissimilar on one or many of the same dimensions such as age, social class, sex, culture, and attitudes.

Homophily
Source and receiver perceive each other as similar on one or many dimensions such as age, social class, sex, culture, and attitudes.

Inductive
Inference of a generalised conclusion from particular instances.

Integrated Brand Credibility Promotion. (IBCP)
All marketing communication is created as source-oriented with planned credibility traits. All marketing communication is consistent and coordinated to project the company brand image together with the company message. Over time, the company achieves desired Brand Credibility.
Integrated Brand Promotion (IBP)

All marketing communication is focused to promote the company brand image. Various promotional tools (including advertising, logos, printed media and Web Sites among others) in a coordinated manner to build and maintain brand (aka credibility brand) awareness, identity and preference.

Integrated Marketing Communication (IMC)

All marketing communication is coordinated to achieve a synergistic effect.

Internet

A vast global network of scientific, military and research computers that allows people inexpensive access to the largest storehouse of information in the world.

Interpersonal communication

Communication between two people, or more than two people. Also known as people-to-people communication.

Irrelevant Homophily and Heterophily

Source attributes not important to influencing the message as perceived by the receiver.

Logo

A graphic mark that identifies a company and represents (stands in for) a company and its personality or image. Also known as a trademark or as the vernacular for a trademark.

Marketing communication

Usually considered the traditional media such as advertising, public relations, and sales promotion materials with the purpose of carrying messages to influence company goals. The most common goal is the sale of a product or service, but there are many other goals. If the media is credibility-based it can also be included in the definition. Therefore, such items as logos, building architecture, lobby and interior displays, employee clothing, forms, stationery, business cards, vehicles, signage and product packaging among others can be considered marketing communication. Also called touch points.

Marketing communication system

Consistency and coordination of verbal and non-verbal messages working throughout a marketing communication program.
Message strategy

The centre point of the source→message→channel→receiver model. A component which is primarily selling strategy meant to achieve company goals, usually in advertising, Web Site and brochure copy. Message strategy is separate from source strategy, channel strategy and receiver strategy.

Non-verbal communication

Communicating cues without words such as body language and symbols. For purposes of this thesis visual/aural cues such as graphic design, message tone, music and advertising layout among many others.

Pre-implementation evaluation for success before investment

Determination if a credibility-based brand element, such as a logo, will influence message(s) to accomplish established company goal before the brand image is implemented. The measurement is along a scale depicting the amount of credibility power inherent in the element in order to influence messages. Note: this is proprietary research developed in this thesis based on the credible source→message→channel→receiver.

Presumed credibility

Perceived credibility about someone or something because of general assumptions formed such as about physicians and the clergy.

Prestige suggestion

An early term similar to celebrity endorsement. The celebrity image in a communication dyad, in advertising for example, becomes attached to the source or company image and care must be taken in choosing a source with an appropriate image to match the company brand image.

Receiver

The third part of the source→message→channel→receiver model, emphasising the three components. The target audience, intended or otherwise.

Relevant homophily and heterophily

Classically defined as source attributes which are important to or logically related to the message as perceived by the receiver. This means that the source of the message must be perceived by the receiver as credible relative to the topic of the message. The receiver and source of the message can be demographically similar or different. The important implication is that all marketing communication must communicate attributes of the source, not the receiver.
Reputed Credibility

Reputed credibility because of what third parties such as people, media and institutions have imparted. An institution, for example, imparts a MD degree giving reputed credibility to a doctor, or to a lesser extent awards an actor with an Oscar trophy. The media may endorse a person for government office.

Return on investment (aka ROI) in branding

Equals the profit (as sales minus costs) over the capital invested for the brand. Also can mean investment in establishing credibility relative to the amount of goods or services sold. This is a much smaller dollar figure, as all touch points are used to establish credibility.

Single rational creative approach

An ideal theory that all creativity in marketing communication is source-credibility oriented, not receiver oriented. Further, that all marketing communication based on this theory is created with consistency and coordination to achieve brand credibility.

Source credibility

Source is perceived by the receiver to have expertise, trustworthiness and forward thinking. Dynamism describes the amount of credibility attributes.

Source-oriented credibility

A creative viewpoint that all marketing communication must communicate the credibility traits of the company as the source of the message, not receiver traits.

Spokescharacters

Non-human characters such as a duck, gecko, camel, or frog which endorse, speak for or associate with company products or services. Similar to celebrities in this respect.

Surface credibility

Perceived credibility from inspection of surface cues which result in initial judgement approval of a person, company or object. Design appearance plays an important role as non-verbal communication.

Trademark

Historically, a distinguishing mark or sign to identify a company. Current vernacular is company logo.
Web Site
Developed informational or sales tool by a company and placed on the Internet.

World Wide Web or www
A universal database of information available to Internet users; its graphical environment makes navigation simple.

1.6 Limitations
The research in this thesis is multi-faceted and is exploring new theories. As such, this thesis has four limitations to the research to be considered.

1. The major limitation is the assumption by the researcher that credibility-based logos actually communicate the intended credibility traits to Web Site visitors. The researcher is relying on many years’ experience and attention to graphic design elements as non-verbal communication.

2. The researcher used a plain Web Site for test purposes, giving the test logo prominence as a visual stimulant to induce navigation bar action. That is, the researcher only tested credibility-based logos on a Web Site in isolation without other stimuli except simple text and simple Web Site design. Many Web Sites are in themselves credibility-based but without a credibility-based logo. Further research would test the effects of a total credibility-based Web Site plus a credibility-based logo. This might produce even greater effectiveness.

3. The researcher does not know the Web Site visitors as they are self-selected to the test Web Site. It is suggested that the visitor could comment on the logos in the test Web Site to determine if the logo matched the intended credibility trait communication. This would be useful as another research project.

4. The researcher does not factor into credibility-based logo design theory or Web Site effectiveness what may be termed ‘false positives’. Success in communication persuasion is a function of several factors such as consistency, clear communication and most importantly repetition, any one of which can produce positive results in spite of a lack of credibility. This is further discussed in Chapter Five.

1.7 Outline of thesis
Chapter One – Introduction. Chapter One introduces the research, and provides the background for the research relative to the need for a better understanding of the company logo and the company logo contribution to Web Site effectiveness. This chapter introduces
a major theory for understanding the relationship between logo design and credibility persuasion principles in communication, termed credibility-based logo design. The implications for better understanding of a rational single creative approach to logo design and extending to creating all marketing communication is possible.

This chapter then includes a brief description of the research problem, issues and contributions, gaps in the current theory that provide justification for the current research, and a brief explanation of the methodology. It includes important working definitions, limitations of scope, and the thesis outline.

**Chapter Two – Literature review and research issues.** Chapter Two justifies the theoretical foundation for the research by reviewing historical and current literature. The relevant parent disciplines of logo design theory, branding theory, communication transmission model theory, source credibility persuasion theory, and Web Site credibility theory, are reviewed. The application of these theories to logo design is explored. The literature review places the logo research in context, establishes the boundaries and reviews new possibilities for investigation. It also identifies gaps in the existing research to provide justification for the possibility that the credibility-based logo theory is justified and contributes to the effectiveness of company Web Sites. The conclusion presents a research hypothesis that credibility-based logos theory can be justified and will have a positive effect on company Web Sites relative to achieving company goals. Table 1.1 indicates how the parent theories may have relevance.

**Table 1.1 Relevant parent theories**

<table>
<thead>
<tr>
<th>Parent Studies</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credibility-based logo design theory</td>
<td>Introduces the concept of source credibility applied to company logo design.</td>
</tr>
<tr>
<td>Branding theory</td>
<td>Introduces current theories in branding, and the concept of brand personality to determine a possible credibility basis or creative application of personality traits.</td>
</tr>
<tr>
<td>Transmission models aka source→message→channel→receiver models as the communication chain</td>
<td>Isolates the ‘source’ as having a distinct endorser requirement in the communication chain. The source endorses the message communicated to the receiver.</td>
</tr>
</tbody>
</table>
Parent Studies | Relevance
--- | ---
Source credibility in interpersonal communication | Furthers ‘source credibility’ as a distinct endorser requirement in communication persuasion. A credible source endorses the message communicated to the receiver for more predictable positive action. Introduces source-oriented, rather than receiver-oriented creativity.

Web Site credibility | Introduces ‘credibility’ as a requirement for Web Site trust and effectiveness. The company credibility based logo design is the ‘source’ or owner of the company Web Site.

Source: Developed for this thesis

Chapter Three – Methodology. Chapter Three outlines the multiple case study research methodology. The chapter provides a detailed outline of the research procedures, instruments to be used and limitations. Included is the unit of analysis, ethical considerations (including Southern Cross University approval), validity and reliability issues. The purpose is to confirm (or deny) the research hypothesis developed in Chapter Two.

Chapter Four – Data analysis. Chapter Four presents the data obtained from the case studies. Typical of case research, several resources will be presented, justifying that logos can be credibility-based in theory and practice. Credibility-based logo design examples are shown, together with the process for design development. The effectiveness of the credibility-based logo on the company Web Site is analysed from the data collected from a Web analytics resource using actual visitors as respondents.

Chapter Five – Conclusions and implications of the research. Chapter Five concludes the research phase by summarising the previous chapters and linking the research hypothesis. Implications for theory in the parent disciplines are explored, lessons are learned, limitations and possible extension of the theory to a rational single creative approach for all marketing communications are included as an epilogue discussion.

Chapter Six – An epilogue. The research results have reasonable evidence for concluding that credibility-based logo design theory is valid and demonstrated to be effective on the company Web Sites. The results, researcher's experience and the validity of the theory permit the researcher to extend the theory to the broader implication of credibility theory.
as a rational single creative approach to the planning and creative development of all marketing communication elements within the company. This is also a branding issue with important implications for a new measurement of company credibility as brand equity.

The outline used to present the research within this thesis is a five chapter model by Perry (2002), although the researcher has six chapters. A thesis outline and brief description follows:

**Figure 1.3 Outline of Thesis**

1. **Chapter 1 Introduction**
   - Orientation to the Research

2. **Chapter 2 Literature Review**
   - Framework, gap identification and theory development

3. **Chapter 3 Methodology**
   - Outline of methodology, justification and research

4. **Chapter 4 Data Analysis**
   - Theory building, theory in practice, theory in practice, quantitative measurement

5. **Chapter 5 Conclusions and Implications**
   - Findings, broader implications, and suggestions for further research

6. **Chapter 6 An Epilogue**
   - Reflections

Source: (Perry, 2002)

**1.8 Summary**

This chapter introduced the research which included the *credibility-based logo design* theory as a possible rational single approach for creating marketing communication. A broad background to the source credibility basis for the field of logo design and Web Site study was outlined to orient the reader to the foundations of the research including the gaps building on previous research. A brief description of the research issues and expected
contribution provided the justification for the research. The research methodology was briefly explained, definition of terms, delimitations and an outline of the thesis were provided.

Having introduced the research, this thesis now proceeds with a detailed review of relevant research in the literature as Chapter Two.
The Earth revolves around the sun.
The speed of light is constant.
Apples fall to Earth because of gravity.
Source-credibility principles are linked to company logos.
Credibility-based logos are linked to Web Site effectiveness.
2.0 Structure of Chapter Two

2.1 Introduction

Chapter One outlined the specific research objective: to establish a theory for credibility-based logo design, then testing the theory as a means of increasing the effectiveness of company Web Sites. Chapter One discussed the problem of Web Site trust (one of two prongs of credibility), and offered the credibility-based logo design philosophy as a possible way for a company’s credibility-based logo to contribute to Web Site trust, and thereby increase action on the company’s navigation bar.

The purpose of this chapter is to build a theoretical framework for the research by reviewing existing literature. Table 2.1 indicates the parent research covered in this literature review.

Table 2.1 Relevant Parent Studies

<table>
<thead>
<tr>
<th>Parent Studies</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logo design philosophies</td>
<td>Reviews the current logo philosophies, highlighting a gap in source credibility principles applied to logo design.</td>
</tr>
<tr>
<td>Brand personality philosophies</td>
<td>Reviews the current brand personality philosophies, highlighting a gap in source credibility principles applied to logo design.</td>
</tr>
<tr>
<td>SMCR Models: source→message→channel→receiver</td>
<td>Discusses the source as having distinct credibility requirements in the communication persuasion chain, leading to a gap in source credibility principles applied to logo design.</td>
</tr>
<tr>
<td>Source credibility in interpersonal communication persuasion</td>
<td>Furthers source credibility as a requirement in communication persuasion, highlighting a gap in source credibility principles applied to logo design.</td>
</tr>
<tr>
<td>Web Site Credibility</td>
<td>Introduces credibility as a requirement in Web Site trust highlighting a gap in source credibility principles applied to logo design and increasing the effectiveness of Web Sites.</td>
</tr>
<tr>
<td>Logo Credibility</td>
<td>Introduces credibility-based logo design theory as a requirement per se and for Web Site trust, which highlights a gap in source credibility principles applied to logo design and Web Site effectiveness.</td>
</tr>
</tbody>
</table>

Source: Developed for this report
This chapter begins by advancing the theory that there is a gap in the research covering current logo design effectiveness. At present most logos are designed without definitive rules for persuasion success. This will be reviewed in present logo design theory. Branding theory will be reviewed in relation to company brand personality. Communication models and source credibility theories will be reviewed in the social sciences for application to planning and creating company logos, and therefore logo design effectiveness. This section is particularly important because it sets up the theory that logos are source credibility-based. Current theories, though scant, in Web Site credibility and logo credibility are reviewed. The gaps in the literature are presented together with research issues to explore.

The structure of the literature review and the development of credibility-based logo design are to:
1. establish credibility-based logo design theory;
2. establish the difference between credible logos and non-credible logos;
3. establish that credibility-based logo design theory can be the basis for planning and designing more effective company logos; and
4. establish that credibility-based logos with specific company traits can add to the effectiveness of the company Web Site.

Gaps are identified in these structures which become the research issues in this thesis. The research problem is then presented as a multiple case study. The research is justified together with specific boundaries. How the researcher will collect data will be outlined as specific research issues to explore.

In summary, the literature review begins with parent theories, followed by a literature review of the immediate disciplines of credibility-based logo design and its application to Web Site effectiveness. The gaps in the literature and research issues are established.

2.1.1 Logo design philosophies

Logo design is a form of non-verbal communication consisting of various traits and, therefore, various meanings. Logo design forms represent something to consumers, as they always reflect the character of the company behind the logo, for better or worse. Given this importance, it is curious that while logos are mostly visual, over 85 per cent of the articles in the Journal of Consumer Research, Journal of Marketing, and the Journal of Marketing Research are about words only and are mostly about advertising.

The few studies in logo design recognise the need for rationale in logo design creativity and offer various approaches. A conceptual framework for corporate identity programs was presented by Hutton (1997) for the purpose helping of those in logo design, branding and marketing communication to have more efficiency and accountability in managing these efforts. In addition ‘for the benefit of scholars seeking to develop the science as well as the art of corporate identity … because of the billions of dollars spent annually on their implementation … and because there is virtually no theory about how corporate identity programmes work’ (Hutton, 1997, p.120). Hutton (1997, p.120) raised another important issue which is basic to this thesis regarding the issue of corporate identity programmes being:

bought, sold and implemented as an article of faith, treated almost entirely as a matter of art rather than science. Unfortunately, most of the relevant literature has dealt only
tangentially with corporate identity (logos). The few articles that have addressed the subject directly have tended to focus on very specific, often technical issues such as legal aspects of symbols, or specific types of symbols, rather than on the general implications for buyer behaviour and marketing strategy.

Most logo research has been concerned primarily with what can be termed the basic requirements of logo design, e.g. that the logo must have ‘memorability’, ‘must stand out’ and the like. As such, the research on logo design further concludes that logos should evoke positive feelings of ’familiarity and affinity’, ’be recognisable’ and ‘communicate clear meanings’ (Hoyer and Brown, 1990; Vartorella, 1990; Schechter, 1993; Peter, 1989; and Cohen, 1986).

Hutton (1997 p.127) postulated that the corporate identity model of buyer preference is a combination of ’attribute preference’ and ‘identity preference’. Attribute preference refers to such things as price, technical specifications and measurable performance, whereas identity preference is conscious associations, familiarity, aesthetics, unconscious associations and exposure effects.

‘Conscious associations’, Hutton (1997 p.127) added, would include both specific and symbolic meaning that an individual associates with (company) names and symbols. Symbolic associations include style, consistency and repetition. Familiarity is an individual’s perception of how well a person knows a name or symbol, or the product, service or organisation it represents. Aesthetics refers to the aesthetic response to a product’s identity rather than its physical attributes. Unconscious associations are perhaps the most difficult part. These might be the eroticism of the alleged Coca-Cola bottle’s curves, or Prudential Insurance symbolic use of the rock. Exposure effects lie in the most basic unconscious level. This is a function of frequency of exposure. Hutton noted (1997, p.129) that the (design) form of the company name or symbol was not directly related to the corporate identity model of buyer preference, but stated that one of the other factors may be more relevant in increasing memorability. Hutton’s contribution to the understanding of how logos work provided many insights for further research. Hutton (1997, p.131) stated that a:

great deal of research needs to be done. Brand and corporate identity strategists and managers – especially from parts of Europe, Japan and other countries with a longer and
perhaps more sophisticated tradition in this field – should be encouraged to publish and publicize their existing theory-in-use knowledge. This will serve as a framework for new insights for branding and corporate-identity and marketing strategy for persuasion than the traditional conceptualisations of marketing communication. Also to help advance the science as well as the art of understanding how corporate identity programmes and branding programmes work.

This was a short nine years ago. What Hutton may have been referring to as traditional conceptualisations of marketing communication, as it pertains to logo design, follows. The researcher adds that these traditional insights were primarily well intentioned requirements for logo design, but difficult for logo designers to interpret in their work and managers to judge and implement.

The requirement for ‘good’ logo design by Werkman is a typical example. Werkman (1974 p.13) in his trademark creativity book stated that trademarks must:

1. enhance or create distinctiveness,
2. name the product/company,
3. enable recognition of the product/company,
4. facilitate remembrance of the product/company,
5. indicate the origin of the product/company,
6. convey product/company information,
7. stimulate the desire to buy, and
8. symbolise guarantee.

These objectives can be considered too many goals for one logo and are confusing. For a logo designer, some of these objectives are nebulous, and therefore difficult to interpret and incorporate into a logo design. Also, some of these objectives are what are termed the basic requirements of what a logo designer would incorporate into any good logo design. For example, most logo designers would already understand the design requirement for ‘creating distinctiveness’. But the terms ‘purpose of the firm’ and ‘familiarity/affinity’ are too broad and difficult to interpret into a design form.

Henderson and Cote (1998, p.14) suggested some guidelines to assist managers in selecting or modifying logos to achieve corporate image goals:
Marketing literature contains no systematic research on the effect of design on consumer evaluation of logos. Relevant discussions are limited to various rules of thumb propagated in the trade press that have been neither tested empirically not integrated to form a comprehensive set of guidelines. Therefore, those who select logos must rely on their own idiosyncratic view in making choices.

Henderson and Cote (1998 p.14) did, however, go on to say that the criteria for a good logo was that it should be ‘recognisable, familiar, elicit a consensually held meaning in the target market, and evoke a positive effect.’ This view was also supported by Cohen (1986), Peter (1989), and Vartorella (1990). Henderson and Cote (1998 p.16) further stated that logos with these objectives would have 13 characteristics that appear most relevant to logos: ‘active, balance, cohesive, complex, depth, durable, organic, parallel, proportion, repetition of elements, representative, round and symmetric.’ These objectives are also too many for one logo to accomplish, and are also confusing. For example, how does a designer interpret ‘depth’ or ‘organic’ in graphic design as visual non-verbal communication to any logo design?

In addition the most meaningful result from the Henderson and Cote study just referenced was that logos should be less abstract, more literal, and memorable. These criteria were not new to many logo designers, but were confirmed in the Henderson and Cote study as being what are called common ‘functional’ elements in logo design strategy. But most importantly, the Henderson and Cote study may be measuring the wrong criteria for ultimate effectiveness, although the researcher agrees logo design should be less abstract, more literal and memorable. Henderson and Cote (1998) added ‘liking’ and ‘quality’ as important to the logo design character as determined by respondents in the US. They concluded that it was important to determine the extent to which logos created a positive effect, and that they should communicate high quality. What these terms meant in the Henderson and Cote study, however, was ambiguous to designers trying to create a positive effect with high quality. The same was true of the ‘recognisable and clear meaning’ objective, apart from giving the designer instructions not to create abstract logo designs. The researcher agrees that logos should be liked, recognisable and have clear meaning, but, again, logos should also be credibility-based to be effective. Henderson and Cote state that quality is a desired trait. The author agrees that quality is generally a trait to be incorporated in a logo design. However, it is a credibility-based trait which is
appropriate as a prime trait for some logos, but not for others. In other words, each company has its own set of credibility traits it wants to communicate and establish. Quality may or may not be one of these. In fact, other traits such as highly technological or stable/been around a long time may be more important to a company in the long range. The researcher will further advance this as credibility-based logo design theory.

Schechter (1993) concluded that logos with clear meanings were better liked, better recognised and transferred a more positive effect. Henderson and Haber (1995) referred to clear meaning as producing designs with the same stimulus codes recognised by the same culture. Therefore, logo designs which were understood and communicated a clear meaning were better than those which were abstract and not understood. This is basic logo communication effectiveness and not new to good logo designers. Clear meaning also increases logo recognition, which is important in remembering company logos. Pictures were perceived more quickly than words according to Edell and Staelin (1983), who concluded that logos with a symbol worked better than a logo with just the name, such as Xerox, or as a monogram, such as IBM. Logos with a symbol created an association with the company name which improved brand memorability.

In a later study, Henderson, Cote, Leong and Schmitt (2003) expanded their earlier conclusions with a logo study conducted in Asia where companies were encouraged to design logos that were elaborate, natural and harmonious, and had to have recognition, clear meaning, quality and feng shui. Henderson suggested that logos with symbols should be used in less industrialised countries and in Asia where visually-oriented writing styles were prevalent. Henderson concluded that logo strategies may be international.

Iverson (2004) attempted to define the planning process for logo success. The goal of this research was to build a beneficial destination image requirement through logo design. Iverson stated that logos could represent meanings and associations that could direct travellers’ perceptions and images of the destination. Further, these meanings and associations provided clues about a destination's culture. Iverson (2004 p.17) continued that logos typically were selected from a pool of designs, and that they should:

1. be recognisable;
2. elicit a consensually held meaning in the target market; and
3. evoke a positive affect.
Iverson (2004, p. 220) referenced the previous 1998 work in this area by Henderson and Cote saying that the Henderson and Cote research ‘has provided one of the very few contributions to the development of the logo design understanding.’ However, Iverson (2003 p.18) added to this research by suggesting that the following questions must also be asked:

Q1: What is the vision of how is the place destination is to be perceived?
Q2: What do the logo owner, logo developer, and logo recipients think about the present place destination logo?
Q3: What do the logo recipients think about a range of developed place destination logos?

Iverson went on to describe the logo design process, stating that from the foregoing questions, the logo developer makes several logo alterations. Q3 is asked again, and modifications are made until a final logo solution is accepted by the owner.

The researcher questions this process, as the prime credibility of the place destination is not asked for, only the ‘vision of how the place destination is to be perceived’, and what is thought about the present logo. A more precise method would be to ask what logo traits are important to communicate about the place destination. These are the traits most commonly associated with a place destination, or the traits the place destination wants to be known by as it is in reality. These are traits which are intrinsic about the place destination, and can be communicated with believability. These are the credibility traits which the researcher will advance in this thesis. Iverson's questions did not ask about credibility traits for a given place destination, hence his Q3 asked ‘what do the logo recipients think about a range of place destination logos (presented)?’ There should only be a small range of logos presented, all specific interpretations of the ‘credibility’ planning. Also note that the credibility traits are all source oriented rather than receiver oriented. The author will advance the rationale for this in section 2.2.2. The source, the message, the channel, and the receiver models aka transmission models or SMCR models.

Janiszewski and Mayvis (2001) experimented with repetition of logos or ‘fluency/attribution’ and found that the meaning of logos, the familiarity of logos, and the presentation of logos all influenced consumer judgements, concluding that logo repetition was also important. Janiszewski and Mayvis suggested that there were many challenges remaining in fluency research, namely that little is known about the stimulus factors that
influence consumers. While not defining stimulus factors, these could refer to the inherent meanings of logo design content and form traits which express the logo personality associated with communication persuasion research.

In summary, the research to date refers generally to what logo designers strive to do, but find the solution objective ambiguous. For example, what is a ‘positive effect’? What ‘meaning’? What is a ‘memorable’ logo on its own without repetition? Most importantly, even if the design rules according to this research were better understood by logo designers, these requirements are not persuasion-oriented. They are not requirements which influence customers. How does ‘use colour’ relate to buying a product and what colour would the designer use? How does a ‘clear, not abstract’ meaning relate to buying the product. Again, ‘what meaning’ would be used to induce a sale? The foregoing literature review concentrated on what could be considered by the researcher to be nebulous rules not connected with communication persuasion theory. To review, a logo must:

- have harmony
- have meaning
- have a clear, not abstract, meaning
- have familiarity
- have feng shui
- have quality
- have good design
- be natural
- be repetitive
- be recognisable
- be distinctive
- be memorable
- use colour
- use symbols
- use a symbol with a name in a sans serif font
- evoke positive effect
Another problem is the logo design research methodology to determine characteristics. The research methodologies are in two basic categories:

1. Logos are researched for functional performance, such as memorable, recognised or liked. This research is only part of what makes a logo effective. For example, a logo may be liked (believable or trustworthy) but not portray the company as expert, second and equally important of being credible in communication persuasion. Therefore, logos are not researched for logo design strategy to influence customers. As will be developed in section 2.3, sources which are influential have credibility traits. Logo research then would measure source credibility traits which were important to be included in the planning a design of logos.

2. Logos are researched which were designed first, and then subjected to respondents. This is a research bias in that the logos in the test may or may not be effective in the first place. The problem is that logos are measured for presumed effectiveness, not actual effectiveness. For example, it is assumed that a literal logo with memorability will produce sales, or that a destination logo with the assumed correct ‘vision’ and developed in a number of alternatives, will come down to one final design which will influence tourists.

The researcher advocates that logo research must be based on communication persuasion theory which identifies source credibility studies as the determinant for successful logo planning and design. This requires an understanding of what credibility traits must be incorporated into a logo design to communicate a meaningful, persuasive personality.

Referring to the Henderson et al. (2003 p.30) study again, the authors stated that:

\[
\text{Future research should include brand personality as part of the measurement of meaning.}
\]

\[
\text{Brand personality consists of five dimensions: sincerity, excitement, competence, sophistication and ruggedness. Personality research should be extended to logo personality in an effort to improve our understanding of the determinants of logo meaning.}
\]

Note the brand personality dimension ‘sincerity’ which is close to the credibility prong of trust, and competence which is another term for ‘expertise’. This is close to the researcher’s source-credibility logo theory objective in this thesis. But Henderson et al do not suggest how graphic design symbology relates to logo design. The researcher would add that new ground for logo research should extend to logo personality in an effort to improve our understanding of the determinants of logo meaning through graphic design.
elements in order to formulate a philosophy for logo communication persuasion requirements. This philosophy is based on credibility principles in source communication.

This research is specific to developing a theory on credibility-based logo design strategy with graphic design traits to influence customers, and reflects a gap in the literature.

2.1.2 Need for better logo design research

Thus, the researcher again advocates that a better research method would determine potential logo effectiveness based on the logo being related to communication persuasion principles. Credibility-based logo design with specific attributes which are considered credible traits for a particular company has more promise as logo communication persuasion theory; first for designers to understand and develop their work, and second to measure logo effectiveness.

The researcher examined communication principles, concentrating on source credibility, which is expertise and trustworthy based. Therefore, source credibility has specific credibility attributes which can be determined prior to creative logo design. These traits can be planned, developed and measured for effectiveness. This is measuring actual effectiveness of alternative credible logos for ‘richness’ in credibility to induce action. One logo would emerge as being effective in producing desired company goals, and therefore create confidence for further implementation in a branding system. This is the only justified role of a logo, and credibility principles become the requirement for logo attributes; being literal, memorable etc are thus just functional requirements of all logos. Logos planned and created to be credibility-based, with specific credibility traits identified, would give designer and client a clear understanding as to what the logo should communicate. The final credibility-based logo design could be judged by the designer and client comparing the desired verbalised credibility attributes. More importantly, a credibility-based logo design could be measured for effectiveness with an understanding as to why the effectiveness results are higher than for logos which were not credibility-based. This was briefly discussed in Chapter One, and will be discussed in more detail in Chapter Three.

Henderson et al.’s (2003) suggestion for further research in the determinants of logo meaning is important and timely. This takes logo design beyond the positive effect,
recognisable and clear meaning requirements in the original Henderson work and into logo personality research which the researcher is proposing, which is that logo design be based on source credibility in interpersonal communication research.

This is new to logo design communication effectiveness based on credibility principles and represents part of the gap the researcher is pursuing. While company personality research is important, the researcher argues that these personality traits should have a basis connected to persuasion principles. The researcher will advance persuasion principles based on source credibility research. This is important as there is a gap in the literature into logo personality research based on source credibility.

2.2 Branding philosophies

Branding philosophies are reviewed here as an overall marketing objective popular today in marketing; however, defining company character within branding philosophies is more directly related to the research in this thesis. The researcher is interested in literature which may relate to the company character which would give insight into the possibility that certain character traits would be part of the creative planning and design of company logos.

Branding is defined in several ways, but is essentially all we know about a company through experience. It is a declaration by a company as to ‘who we are’, ‘what we believe’, and ‘why you should put your faith in our company’ (Corporate Branding Partnership, 1997, www.brandchannel.com). It is essentially image formation, building the brand image on a few cues about a company to eventually include many more. The brand image has often been described as the brand or company personality. Again, brand personality is an important research area in branding, but, as will be developed, what constitutes brand personality traits is still the question.

Branding literature is generally discussed in five categories:
1. Brand Personality;
2. Brand Leadership;
3. Brand Identity;
4. Brand Building (including planning, creating and managing branding programs.); and
5. Brand Measurement.
Of the above, Brand Personality literature relates to logo design philosophy research, and ultimately branding effectiveness. The other categories of Brand Leadership, Brand Identity, Brand Building and Brand Measurement, are management functions relative to the implementation and measurement of the brand personality.

2.2.1 Brand personality

The researcher is interested in company character. It was found that company character was termed by several labels such as brand personality, company personality, brand personality, or company brand personality. Several other labels were used as well which leads to the suggestion that one label should be standardised for use by practitioners and researchers. Regardless of the label, brand personality means the traits or attributes company managers and consumers use to describe the company metaphorically. Metaphorical attributes are used as the basis to discuss people, places and things, and are often used to compare, contrast, discern and validate. Metaphors are also used by company managers and consumers to describe a business. These company traits are considered important by company managers or learned over time by consumers as personality description. Consumers learn company personalities by default, as a function of what the company communicates. Carefully planned company communication, based on source credibility traits, is a more effective management goal. Thus, to be useful for the purpose of this thesis, the researcher is interested in understanding personality traits which are credibility-based, and which can then be used in planning a credibility-based logo design.

As a general discussion about brand personality, Nissem (2006, www.brandchannel.com) gave the following examples of attributes describing Southwest Airlines: friendly, inexpensive, frequent flights, quick turns, fun flight attendants etc. This was similar to the Airline’s mission: ‘the mission of Southwest Airlines is dedicated to the highest quality of customer service delivered with a sense of warmth, friendliness, individual pride and company spirit.’ At TheBus, the public transportation system in Honolulu, the researcher established the brand personality goals as ‘professional’ and ‘friendly’, two trustworthy traits in addition to the established expertise trait of 'public bus transportation', hence the name logo, TheBus.
Aaker’s work (1996) and Aaker et al.’s (2000) was close to a definition of a company’s personality traits within credibility persuasion principles, when they referred to the ‘quality’ image of a brand. The quality of a brand is one of Aaker’s measures for brand equity, but he does not clearly define it. The researcher believes that quality can be any credibility trait in a particular context. For example, state-of-the-art versus old-fashion/traditional could be deemed quality in terms of Aaker’s definition. The former could mean quality for a computer company, and the latter for an antique store. The computer company would use the trait in a contemporary design, while the antique store would use the trait in a stable, old-fashioned design. Both would be correct in the design interpretation for the company logo.

The term ‘quality’ means many things to many people, and is particularly hard to define as a company personality. On the other hand, specific attributes are used when describing company credibility. Credibility-based logo planning of traits gives the logo strategist richer traits on which to base logo design content and design motifs, a point the researcher will develop further.

Aaker and Joachimsthaler (2000) furthered the possibility that brand personality and brand credibility were similar when they stated that brand associations could also provide credibility. They confirmed that attitude research in psychology had shown that believability and persuasive power was enhanced when a spokesperson was perceived as being trusted, well-liked and expert. They confirmed too that these same characteristics were relevant when evaluating whether a claim made by an organisation was credible, that is, an expert organisation would be seen as especially competent in making and selling its products. Further, in an unreferenced study, the number one attitude identified by consumers when asked to describe the best brands was ‘the brand that I trust’. Aaker and Joachimsthaler did not describe what credibility or expert or trust meant in terms of planning and developing applicable brand expressions such as the company logo, advertising or Web Sites.

Aaker (2004) stated that a corporate brand would potentially have a rich heritage, assets and capabilities, people, values and priorities, a local or global frame of reference, citizenship programs, and a performance record. For example, according to Aaker, Shisheido would have ‘skincare’ related to its assets and capabilities; L.L. Bean would
have a rich heritage; Home Depot would have people; and Sony would be innovative. Note that the researcher would consider traits as also company specific credibility traits based on the company’s specific expertise.

Jennifer Aaker (1995) defined brand personality as ‘a set of human characteristics associated with a brand’. Brand personality described in such terms is to use metaphors as communication tools to describe one thing in terms of another, such as Aaker and Joachimsthaler (2000) example of ‘graceful as a cat’. Jennifer Aaker stated that the core identity of a company explained as a metaphor was very useful in understanding the meaning of an identity, and gave the example of a financial institution’s core identity as ‘strength’. Potential visual metaphors for strength could include a steel girder, a heavyweight boxer, an Egyptian pyramid, or a fortress. While all may communicate ‘strength’, certain metaphors will depict the brand personality of a financial institution better than others. The problem here is knowing that strength is the correct brand personality for a bank, even though logic may assume it to be so. If brand personalities are to be imparted for action effectiveness, then more than logic must prevail. There must be a strong basis for deciding what the brand personality must be, and the researcher believes this should be the credibility attributes of a company. The reason for this is that the explanations for brand personality are often nebulous and non persuasion-based.

For example, Jennifer Aaker (1998) included in the definition of brand personality the characteristics of age, gender, socioeconomic class, as well as commonly referred to traits such as warmth, concern and sentimentality. David Aaker (1996, p.142) listed as examples:

- Virginia Slims tend to be feminine in comparison to the masculine Marlboro.
- Apple is considered young, while IBM tends to be seen as older (which it is).
- Guess is considered sophisticated in contrast to the rugged Wrangler.
- Nike is considered athletic, while LA Gear tends to be perceived as more fashionable.
- Coca-cola is considered real and authentic, while Pepsi is young, spirited and exciting.
- Dr. Pepper in contrast is non-conforming, unique and fun.

Typically researchers will use these personality terms in profiling brands which Aaker and Joachimsthaler (2000) claimed gave the brand personality concept ‘face validity’, i.e. using metaphors which respondents are comfortable with, such as using human
characteristics for brand personalities as an attempt to define a universal brand personality. David Aaker (1996 p.144) developed *The Brand Personality Scale* to ‘test a compact set of traits designed to both measure and structure brand personality’. The scale involved more than 1000 US respondents, 60 well-known brands with distinct personalities and 114 personality traits. Aaker noted that five personality traits emerged as the ‘Big Five’. These were sincerity, excitement, competence, sophistication and ruggedness, and were considered important across all ages and genders.

Note how close ‘sincerity’ is to one common credibility stem of ‘trustworthy’; and how ‘competence’ is close to the second stem of ‘expertise’. However, universal descriptions of brand personality do not help a logo design planner or designer create what should be a unique logo for a company.

Each company has its own brand personality. The author asserts that the company brand personality might be better understood if it were credibility-based. This gives a richer set of design traits to be incorporated into a specific logo design for a specific company. But, to further confuse the logo planner and designer, brand personality was often referred to in other confusing ways. Brand personality was also called the core competency of brand meaning by Kathman (2005) and by others as the soul of the brand, the brand vision, the brand dream or the brand basic values. It has also been called the ‘character and meaning’ of the business and ‘the key elements’ of brand personality.

As mentioned in the opening of this section, it is confusing to have so many labels as definitions. *Brand credibility* by definition allows branding practitioners to have company specific credibility traits which can be defined, are understandable and have a direct relationship to persuasion principles in communication. In short, the *brand credibility* concept allows a logo planner, designer and company brand manager to have an understanding to better define, create, implement, and measure the company logo and other elements which make the credibility-based branding system. The long range goal is company specific *brand credibility* which can be measured.

Erdem and Swait (2004 p.191) offered the concept of ‘credibility’ in their brand study, but did not relate their research to the planning and design of company logos. Their research examined the role of brand credibility on brand choice. They found that ‘brand credibility
increases probability of inclusion of a brand in the consideration (buying) set, as well as brand choice conditional on consideration.’ Erdem and Swait (2004 p.192) also found that:

Although credibility impacts brand choice and consideration set formation more and through more constructs, it contexts with high uncertainty and sensitivity to such uncertainty that credibility effects are present in a categories.

Finally, their results ‘indicate that trustworthiness rather than expertise affects consumer choice and brand consideration more.’ Erdem and Swait (2004, p.196) suggested that future research:

Should examine brand credibility impacts using structure choice and formation models to allow a purer attribution of impacts, leading to a better understanding of the mechanisms whereby brand credibility impacts choice stages. The research should also extend to explore choice dynamics and thus explain the processes by which credibility and consideration set formation evolve over time. Finally, more detailed analysis of individual level and product category specific moderators of credibility effects should be conducted.

2.2.2 Need for better definition of brand personality.

There is another gap in the literature regarding the lack of a definition of company-specific or brand-specific personality based on persuasion criteria, such as source credibility. It is this gap which the researcher is pursuing: to enable creatives and company managers to have a better means of planning creative traits into visual forms.

A measurement of credibility is needed, using specific credibility attributes for a specific company, demonstrating that credibility is company specific, i.e. that each company has its own set of credibility traits. These traits differentiate one brand from another. Most importantly from an operational viewpoint, the planning of specific credibility traits for a company gives direction to management and designers for specific credibility-based logo design and ultimately for brand credibility.

To be operationally effective, the logo planner, designer and manager must have a descriptive reference point, i.e. a credibility-based logo design set of descriptive attributes. Part of defining the brand personality is to apply the appropriate metaphor. Metaphors are
therefore central to this thesis relative to being able to define company credibility traits in metaphor terms for mutual understanding by logo designers and company managers.

Aaker and Joachimsthaler (2000) stated that identifying relevant metaphors can represent (or fail to represent) the brand personality. One of Aaker and Joachimsthaler's research techniques was to use representative images to portray a wide array of stimuli including animals, books, people, activities, or landscapes. There could be other brand images which would also involve corporate colours. The point Aaker and Joachimsthaler are making is that descriptive attributes can come from metaphors in the animal world, the people world, the landscape world, the colour world – anywhere where a descriptive metaphor may be used to describe brand personality.

Caprara et al. (2001) using Goldberg’s (1990) Big Five Model of human personality concluded that the factors used to describe human personalities appeared to be inappropriate in studying brands. Credibility principles in persuasion communication were not used in the Caprara et al. (2001) research to determine brand personality traits, only Goldberg’s Big Five Model, which was not credibility-based.

Aaker and Joachimsthaler (2000) suggested analysing metaphor images according to what made them ‘on’ or ‘off’ strategy. He stated that the ultimate objective was not so much to identify a key objective, but to learn what made a metaphor right or wrong for the strategy or its communication. This is fine, but on what basis is the metaphor judged right or wrong and for what strategy or communication? The researcher believes that strategy and communication must be based on credibility principles in communication persuasion. Credibility traits are easy to access, and are easy to understand relative to establishing a brand personality, as will be developed in this thesis.

In summary, brand philosophies point out that it is important to consider brand personalities as metaphors, but do not specifically identify what the criteria would be for picking certain metaphors or for what reason. Based Caprara et al.’s (2001) discussions, the researcher finds that there is a gap in the literature for developing brand personality traits as metaphors. Further, the branding literature reviewed does not suggest that brand personalities should be source-credibility specific for the purpose of translating these credibility traits to a company-specific logo design. There is therefore a gap in the
literature in assessing brand personality and metaphors based on credibility principles to
plan and design company logos.

The researcher found that source credibility was very important to defining the brand
personality from a historical perspective relative to research in interpersonal
communication. This is an important gap in the literature and is the most important aspect
for the research in this thesis to investigate.

Especially useful is research in establishing effective communication models and in
interpersonal source credibility research per se. Source credibility in interpersonal
communication persuasion between people can be applied to effectiveness in
communication persuasion between companies and people. This bridge between people-
to-people communication persuasion and business-to-people communication persuasion is
important. To help the reader in understanding this bridge, a review of traditional
communication models together with the source credibility is reviewed in the following
sections.

2.2.3. The source, the message, the channel, and the receiver models aka transmission
models or SMCR Models

This section and the next on source credibility are the heart of the literature review. This
section reviews classic communication persuasion models. The importance is that the
communication persuasion model places the source of the message on one end of the
model and the receiver on the other end. As such, the source serves as an endorser of the
message communicated through a given channel and perceived by the receiver. Further,
the research will advance that the source is more effective when it is considered credible.
This suggests that the company, as the source, will be more effective if the company
personality is source credibility-based. The logic is that source credibility principles in
communication persuasion must be considered when defining the specific company
personality traits to communicate as design elements within the company logo. The
researcher offers source credibility as central to credibility-based logo design. This builds
upon the 'functional' research of Hutton (1998) and Henderson and Cote (2003). The
research advances that memorability, uniqueness, and similar functional requirements are
important too, but not at the exclusion of logo credibility for persuasion purposes.
Persuasion is one of the most complicated forms of communication. To help understand the process of persuasion, the elements of transmission models may be useful. These models are also termed SMCR or source→message→channel→receiver models. These models all have the premise that the content of the message in isolation makes little sense without considering the other three elements: source, channel and receiver. Communication models are linear, source→message→channel→receiver. Although it is recognised there is feedback from the receiver back to the source, it doesn’t change the major sequential importance of communication flow. To illustrate, a door-to-door salesman (source) wants to sell (message) brushes to a housewife (receiver). His voice is the (channel). Breaking down the communication model is useful in understanding how different parts of communication work together. The premise is that each part of the model has its own responsibility for success. This linear arrangement suggests that the source acts as an endorser of the message communicated to the receiver. The credibility of the source is therefore important for message persuasion. This supports the research premise of this thesis that credibility-based logo design is also source-oriented. The company credibility traits are the basis for the company's logo design.

The communication models which follow are the crux of this research, together with the development of source credibility. There are many studies on source credibility over the past two decades which have concluded that a credible source would have more influence on the receiver. Source credibility determines whether or not the source's message should be trusted and accepted. By isolating the source in the message, the issues of whether the source as an endorser is credible, non-credible, likeable or neutral can be examined. How these attributes play a major part in message acceptance and ultimate persuasion will be discussed later. On the other hand, the message can be in many forms, such as motivational or non-motivational, descriptive or non-descriptive, obscure or clear, loud or soft. Messages are usually persuasion messages, such as ‘buy our product or service’, ‘finance our company’, ‘buy our stock’, and ‘work with us’, or just messages without being action-oriented. Messages are connected to, but have different responsibilities in the communication process, and are thus a responsibility independent from the source, the channel and the receiver for communication effectiveness.

Channels of communication are the various media by which the messages are transmitted. For commercial purposes, these are most commonly television, radio, magazines, and
newspapers. During the past decade, the Internet has rapidly grown as a major communication channel. Channels of communication are also connected to the source, the message and the receiver, but have an independent responsibility. Further, receivers are the target of messages. In advertising terms, they are the audience, or more precisely, the segmented or target audience. There are specialists called media analysts and media buyers who have made media buying a science, by determining the optimal way to reach the target audience with the best media buys at the right frequency of messages. Receivers are connected to, but have different responsibilities to communication, and are also independent from the source, the message and the channel of communication. Historically communication research has focused on these four areas separately although each is dependant upon the other for ultimate communication effectiveness.

Thus, within these elements of the communication model, there are source responsibilities, message responsibilities, channel responsibilities and receiver responsibilities, and seams between each of them. However, the prime responsibility of the source, as an endorser, is to influence the message received by the receiver. Or, put in the context of this thesis, the prime responsibility of the company (as a credible source) is to endorse the sales message on a company Web Site to be received by the visitor as a potential buyer. Thus the significance of these classic communication models is in breaking down and understanding the responsibility of each segment, particularly the source end of the model. Note that these are classic models in communication that have appeared in several articles and books which makes it difficult to reference a single source for each model with page number.

### 2.2.3. The Shannon-Weaver Model (1947)

The Shannon-Weaver Model was the typical communication model often referred to as the transmission model of communication. It was the model often first introduced to students of communication. Curiously, it was first developed for technological reasons to breakdown information systems into subsystems so as to evaluate the efficiency of various communication channels and codes at Bell Laboratories. The Shannon-Weaver Model included six elements.
Figure 2.2 Shannon Weaver Models (1947)

Information source → message → transmitter/signal → receiver → destination
↓
Noise

The problem with the model was not in its linearity, but that it looked at communication as a one-way process. This was remediated by Shannon-Weaver, through the addition of a feedback loop.

Noise
↓
Source → encoder → message → channel → decoder → receiver
↑
Feedback

Source: Shannon and Weaver, 1947

All human communication has some source (or information source) in Shannon’s terminology. This is some person or group of persons with a given purpose for engaging in communication. When communicating, the source wants first to show that it is friendly, second to give some information, third to get someone to do something, and fourth persuade someone to its point of view. Shannon was not particularly concerned with the communication of meanings. Wilber Schramm’s model of 1955 placed greater emphasis on the process of encoding and decoding. This was important for message communication and persuasion as it was non-linear.

2.2.3. Osgood and Schramm Circular Model (1955)

The Osgood and Schramm Circular Model took into account that communication transmission was circular, not linear. Osgood and Schramm (1955 p.10) defended their model:

It is misleading to think of the communication process as starting somewhere and ending somewhere. It is really endless. We are little switchboard centres handling and rerouting the great endless current of information.
Figure 2.3 Osgood Schramm Circular Model (1955)

Figure removed due to copyright restrictions

Source: Osgood and Schramm, 1955

Although Osgood and Schramm’s model was an improvement on earlier models, the credibility of the source was still not considered to be a factor in communication persuasion. It is particularly helpful in noting that Schramm's process includes interpretation which takes place whenever a message is decoded. How one person interprets or makes sense of what is being received compared to someone else, is a study of perception psychology. 2.2.2 The Lasswell Formula (1948) Lasswell was primarily concerned with mass communication and propaganda, so his model was an attempt at what he called 'control analysis and effects research'. Note from Table 2.2 that the Lasswell Formula consisted of five major components as a linear model again.

Table 2.2 Lasswell’s Formula (1948)
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Source: Harrold Lasswell, 1948
Because of the application of Lasswell’s Formula to the media, his question *who?* is often referred to in communication research as ‘control analysis’ (Lasswell, 1948). The emphasis is on the source end of the model:

- Who owns this newspaper?
- What are their aims?
- What are their political alignments?
- Do they attempt to set the editorial policy?
- Does the fact that they are a Republican or Democrat account for the newspaper's editorials?
- How does the editor decide what to put in the paper?’

There was an attempt to know more about the source in Lasswell’s formula, skirting all around the issue of whether or not the source was credible. Political alignment might be considered a condition of being trustworthy; however, there was no mention of source credibility per se in Lasswell’s Formula of 1948.

### 2.2.3 David Berlo (1960)

Berlo (1960) defined the basis of his model as linear, and added that an individual’s acceptance of information and ideas was based in part on who said it, i.e. the source at the beginning of the communication process. It was different in that it simplified earlier models. Berlo’s approach was straightforward and placed greater emphasis on dyadic communication. By doing this he stressed the role of the *relationship* between the source and the receiver as an important variable in the communication persuasion process to achieve what Berlo called fidelity. From his model, he enumerated what the factors were that contributed to the dyad at each end of the communication. For example, he placed more highly developed communication skills as a value that would allow the message to be encoded and decoded more effectively. What these communication skills were he did not define. But the character of the source, according to Berlo, played a role in effective communication persuasion.

Berlo suggested that a monadic approach to communication transmission might give information about the communication skill level, such as the personal characteristics of both the source and the receiver. For example, this might be the source tone of voice, or that the source and receiver may be alike, or the receivers may have a ‘wide range of
knowledge’ or ‘great enthusiasm’. By knowing more about the source and receiver, this might allow, according to Berlo, a greater degree of prediction about the likely success of the communication.

Today, Berlo's model is considered by some to be a very useful departure compared to the former communication models. As shown in Table 2.3 there are four elements in the model showing how the source/encoder and receiver/encoder affects communicator skill fidelity.

**Table 2.3 Berlo's Model (1960)**

| Figure removed due to copyright restrictions |

Source: David Berlo, 1960

There are five verbal communication skills according to Berlo: two are encoding skills, *speaking and writing*; two are decoding skills, *listening and reading*; and the fifth, *thought or reasoning*, is crucial to both encoding and decoding. Berlo (1960) stated that as encoders, communication skill levels affected communication in two ways. Communicator skills affected the source's ability to persuade in a communication dyad. Berlo did not separate *verbal* skill intentions from *visual* skill intentions. Secondly, communicator skills affected the source’s ability to communicate as intended. Thus, communicator skills enhanced the right communication message to be accepted by the receiver. Berlo used the term ‘fidelity’ to define communicator skill. Berlo used the term fidelity which was close to the term trust, and trustworthy is just one of the stems of being credible. Therefore, credibility principles per se were not yet a part of the communication models in 1960. The model is still useful as it shows the four areas of responsibility with fidelity or trust as an image trait of the source being considered.

Berlo's comments about the message and the channel are not discussed here as this thesis is primarily interested in the source/receiver relationship.
2.2.4 Maletzke's Model of the Mass Media (1963)

Maletzke’s model built on the Berlo model in that he introduced the ‘gate keeping’ process by the communicator, which involved the communicator’s self-image, personality structure, working team, organisation, social environment, and the pressure and constraints caused by the public character of the media content.

It is also of interest that the Maletzke model simplified the process into four major elements, as shown in Table 2.4

Table 2.4 Maletzke's Model (1963)

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From the foregoing models, it is important to note the breakdown in the requirements of each area within the models generally as Communicator→Message→Medium→Receiver. But note, again there is no mention of source credibility on the communicator end.

In summary, communication models are very useful to illustrate the elements of the linear communication process, in particular, that the source of the message is at the beginning of the process and the receiver is at the end. This has important implications for logo design being source-oriented, not receiver-oriented in character. It should be noted in communication model studies that there is feedback from the receiver to the source, as well as 'noise' or interference between each part of the model. But the basic operational use of the model is linear as illustrated.
2.3 **Source credibility and the communication model**

Source credibility within the classic communication model is the basis for the researcher's research in credibility-based logo design. This section builds upon the theory of source credibility in interpersonal communication as it might apply to the design of company logos. The logic again is that the responsibility of the source is to lend credibility as the principal endorser of company messages. Thus a credibility-based logo design representing the company as a source, serves as an endorser to company messages as received by its customers. Communicating source credibility as an endorser to messages is thus the responsibility of the company as a source, as stated in the communication model section above. The application of source credibility can then be explored as the basis for company logo design.

2.3.1 **Source credibility in interpersonal communication**

In interpersonal communication the concept of credibility is also described in the literature as source credibility, and when the source relates to companies it is also called ‘corporate credibility’ (Keller, 2001). In this thesis, the researcher uses source credibility to mean ‘company credibility’. There are several important studies beginning in the late 1940s and 1950s, however, this section summarises a few historically influential studies in improving messages between the source and the receiver based on source credibility, as well as newer studies.

Research on source credibility begins with reference to Aristotle. He established the basis for the concept in *On Rhetoric*. Aristotle (1991 translation) defined credibility as ethos, or the process of persuasion through the communication of character. On character: ‘character makes a speaker worthy of credence.’ Credence is close to credible. On persuasion and character: ‘persuasion is achieved by the speaker's personal character when the speech is so spoken as to make us think he is credible.’

Early studies on the importance of credibility to communication in the early 1950s were on opinion leadership. Katz and Lazarsfeld (1955) and Katz (1957) defined opinion leaders as those members of a social system sought by their peers for opinions and advice. They were considered ‘super-representative’ on the topic of discussion. The opinion leader was not always similar to the person seeking the advice; simply, the source was more credible and had no other common attributes such as age or gender relative to the person seeking
the advice. The source and receiver demographics were different. What mattered was the credibility of the source. This lead Katz (1957) to speculate that the relationship between perceived similarities and attitude change were more difficult than originally assumed. Indeed, the credibility of the source mattered more than perceived similarities. This was a huge leap in understanding that communication persuasion is source-oriented, not receiver-oriented.

Rogers and Bhowmik (1970) and Rogers and Shoemaker (1971) conducted similar research into relevant and irrelevant credibility. ‘Relevant’ is important in the sense that the receiver perceived the source to be credible in the communication dyad. For example, if a source (also referred to as a change agent in these studies) had technical competence and this was relevant to the persuasion dyad, then technical competence was a relevant variable to achieve persuasion. Thus heterogeneous members in a communication dyad could have successful persuasion outcomes to the source’s advantage, if the source was considered credible and the receiver considered the source’s credibility relevant. The source and receiver may or may not be homogeneous on other variables (Rogers and Bhowmik, 1970). For example, Rogers and Bhowmik stated that the source-receiver blood types would be irrelevant, as would age, gender and many other source-receiver attributes. Rogers and Bhowmik’ conclusion that the source and receiver may or may not be homogeneous is important in understanding that credibility is source-oriented not receiver-oriented. Communication persuasion effectiveness relies on the source credibility side of the communication model.

There were several similar studies in the 1950s and 1960s relative to the source and receiver attributes being similar. Common ground theory was explored as this was obviously the more logical hypothesis and, therefore, more research attention was given to homogeneous communication dyads. But research into heterogeneous communication dyads by Minnick (1957), Oliver (1957), Marsh (1967), Berchied and Walster (1969), Rogers and Shoemaker (1971), and Wheeless (1974b) began to show that the credibility of the source was important in persuasion effectiveness. Collectively, the studies by the foregoing researchers found that the similarity between source and receiver seemed to have its greatest function in encouraging voluntary exposure to the communication message. Rogers and Bhowmik (1970) stated that the perceived homophily was perceived first as character or trustworthiness, which they termed the safety dimension of credibility.
Later studies supported the source-oriented requirement that receivers were persuaded to a greater degree by sources they perceived to be credible (Wheeless 1974b and Anderson 1972). What was important was that the source did not have to be similar to the receiver in order to be credible. The conclusion among these early researchers was that the most influential source might be initially homophilous with the receiver, but would be perceived as being more credible (expert and trustworthy), whether or not the source was homophilous or heterophilous on the topic in question. Haiman (1974) varied the dress and grooming of a speaker and found the speaker was better liked in the ‘high attractive’ condition, but was not more persuasive when likeability was contrasted with credibility. These studies were important for identifying source credibility as a communication persuasion requirement.

This furthered the point made earlier that there were source responsibilities in the persuasion communication process, which were different from the message, channel and receiver responsibilities. The prime responsibility of the source was to be perceived as credible. The ‘trustworthy’ dimension of credibility may be the first important overall perception of a person’s or company’s credibility. The important point made here was that the source of the message and the receiver of the message did not have to have what was often termed ‘common ground’ in the communication dyad. The company personality and the customer personality could be different. Therefore, in terms of the company as a persuasive source, the company logo may also be more effective if the logo were created and perceived as credible. The design of the company logo would capture the credibility attributes of the company as the source, not the attributes of the receiver.

In summary, source credibility is important in interpersonal communication persuasion. Further, common ground theory is still the obvious conclusion for designers and company managers on which to base creativity. A number of logo designs, advertisements, and marketing communication in general emulate the customer in order to achieve common ground. Interpreting Rogers and Bhowmik (1970), achieving common ground in order to sell a product is acceptable, but not at the expense of losing source credibility perception in order to achieve that common ground.
The application of source credibility principles to logo design theory has not been established, and is a gap in the literature. Elimination of common ground theory, except as noted by Rogers and Bhowmik above, is discussed in Chapter Six.

### 2.3.2 Source credibility traits

In many previous studies relative to source credibility, (Hovland and Weiss, 1951; Hovland, Janis, and Kelley; 1953; Katz and Lazarsfeld, 1955;Rogers and Bhowmik, 1970; and Sternthal and Craig, 1982), three credibility traits were repeatedly related to communication effectiveness:

1. ability, competence, knowledgeable (expertise);
2. believability, (trustworthiness); and
3. dynamism.

Katz and Lazarsfeld (1955) and Rogers and Bhowmik (1970) stated that in ‘personal influence’ there were two dimensions of source credibility: *qualification or expertise*; and *safety or trustworthiness*. Berlo, Lemert, and Mertz, (1969) stated that two factor analytic studies produced three meaningful and statistically independent dimensions for the construct dimensions for evaluating messages sources.’ Berlo, Lemert and Mertz provided the following three dimensions of source credibility:

1. **Safety** in terms of safe-unsafe, just-unjust, kind-cruel, friendly-unfriendly, honest-dishonest.
2. **Qualification** in terms of trained-untrained, experienced-inexperienced, skilled-unskilled, qualified-unqualified, informed-uninformed.
3. **Dynamism** in terms of aggressive-meek, emphatic-hesitant, bold-timid, active-passive, energetic-tired.

*Safety* is a dimension of *trustworthy*. Is it safe to accept this person as a source? Other dimensions are part of liking or disliking, good or bad. But the key thought is can the person be trusted to do what he or she says they can do? In this sense, trust is a back-up to being expert.

**Qualification** is a dimension of *expertise*. The major qualification dimensions are varied, such as trained, experienced, informed, and qualified, and in terms which are relatively context-free, such as authoritative, able and intelligent. Also, elements of prestige are
involved in evaluation of qualification, and terms such as important, powerful and successful are power-prestige words.

**Dynamism** is a dimension of how much expertise and trustworthiness a person has or displays. This is the energy available to the source which can be used to emphasise, augment and implement the suggestion. The dynamism dimension can be conceived as an intensifier. Dynamism can also be a result of consistency in communication. This is because consistent communication of credibility traits means a large number of impressions, which has a dynamic building effect.

### 2.3.3 Four dimensions of source credibility

Although source credibility traits remain in terms as expertise-qualification, safety-believability-trustworthy and dynamism-or oomph, there are four dimensions credibility is perceived. The early researchers on source credibility did not differentiate the four dimensions as to how the source was perceived as being credible. Fogg (2003) describes the four dimensions as follows: Note that credibility-based logo design is a form of one of the dimensions, *surface credibility*.

**Presumed credibility** occurs when the receiver interacts with a source and presumes from stereotypical generalities that the source is credible, or not credible. For example, car salesmen are generally not considered credible, while other stereotypes are generalised as being credible, such as the clergy, or physicians. Fogg (2003 p.132) stated that ‘presumed credibility can be defined as the extent to which a person believes someone or something because of general assumptions in the person's mind’. Presumed credibility in essence is assumptions and stereotypes people form about someone or something.

**Reputed credibility** is based on source labels, such as an M.D. or Ph.D. following one’s name or other endorsements such as awards, referrals and reports on people or things. Fogg (2003 p.135) stated that ‘reputed credibility is the extent to which a person believes someone or something because of what third parties – people, media, or institutions – have reported.’ Fogg cited further examples as favourable published reports about a company or product, and links from one Web Site to another as an endorsement.

**Experience credibility** is based on one’s first-hand experience with a source over time. This is the most complex and considered the most reliable method of making credibility
judgements (Fogg, 1998, Fogg and Tseng, 1998). Fogg (2003, p.136) stated that experience credibility is ‘earned credibility derived from people's interactions with others over an extended period of time’. Fogg added that it was the most powerful form of credibility as it strengthened over time leading to an attitude formation not easily changed, although one misstep could instantly destroy experienced credibility. This is important for consistency in communication as will be further explained.

**Surface credibility** includes non-verbal visual cues, such as expressed in graphic design, to infer that the source is believable/honest and competent/expert. Fogg (2003 p.132) stated that:

Surface credibility is derived from simple inspection. People make credibility judgements everyday, making an initial judgement based on surface traits such as a person's looks, his or her dress, or hairstyle. Think about how people surf the Web. Because there are so many Web pages to choose from, and there may not be clear guidelines on which pages are the best, it's likely that Web surfers will leave sites which lack surface credibility.

However, surface credibility can become experienced credibility, reputed credibility or presumed credibility. Fogg (2003 p.137) pointed out that:

The four types of credibility are not mutually exclusive. For example, presumed credibility which is based on assumptions also plays a role in surface credibility, which is based in part on making quick judgements, which in turn can be based on underlying assumptions about credibility.

Specifically, surface credibility refers in this thesis to the company credibility-based logo design, and is what the researcher is primarily interested in for this thesis. Thus, this research will relate credibility-based logo design as a form of surface credibility with improved company Web Site effectiveness.

In summary, the credibility of the source is defined by specific traits for a given source. These traits can be defined by the source's expertise and believability. Source credibility is the basis for credibility-based logo design and to improve the effectiveness of company Web Sites. There is a gap in the literature as to how credibility traits are defined and created as credibility-based logo design, and how credibility-based logos will then have an effect on company Web Sites.
Non-verbal communication and surface credibility was discussed in a 1950s study and is outlined in the next section.

2.3.4 Non-verbal communication of source credibility

Part of the importance of source credibility is to be able to express it as a non-verbal, ‘surface’ cue. One of the early studies into non-verbal communication relative to the meaning of the source (but not specifically into source credibility) was in the field of advertising during the mid-1950s. McCann (1955) introduced the theory that the layout of a department store advertisement ‘told volumes about the department store as a whole’, in addition to the text in the advertisement. For example, the layout style indicated to customers the stores’ return policy, sales staff, fixtures – all assumptions attributed to the department store as the source of the advertising. These assumptions about the store as a whole were communicated non-verbally and were not part of the advertising text. The 1955 study by McCann was one of the first attempts to apply some of the newer techniques of the social sciences to the problem of measuring the effectiveness of department store advertising. It became a classic study in non-verbal design/layout communication of company personality with the department store as the source. In this context, ‘effectiveness’ did not mean how well the advertisement moved the displayed merchandise. McCann’s objectives were to measure how well various department store advertisements communicated to reader’s information about the store and the people who managed it as a whole. McCann (1955) assumed that no one would mistake a Lord&Taylor advertisement at the time for a Sears and Roebuck advertisement. And, by the same token, ‘it seemed safe to assume that the least perceptive consumer would recognise, on the basis of the two advertisements alone, that there were a number of important differences between the two stores’. This, then, was McCann's (1955) hypothesis of the study: ‘what did department store advertisements actually tell the consumer about the store as a whole?’ In other words, what store ‘personality’ did the advertisements express, and how did they fit with the ‘experience of women who knew the stores?’1 Note that the term 'personality' is used by McCann, which the researcher now believes is better described as 'company credibility'.

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1 Today research would normally be gender neutral, but McCann based his research around the reaction of women only.
From the results of the study, McCann (1955) concluded that the social status of a given store was the prime basis for its definition to women in a community. Just as they looked up to certain people in the community, so they looked up to certain stores. There were other stores, of course, which women looked down upon. Although the individual stores in a city were rarely ranked in a similar fashion, that is, in comparing one store with another, the ‘degree of agreement between the women themselves when they ranked the stores was extremely interesting.’ No matter what the age or general situation, the reaction seemed to be a result of an ‘overall impression of the advertisement’. On the basis of non-verbal cues from the advertising layout, women made their first relevant deductions about the store.

McCann (1955) surmised that it seemed likely that through the process of looking at the advertisement and absorbing it to some extent, a woman would come to a point at which, quite unconsciously, she asked (and answered for herself) a few key questions regarding the store which placed the advertisement:

- What was the status of the store?
- Where did it fit in the high-class to low-class hierarchy?
- What could she expect from the store in overall atmosphere, product quality, price, and personal treatment?
- How interestingly and fully did it seem to fulfil its status?
- How did all this fit with her, with her concept of herself and her desires and expectations of a store?

McCann (1955) concluded:

> It would seem that research into department store newspaper advertising, its impact and meaningfulness, could prove very valuable to many stores in their advertising planning. For the individual store, such research could well point toward increased effectiveness of advertising through a more readily understood and accepted ‘message’ of the store behind the advertising. This is a better fit between the ads, the store, and the store’s market.

McCann’s discovery was that the store image behind the advertising could be created with non-verbal visual cues communicated by the advertisement's layout. This emphasised the responsibility of the source in the communication model, which was not dependant on the demographics of the receiver in creating the advertisement. This was an important insight into advertising creativity. However, motivational research for message purposes
(message responsibility) was one of the more preferred advertising research topics in the 1950s.

Thus, McCann’s study indicated that non-verbal communication about the department store as the source of the message in a newspaper advertisement was possible with advertising layout style. This suggested that non-verbal communication was also possible through the design of company logos. There is a research gap as to how credibility-based logos non-verbally communicate source credibility traits.

2.3.5 Current theories in source credibility

The foregoing describes some of the more important source credibility influences applied to credibility-based logo design. This section describes the more important current theories.

Company credibility in terms of the more common stem ‘trust’ is a big issue today, considering the fall of giant companies such as Enron. It is also an issue of brand equity measurement which is also called goodwill. It is also an issue when creating company Web Sites. For example, studies by Fogg (2003) and Fogg and Tseng (1998) relative to Web Site effectiveness concluded that trust had been one of the most important issues in E-commerce. Typical were medical Web Sites where a high level of trust was at the centre of a virtuous circle of sharing, helping, and cooperation. The importance of trust, particularly initial trust, and the Internet is reviewed further in the section on Web Site Credibility.

In a study on company reputation, Helbig and Milewicz (1995, p.25) defined credibility as ‘whether a company can be relied on to do what they say they will do’. Helbig and Milewicz concluded in this study that credibility existed when one could confidently use past actions to predict future behaviour. Thus, the authors considered credibility critical to a company’s reputation.

McCroskey and Young (1981, p.24) stated that:

Few subjects have received as much attention from researchers in communication or speech as ‘ethos’ or more commonly ‘source credibility’. Scholarly attention has focused on the impact of source credibility in the communication process, on the impact and a variety of variables on source credibility and to a lesser extent the nature of credibility construct and its measurement.
McCroskey and Young developed a methodology for credibility measurement which seemed appropriate in 1981. However, this only validated the discovery of credibility dimensions of ‘expertise’ and ‘trustworthy’. Note that a new measure of credibility measurement, based on the credibility of logos and customer response or action is proposed in the methodology section in Chapter Three. Today, credibility has been defined with more emphasis on trust or believability. Some researchers also use the term integrity referring to how companies operate. Some use the terms moral and immoral, ethical and unethical and genuine and phoney. Some have said that authoritative equals qualification and character which equals safety.

A definition by Helbig and Milewicz (1995, p.26) was ‘the believability of an entity’s intentions at a particular moment in time, the trustworthiness or extent of confidence in the source’s actually carrying out its intentions.’ Other research discussed the functional considerations of credibility. For example, Sternthal et al. (1978) stated that credibility must occur before the message in order for credibility to have any effect. This supported the classic linear communication models. Also, Petty and Cacioppo (1986) stated that credibility was important in a dyad when there was low involvement with the receiver about the message being proffered.

In the literature on brand management, credibility is considered one of the most important characteristics of a brand (Aaker and Davis, 2000 and Keller, 2001). Credibility is a concept which is linked to the sender (the source) and refers to the degree to which the sender is considered to be a reliable source of information (Maathuis, 1999; Keller and Aaker 1998). A good summary was provided by Wathen and Burkell (2002).
Table 2.5 Examples of factors influencing credibility (interpersonal, print and internet)

Source: Wathen and Burkell (2002 p.134)

The preceding table came close to an ideal communication model for the researcher’s purposes in establishing credibility-based logo design theory. The exception would be the source’s ‘similarity to receiver’s beliefs/context’ as logos cannot change for each communication encounter. This is not to say that the communication model would not be appropriate for interpersonal communication and printed media, whereby the source can include the receiver’s beliefs/context, in a speech for example. Otherwise, the model contains the essential elements for successful communication persuasion outcomes. Wathen and Burkell (2002) also stated that messages which were new to the receiver and transmitted by a highly credible source were learned quickly by the receiver. When the message was presented again months later, the receiver could not recall the source of the message yet the message would be accepted by the receiver. The point was that the message was persuasive in the first place; thus a credible source is important to message acceptance in the short and long term.
Source credibility was also discussed as endorsers giving credibility to company advertising. Lafferty et al. (2002 p.38) concluded that:

Corporate credibility plays an important role in consumer evaluation of advertisements. In addition, a company's credibility seems to have a direct effect on brand perceptions and purchase intentions. Because these company perceptions may be central to the success or failure of promotions and sales, managers need to become much more aware of how customers view the corporation. Consequently, managers need to constantly monitor perceptions of corporate credibility.

Source credibility increases the acceptance of messages by stakeholders contributing to better relationships with target groups (receivers) which is essential for a company in reaching its goals. This is supported by Fombrun (1995) and Biehal et al. (1992).

In summary, there was ample interpersonal research for over 50 years relative to interpersonal communication persuasion and source credibility. There was agreement that the source of the message was at the beginning of the linear communication model. There was agreement that source credibility could be persuasive. There was agreement that the source has credibility traits which could be described. There was agreement that source credibility could be described in term of the company’s expertise and trustworthiness which were the two important prongs of credibility. Dynamism was a possible third prong. There was evidence that non-verbal or surface cues could be applied to communicate source credibility as in the department store study. However, there are gaps in the literature as to how source credibility, and source credibility traits, translates into credibility-based logo design. The following three of four identified gaps begin to form the basis of the research. (Note gap #4 is referred to at the end of the next section)

1. How does source credibility become the basis for credibility-based logo design theory?
2. How are source credibility traits defined in credibility-based logo design?
3. Can these verbal traits be translated to creative forms in credibility-based logo design?

### 2.3.6 Web Site credibility

The problem of trust and visitor action on Web Sites was briefly reviewed in Chapter One. This section reviews the research issues for possible guidance to increase visitor trust and thereby action and more sales. Most Web Sites are developed and published on the Internet with the purpose of selling a product or service. However, most Web Sites lack
trust and therefore visitor action leading to a purchase. According to Computerworld (2002, p.17):

Most E-commerce sites rebuff at least 70 per cent of the customers who visit them, passing up millions of dollars in potential sales. Even the best retail Web Sites are doing only half of the business they should be doing.

This may be more than a trust issue. Still, during the past decade or so, Internet usage has grown faster than any other medium in the history of communication. The different facets of the Internet – chat, E-mail, and E-commerce have all touched millions of lives. Of the US population 50 per cent now has Internet access according to Consumer Watch (2003). Media has an impact on social change. The more impact the medium has, the more significant the change it evokes. Given the speed of the adoption of the Internet and the versatility of its usage, the Internet has some claim to being the most influential medium the world has ever seen. Understandably the impact of the Internet on many of its constituents has been very high.

The problem of trust manifests itself early in research relative to the overall look, the ease of navigation, the professionalism of the content, privacy policy, third party endorsements, and the attention to detail, which are obvious contributors to trust. The prime problem in current research is who is behind the Web Site. This literature search covers these problem issues, concluding that there is a gap in the literature into how credibility-based logo design could help alleviate the problem. This section begins with a background to the problem.

During the 1990s technical consideration of such areas as credit card security was important. Many potential customers needed to be convinced to even use their credit card, let alone buy something over the Internet. The security of credit card numbers and personal data on the Internet is still an issue, yet with increasing sophistication of relevant card transaction security, concerns are diminishing.

Studies by Rich and Belkin (1998) concluded that there were seven criteria that affected the credibility of Web information: source, content, format, presentation, currency, accuracy and speed of loading. The source of the message was important as stated and the authors referred to name and contact location as the supposed qualifying information for
the receiver. The authors did not mention the company logo as the source which could impart credibility information if designed with that purpose. Studies have also suggested means of evaluating the quality of Web information. In the Rich and Belkin study, users were influenced by the educational suffix ‘.edu’ as being more credible than the commercial suffix ‘.com’. The authors stated that visitors looked for presumed credibility markers such as the author’s credentials and institutional affiliation, and the .edu was given as a reason for visiting the site in the first place. Similar studies by Feightner et al. (1999) concluded that a presumed credibility might be inferred because a company expended the money to impart information with a quality looking Web Site. In addition surface credibility was evident if the information presented was coupled with a well-designed interface and attractive graphics. This was also confirmed by Critchfield (1998), who stated that the opposite was true with errors and sloppy presentation.

The key difference between the Internet and other media was interactivity. The ability of the user to interact with the medium was one of the reasons why the Internet became so popular. The Internet combines the broad reach of mass communication channels with the persuasive characteristics of interpersonal communication channels by allowing for the give and take between the source of the message on the Internet and the visitor receiver. Internet research thus extended from a technical focus to a source focus. The fallout was that as the Web became the people’s resource and the number of Web Sites increased dramatically, there was a need to help people determine whether or not a Web Site was credible, and whether its information could be trusted.

Cassell et al. (1998) speculated that the Internet may have a greater ability than other mass media to make use of principles of consumer behaviour to enhance message information being accepted and action taken. The intent here was specifically intended to have viewers learn more about the person or company behind the Web Site for the purpose of trust. Along with interactivity, the role of personalisation made the Internet even more attractive to many users and this feature has definitely added to users’ appreciation of who was behind the medium. Goldsborough (2004) suggested users of the Internet should ask:

- Who is behind the information given on the Web Site?
- Why is the person or organisation presenting the information?
- Is the information paid, as advertising or info-ads?
Kim and Moon (1998) analysed first Web site impressions as they pertained to user interface with a company Web site. Kim and Moon focused on the relationship between emotions and design features in producing trust. They found that the overall design of a company’s Web Site conveyed trust and influences a visitor’s feeling about the site. Kim and Moon related trust and the appearance of a speaker, and stated the same factors worked with the overall appearance of a Web Site in establishing trust. Keen (1999) found that one’s expertise in technology increased trust in Web Sites. Another predisposition was in one’s attitude toward doing business on the Web Site. Keen stated that about one-third of the population were early adapters to almost anything while two-thirds of the population would need good arguments and the benefit of other users’ experiences to feel confident enough to transact business on the Internet.

In 2000 there was a distinct shift in research relative to trust and Internet business from the technical topics to research on information credibility. Flannigan and Metzger (2000) were early contributors, albeit their research concerned media credibility of the Internet per se. Iyer (2001) focused her Ph.D. dissertation on the interactivity and connectivity between Web Site visitors and Web Sites on eleven variables: security, privacy, affiliated networks, reciprocal links, banner advertising, breadth of products, chat customer participation, E-mail marketing, newsletter, online distribution, and order tracking. Wakefield (2001) focused his Ph.D. dissertation on the influence of third-party assurance seals as an indicator of Web Site trust. Lee (2002) followed up with the influence of assurance seals, but also included company reputation and customer relationship management.

Einwiller, Geissler and Marcus (2000) stated that the focus of trust would shift from consumer trust in technology, to trust in the company itself. For example, more potential customers needed confidence that they would receive what they purchased, leading to doubts in company fulfilment obligations. Einwiller, Giesler and Markus (2000, pp 20-23), stated that ‘the concept of corporate branding provides effective methods for accomplishing this task’. The authors gave five trust signals:

1. **Experience**, such as a relationship history with a person or company.
2. **Familiarity**, such as a brand or a name in place of the company itself.
3. **Affiliation and belonging**, such as a company belonging to a community generating communal trust.
4. **Transparency**, such as openness, or being real. Also reduction in real or perceived information asymmetry.

5. **Factual signals and heuristic cues**, such as certificates, guarantees, and security statements eg. Better Business Bureau.

Of the above familiarity relates closest to source credibility in communication persuasion concepts. Egger (2001) suggested that a person’s pre-purchase knowledge of a company was important to Web Site effectiveness. This could be a company in a particular industry which was trusted; it could also be a company within a particular marketing industry, such as direct marketing. For purposes of the research, Egger suggested that the company’s brand be considered. Egger (2001, p.20) listed four actions for company managers:

1. to determine the company’s brand position with respect to its competitors;
2. to determine the consumer’s perception of the brand’s reputation, quality of experiences, and expectations;
3. to identify any associations and values connected with the brand; and
4. to define a clear online user experience strategy.

Egger included word-of-mouth, a form of virtual marketing, as an important determinant of pre-purchase knowledge, together with one’s own experience. Egger also referred to consumers accessing a Web Site for the first time and that probably being an emotional experience. Egger stated that there was an interface in terms of the graphic design and layout of the site. Further more specific attributes included the easy identification of the company and its logo and possibly its slogan. This also includes the company’s address and phone number, officers’ names, photos and bios; legal status; organisations it associated with; moral values and philosophy; charity activities; security concerns and safety; privacy policy; after-sales service policy; method of contact and feedback. Kim (2003) focused his Ph.D. dissertation on what he termed ‘Website Quality’ and impact on Web Sites. He concluded that competence and goodwill were important attributes.

A set of principles were still needed to increase the trust and therefore the effectiveness of company Web Sites. The most promising research had been in the design and text of Web Sites which served the rhetorical function of persuading viewers to enter an organisation’s Web Site (Fogg and Tseng 1998). The rhetorical concept of *ethos* provides a useful starting point for considering how to make constructive design choices when designing
Web Sites, and when identifying the company behind the Web Site. Fogg et al. (2001) best summarised the current Web Site issues with visitor trust, and worked to address these issues in papers and PowerPoint presentations, now contained within the Stanford Web Credibility (www.webcredibility.edu) and the Stanford Persuasive Technology Lab Web Site (http://credibility.stanford.edu). An example follows.

In the last few years, there has been a proliferation of Web Sites with low-quality information, as well as sites that are outright misleading. Anecdotal evidence suggests that Web users are becoming more sceptical of the information they find online and may be wary of Web-based experiences. As a result, Web designers now face increasing pressure to enhance the credibility of their sites. But to this point, designing for Web credibility has been more art than science, leaving many Web designers to rely on intuition alone, without any support from quantitative research. Given the importance of Web credibility, it is remarkable that so few quantitative studies exist. Although some private companies have created proprietary knowledge about design for maximum Web credibility, only a handful of studies in this area are public. Little research has been published on why people believe information on some Web Sites and not others.

Fogg and his Stanford Persuasion Technology Lab completed the first large published study with the purpose of investigating and outlining the factors which influenced the perceived credibility of Web Sites (Fogg et al. 2001). The researchers included Web Site elements from various categories, such as aesthetic features, content variables and technical factors. In this study, 2684 people evaluated the credibility of Web Sites randomly assigned from one of ten content categories (E-commerce, entertainment, health, news, non-profit, opinion, review, search engines, sports and travel). The comments about each site’s credibility were gathered, and were analysed to track which features of a Web Site were noticed, or went unnoticed. The Stanford Persuasion Technology Lab (2001, http://credibility.stanford.edu) stated:

The hope was to create a basic and broad advertisement understanding of what makes Web Sites credible, as well as providing a foundation, both in method and content, for future quantitative investigations. For designers, our hope was to enhance the practice of design on the Web credibility, offering Web Site creators' concrete data for design decisions made on a daily basis. We found that when people assessed a real Web Site’s credibility, they found that certain elements were vital to a Web Site’s credibility. The data showed that the average consumer paid far more attention to the superficial elements such as visual cues than to content or more rigorous elements such as the site’s privacy policy. For example, nearly half of all consumers assessed the credibility of sites based in part on the appeal of
the overall visual design such as layout, typography, font size and colour schemes. Our result among consumers about the prominence of site design and overall look was new and what we hoped to find. Participants seemed to make their credibility-based decisions about the particular organisation behind the site based upon the site’s overall visual appeal.

Fogg created a whole field of study termed *Human Computer Interaction* or *HCI*. Researchers such as Fogg have made progress in studying the relationships between user perceptions of consumer credibility and between computers and persuasion. Fogg’s pioneering work is contained in a body of work within *Web Credibility Research and Design* which is credibility research relative to a variety of Web Site trust issues sponsored by Stanford University. As part of this ongoing research Fogg coined the term ‘Captology’ which is an acronym for ‘Computers as Persuasive Technologies’. This research explored computers as interactive technology persuaders that changed a person’s attitudes or behaviour (Fogg 1998). The intent of Captology was to establish knowledge which focused on designing computers and/or user interfaces in order to persuade individuals who use them. Fogg and Tseng (1998) determined that one of the factors that played a large role in this persuasion was trust. Further, Fogg and Tseng (1998) correlated credibility with believability and trustworthiness with dependability. They postulated that ‘credibility is a perceived quality composed of multiple dimensions: trustworthiness and expertise.’ Trustworthiness was defined by the terms ‘well-intentioned, truthful and unbiased’. Expertise was defined by the terms ‘knowledgeable, experienced and competent’. This is consistent with historical research on source credibility stated earlier.

Nielsen (1999) proposed ways to make Web Sites more surface credible, thus reflecting on the source of the Web Site. Nielsen advocated that credibility was important for Web users since it was unclear who was behind information on the Web and whether a page could be trusted. Nielsen advocated that credibility could be increased by high-quality graphics, good writing, and use of outbound hyperlinks. Further, the professional appearance of the Web Site needed to feel solid. Dorman and Chisalia (2002, p.63) stated that they approached Web Site design according to persuasion communication.

Organise information in the most efficient and persuasive manner, and set the mood to attract and engage viewers. The function of images is based on two elements: the identity of the objects depicted and the emotional and dramatic implications of these images. Visual images can provide a trust relationship.
Dorman and Chisalia did not provide a basis for these visual images, however. They also did not refer to credibility-based logo design as a visual image. Wang and Emurian (2005) concluded that the design of a Web Site was important for online shoppers’ trust in the merchant, and that building and sustaining trust as a subject continued to evolve. While the functionality of the company Web Site was important, other factors were also important such as professionalism, security, opportunities for interaction, and offline status of the company, which included location and reviews about the company's reputation. These could be summarised as credibility attributes expressed in a different way. Of these, studies of trust and competence as company values were most useful.

Wathen and Burkell (2002) stated that the user made judgements according to the surface credibility of the design of the Web Site per se, i.e. ‘does this site look professional?’ They concluded that credibility on the Web Site was multi-dimensional. Upon entering a Web Site, the viewers made some immediate judgements about whether or not to stay. The user would process the information perceived and take action based on just the surface credibility of the overall site character. Wathen and Burkell (2002) stated that one direction of change in the future would be in the use of ‘life-like virtual agents’ which supported the interpersonal communication nature of the Internet, i.e. interactivity. Wathen and Burkell speculated that the company could be considered a virtual agent. Wathen and Burkell concluded by quoting from Burgoon et al. (2000) that when human-like virtual agents are applied to Web Sites, users would be able to rely less on peripheral clues of Web Site design and more on the credibility of the company behind the Web Site. This has important implications for credibility-based logo design as a possible influence on company Web Sites. Wathen and Burkell (2002, p.144) offered a good summary on Web Site credibility and presented a table that illustrated their point.

There is a multidimensionality of the concept of credibility. Some questions are: (a) what are the key markers of credibility of online information? (b) are surface (one of the classifications of credibility) characteristics for Web-based media more important than for traditional media? (c) is the following model proposed an accurate representation of how users judge the credibility of Web Sites and information presented on them?
Possible explanation as to how visitors view Web Sites

User enters Web Site → Evaluation of surface credibility

Surface Characteristics
Appearance/Presentation
- Font size
- No obvious errors, typos
- Attention to detail

Usability/Interface Design
- Navigation/menus
- Interactivity
- Download advertisement
- Speed

Organisation of Format
- Layers/ease of access
- Choice of detail level

(user either leaves site or continues)

If continues → Evaluation of message credibility

Source
- Expertise/competence
- Trustworthiness
- Credentials

Message
- Content
- Relevance
- Currency
- Accuracy

(user either leaves site or continues)

If continues → Content evaluation

- How does the information match my previous knowledge
- How badly do I need the information
- How stressful is the situation
- How familiar am I with the topic?
- How easy is it to apply this information to my situation?
- Am I ready to believe this information?

Am I ready to act on it?


Tsiames and Siomkos (2004) also considered the Internet was virtual and required a name or brand behind the Web Site. Tsiames and Siomkos stressed the importance of brand trust which was the outcome of brand core or what a positive brand communicated to users.
They stated that Web Sites enabled companies to gain control over user interactions with a positive brand. Continuing interactions meant the brand must have continuous validity. Thus Tsiames and Siomkos concluded that the compelling factors when building effective online brands was the brand’s value proposition, distinctive character, online experience, network externalities and strategic alliances, customer focus, and commitment to innovation and content. Further, the brand identity should comprise a set of features, name, appearance and promotion methods, which are communicated to the public through the brand. These are the brand core, the brand style, and the brand theme. The brand core is the genetic code of the brand and remains the same through time. The brand style articulates the brand core in terms of culture, personality and image. The brand theme reflects the way the brand communicates to the public. As with brand personality, these terms applied to the company behind the Internet are also nebulous. What should be articulated in the brand style, and what should be reflected in communication to the public with the brand theme? In summary, the researcher feels the above goals are all nebulous with no understanding of what the equally nebulous value proposition means, or how these goals are to be translated by a logo designer, or managed by a company. Defining the company behind the Web Site in more workable terms, such as a credibility-based definition would be more specific.

It should be noted again from the above that the company logo is not considered to be a factor. Also, perhaps if the company logo were to be considered a factor, it might be put into the first level of consideration, as the surface credibility cue referred to in Chapter One. Fogg (2003 p.135) added,

My research at Stanford has shown that computing products are likely to be perceived as credible when they are aesthetically (the researcher's italics) pleasing to users, confirm their positive expectations, or show signs of being powerful. But a comprehensive formula for surface credibility has yet to be developed (the researcher's italics).

What Fogg is implying is that surface credibility cues are important to the effectiveness of Web Sites as they associate directly with the credibility of the company source, the Web Site owner. Thus, credibility-based logo design theory was possible. Dr Fogg mentioned to the researcher (personal conversation in February 2004) that there were insights from prominence-interpretation theory for logo effectiveness on a company Web Site. What people noticed about a site reflected what judgements they made. What they saw, or didn’t
see made a difference in effectiveness. Accordingly, Dr Fogg also mentioned that for logos to be effective, they must be noticed. This is a design requirement of the Web Site meaning that the company logo should be prominent and usually in the upper left hand side of the index page, the expected location according to Nielsen (2005).

In summary the studies on Web Site trust covers usability issues such as navigation, credit card transactions and source issues. However, the studies did not explain how trust was communicated about the company behind the Web Site related to source credibility. Further, the studies did not suggest a relationship between Web Site credibility and credibility-based company logos as an expression of the company familiarity or trust on the company Web Site. Nor did the studies explain how credibility-based logos, through non-verbal communication elements, communicated expertise and trust. Finally, the studies did not apply a credibility-based logo representing the company to determine the increased effectiveness of company Web Sites. These are gaps in Web Site effectiveness which this study will investigate. The following is the fourth gap in the literature which, with the previous three above in section 2.2.1 forms the basis for this research.

4. How is credibility-based logo design tested and measured to determine if credibility-based logo design is effective per se, and increase the effectiveness of a company Web Site?

In the next section company logo design and credibility principles are discussed together.

2.3.7 Company logo credibility

The literature is very scant on this subject. The researcher found that the only published study into credibility-based logo design was by the researcher, as a Master of Arts thesis (1979) and as a book co-authored with Laurel Harper, (Haig and Harper 1997) entitled The Power of Logos: How to Create Effective Company Logos. In addition, there are also several published articles by the researcher. It should, however, be noted that although many logos have been designed which are considered credibility-based, the term ‘company logo credibility’ as a possible explanation for their success, is new.

2.3.8 The value of the company logo to business

Haig and Harper (1997, p.2) stated that:

As people, we learned to talk and be heard in order to serve our needs. And like people, businesses need to have an effective voice to achieve their goals. That's especially true in
this age of electronic communications. We have become an information society, with the gathering and dissemination of information being a mighty armament for any business.

The importance of communications in business today is beyond dispute. According to the authors (the researcher is the co-author) that is where logos play a part. Logos are not just for decoration. Logos can help to portray the company’s business. Logos can define the company personality. Logos are image and substance concurrently. The logo has been called the epitome of a company's entire communications system.

Thus, again according to the authors, it follows that if the business of business is communications, and the company logo is at the heart of marketing communications, it is incumbent on companies to learn how logos work in order to unleash their full power. It is not hard to find a graphic designer who can develop an attractive logo. However, it is difficult to find one who understands how to create a logo that not only looks good, but communicates to persuade. Hence, logo design is not just the design business. It is more a communication persuasion business if it is to be truly effective as an asset to a firm.

2.4 The credibility-based logo

From the literature review, it is noted that a credible source would be more influential in supporting the message directed to the audience, than a source only likeable or neutral. The research reviewed is quite conclusive that source credibility in person-to-person communication, called interpersonal communication, will be more effective in supporting messages. The more credible the source, the more likely the message will be accepted and action taken by the receiver. A common example is that of the computer expert and the chef. The computer expert is more likely to be consulted about computer or Internet questions. The chef is more likely to be consulted about new recipes or restaurants. Each has a particular expertise which makes one credible on one subject and not the other. If the person is believable and/or trustworthy, that person is considered credible and influential.

The same philosophy, that a credible source may also be the company, began in the late 1960s. The origins of logo credibility began with the teachings of the 20th century logo designer, Saul Bass. Bass is known for his logo designs for AT&T, United Airlines, Rockwell, United Way, and Continental Airlines, among others. One of the prime elements in a logo, Bass would say, is the company's business. Then the design feel must look ‘appropriate’ for the business symbolised. This was a remarkable rule at the time,
without any basis as to how logos might influence, based on credibility persuasion principles in communication. Haig and Harper (1997, p.24):

A company logo has the ability to contain credibility traits How does a logo designer use the credibility principle? The first thing a designer does is to symbolise the company business. This says that the company is an expert in this business. The design motifs then are applied to give the company the trustworthy dimension. To use the Apple brand image as an example, the design motif would be contemporary. For a financial institution, the design motif would suggest security or having been around a long time.

If a company logo has the ability to contain credibility traits, the question is: how and why are credibility traits defined?

### 2.4.1 Credibility-based logo design

Beginning in the late 1960s, Bass would insist that the logo would symbolise the company business and have a personality representing the company as defined by management interviews about the company and where it was going. This was done by the researcher without a structured questionnaire and without a basis for the questions except to learn more about the company. To learn all about the company, with similar company interviews and review of volumes of written material, is the research practice today. The information learned becomes a design brief which is shared with company management and for logo designers to begin their work. The problem is the design brief for the most part has no basis for communication persuasion applied to logo design strategy. Bass called the requirements for logo design, design criteria, which, again from the researcher’s experience, was close to a logical conclusion for design exploration in the late 1960s; but it did not have a communication persuasion basis either.

From the researcher’s long term experience working major and small logo design offices in the US, logo designers need a basis to begin their work, and to justify the final design. The common practice today as witnessed by the research is to 'learn everything about the company" which then becomes the Is there a better method than ‘learning all about the company’ which allows for a narrow investigation, based on principles which will make the logo effective? Is there a communication persuasion basis to the investigation? Brand personality reviewed in Section 2.2 Branding philosophies, offered a possible solution. Aaker (1996 p.166) linked perceived quality to brand personality, and to the ‘nature of relationships and the characteristic of ideal relationships between people’. Aaker referred
to a Ph.D. dissertation by Susan Fournier (1994) that that ‘nostalgic connection’, ‘self-concept connection’, ‘intimacy’ and ‘partner quality’ were four of seven dimensions relative to strong relationships between people and suggested how brand-consumer relationships could be conceived, measured and managed based on quality. He stated further that ‘Certainly a goal of brand strategists is to create segment with high brand loyalty … which is high brand relationship quality (BRQ)’.

Again Aaker (Aaker 2000 p.17) connected perceived quality with brand equity:

Perceived quality is a special type of association, partly because it influences brand associations in many contexts and partly because it has been empirically shown to affect profitability (as measured by both return on investment and stork return).

It would seem that quality is a brand personality dimension which possibly would be a logo design characteristic. It is often a credibility trait. However, if quality were the only creative requirement, all logos would look one dimensional as a quality non-verbal graphic design statement. The researcher builds on Aaker and others with the possibility that expertise and trustworthy traits specific for each company make logos multi-dimensional graphic design statements. Quality may be included or not depending on the company ‘credibility’ message.

### 2.4.2 Examples of company source credibility

To review for reader clarity, in a marketing communication context the source of the message is the company. The source company can be in print advertisements, in television, on the radio, on the Internet, on signage, on the tail of aircraft, on stationery/business cards, all touch points between the company and the receiver. It was hypothesised in the researcher’s MA thesis that if the company could symbolise its particular business, that is, what it does as the content of its logo and look believable in this business non-verbally in the design motif of the content, the company would be considered credible. Symbolising the business communicates that it is an expert in this business. Like a key maker with a key in his sign over the door, we presume that this is what the key maker does, so he must be good. If the key maker is also trustworthy, then people would consider him credible. This hypothesis was supported by research conducted in 1978, as mentioned previously. Three credibility-based logos, in comparison to three likeability-based logos and three control logos, actually proved more effective for a fictitious airline used in the study to persuade respondents to ‘do’ rather than ‘not do’ ten
company goals. Over a hundred company logos have since been planned with credibility principles of expertise and trustworthiness as the basis for the design. The following logos are credibility-based, and further examples can be found in Appendix A. A brief description tells why they are particularly good examples of credibility-based logos as judged by the researcher for the benefit of the reader.

**Figure 2.7 Credibility-based Logo Example**

**Housen Painting, Powerlogos Design/Cygnus Advertising**

Comment: this is a perfect example of a credibility-based logo for a small business, Housen Painting in a small New York USA city. The house and paint brush symbolises Housen's expertise in house painting. The logo projects Housen Painting as a highly professional company doing only quality work – great trustworthy traits. The contemporary design further signifies the company as being knowledgeable about the latest paints and painting techniques.

**Movie Tours, Powerlogos Design/Anastasia Beltyukova**

Comment: Movie Tours is a Kauai, Hawaii, based movie location tour company. Visitors tour where Jurassic Park, South Pacific and many other films were staged. The logo symbology captures the ‘tour’ essence of this business, its area of expertise. The fun image furthers the believability that one would have fun on this tour. Done in a contemporary design, it is a perfect example of the three elements for a credibility-based logo design. The logo also won the Award of Excellence in the 2004 Advertising Federation Awards Competition.

In contrast, the following logos are not credibility-based as explained alongside; more examples can be found in Appendix B.
Figure 2.4 Examples of non credibility-based logos

Comment: Verizon does not express its area of expertise, which is worldwide communication. The ‘V’ swoosh doesn't communicate anything except ‘V’ as in ‘Victory’ as one company executive explained. It is slightly trustworthy expressing technology and efficiency. A design motif which is highly contemporary would have expressed these two trustworthy traits better.

Comment: Avaya's slogan is ‘communication without boundaries’. It is also in the communication business which is its area of expertise. This is not expressed. The company name does not help to understand the company business. It is also not trustworthy or contemporary looking.

Source: Developed for this report

2.4.3 Credible logo design and creative rationale based on functional requirements

Logo design, like the any other design, has a basis for development often referred to as design criteria or what the design is intended to communicate. But intentions must have a basis if the design is to be appropriate to the requirements. Design does not come ‘out of thin air’. Creating logo design form is a rational process based on function. Alexander (1967, p.2) stated:

The process of inventing physical things which display new physical order, organisation, and form is in response to function. Consider a simple example of a design problem, the choice of materials to be used in the mass production of any simple household item such as a vacuum cleaner. Time and motion studies show that the fewer different kinds of materials there are, the more efficient factory assembly is. This means a demand for simplicity in materials used. This need for simplicity conflicts with the fact that the form will function better if we choose the best material for each separate purpose separately. But then, on the other hand, functional diversity of materials makes for expensive and complicated joints between components, which are liable to make maintenance less easy. Further still, all three issues, simplicity, performance and jointing, are at odds with our desire to minimise the cost of materials. For if we choose the cheapest material for each separate task, we shall not necessarily have simplicity, nor optimum performance, nor materials which can be easily jointed. Writing a minus sign beside a line for conflict, and a
plus beside a line for positive agreement, we see that even this simple problem has the six ways conflict pictured below.

**Typical Design Requirements Model**

Figure removed due to copyright restrictions

Source: Alexander (1967 p.3)

This is a typical design problem. It has requirements which have to be met which are performance, simplicity, economy and jointing. The minus sign (-) means a possible conflict between the requirements, and a plus sign (+) means compatibility. Thus, simplicity and jointing are compatible requirements, and the other five requirements have conflicts to be worked out. This problem is simple to solve, according to Alexander. But a more complex problem would be designing an environment for a million people. Alexander stated (1967, p.94), ‘the ecological balance of human and animal and plant life must be correctly adjusted both internally and to the given exterior physical conditions’.

As in the simpler example, each of these issues interacts with several of the others. But in this case, each issue is itself a vast problem, and the pattern of interactions is vastly complicated. What Alexander contributed to the planning process was an analytical understanding of design. This was that design was made up of elements, and that the elements were defined by the various functional requirements of the design problem.

Alexander stated that to solve a design problem:

1. It must be possible to generate a wide enough range of possible alternative solutions (based on requirements) symbolically.
2. It must be possible to express all the criteria for solution in terms of the same symbolism.

Thus, we have context (requirement) and form.
Table 2.6 Context/Form Requirements

<table>
<thead>
<tr>
<th>Context</th>
<th>Form</th>
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<tbody>
<tr>
<td>C1</td>
<td>F1</td>
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</table>

For more than one context we have:

<table>
<thead>
<tr>
<th>Context</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>F1</td>
</tr>
<tr>
<td>C2</td>
<td>F2</td>
</tr>
<tr>
<td>C3</td>
<td>F3</td>
</tr>
</tbody>
</table>

And so on depending on the number of requirements.

Source: Alexander (1967 p, 77)

Alexander suggested that to better understand ‘form’, there must be a breakdown of the symbolic understanding of each ‘content’. For an environment he used pictographs. For example a need for cattle was drawn as a cattle pictograph; the need for water was drawn as a water pictograph; and the need for shelter was drawn as a shelter pictograph. Each requirement was so drawn and placed at what would become the bottom of a requirements pyramid. The next task was to combine logically fitting requirements together. For example, cattle, people and water would go together; water and growing food would go together, but as another subset. At the top of the pyramid would be a picture of the design problem, representing the various requirements as one subset cluster. In logo design, these subset clusters were represented by ‘attributes’. These are verbal attribute descriptions based on credibility requirements. Plato, Phaedrus, 265 AD had basically the same philosophy:

First, the taking in of scattered particulars under one Idea, so that everyone understands what is being talked about. Second, the separation of an Idea into parts, by dividing it at the joints, as nature directs, not breaking any limb as a carver might.

Alexander wrote *Notes on the Synthesis of Form* in 1967. It was written for architects and environmental planners. Though the principles were the same in planning and creating logos, the process that a logo be planned and created based on credibility principles had not been adapted by logo designers in this literature search.

2.4.4 Credibility based company logo and non-verbal communication

Reviewed earlier, the 1955 study by McCann about department store advertising demonstrated that advertising layout can non-verbally communicate inferences about the store ‘as a whole’. Whether or not the source credibility requirements were based on advertising layout, it was still non-verbal design communication. Whether or not the requirements by Alexander, as outlined above, were defined as pictographs or verbal
attributes, the translation was still requirements in design communication. Whether the
design was a village or a logo, the designer must take the design requirements of the
problem and translate them into visual form as an architectural drawing. In the case of the
researcher, this is logo design based on required credibility traits to communicate source
credibility. This requires the creator’s ability to create a non-verbal logo form which
contains all the stated requirements, or elements of credibility.

Most studies in non-verbal communication agree that only about 35 per cent of
communication experiences are verbal, while about 65 per cent are non-verbal. How
something is said is as important as what is said. Non-verbal communication serves to
reinforce, repeat, substitute, complement, accent, regulate, even contradict, verbal
stated:

Non-verbal communication includes all forms of human communication that transcends
the oral or written word, such as body language (gesturing, nodding, and smiling) or visual
cues like the octagonal shape of a stop sign, the palms-up hand of a ‘don't walk’ sign, or
the internationally recognised symbols used for money-exchange at an airport. Such
examples are a reminder that we continually interpret non-verbal cues to help us
understand the world in which we live.

The same is true of a company logo. It can be the world's most outspoken non-verbal cue.
Notice how the logo becomes a part of our non-verbal communication environment at
sporting events for example. In auto racing, logos are very prominent. The question is
how would designers use non-verbal shapes to express the same attribute of
communication; how would we know that all people perceive this shape equally; and what
shapes evoke which non-verbal communication attributes? ‘Contemporary’, ‘secure’ and
‘energetic’ may be easy. But, ‘responsible’, ‘dedicated’ and ‘admired’ is more difficult.
Perhaps an even more important issue is how branding managers would use non-verbal
and verbal messages together to consistently enhance the company's credibility brand
image. The key words here are consistent and non-verbal and verbal together. When non-
verbal and verbal communication is out of alignment because of non-consistency or wrong
non-verbal communication, there is a mixed message. The result is a confused customer
(receiver) wondering what to believe. On the other hand, when non-verbal design forms in
a logo or advertisement reinforces the verbal message, planned credibility will be
maintained. Studies in non-verbal communication often state that when there is conflict,
non-verbal messages will always win, because the silent message of source intention is more believable.

A more detailed discussion of non-verbal communication is found in Appendix C.

2.5 Summary of literature review

The overall observation is that the literature directly related to credibility-based logo design is scant. However, credibility-based logo design has been researched in company-to-people persuasion, as in the researcher’s MA thesis, with favourable results. Credibility-based logos, like other design forms have requirements for successful outcomes. Credibility-based logos are an important area of non-verbal communication which can be used to form company logos as surface cues for a brand personality. Otherwise, logo research to date has been what the researcher considers functional requirements such as distinct, memorable and so on.

This chapter has reviewed the relevant literature in logo design, branding communication models, source credibility, Web Site credibility, company logo credibility, and design functional requirements theory. The researcher investigated brand personality meaning in terms of source credibility principles reviewed in the literature. The researcher defines brand personality meaning as credibility-based brand meaning which is clearer. Therefore, the researcher’s study in this thesis is an opportunity to build on Hutton (1998) and Henderson and Cote (2003) relating logo design and source credibility principles in communication persuasion as credibility-based logo design, then to relate credibility based logo design to increase the effectiveness of company Web Sites. Eight gaps in the literature relating to logo design and Web Site effectiveness are identified as follows:

1. There is a void in the literature in logo design per se.
2. There is a void in the literature in brand personality relating to defining logo design and Web Site effectiveness.
3. There is a void in the literature in transmission or communication models aka SMCR models relating to logo design and Web Site effectiveness.
4. There is a void in the literature in source credibility in interpersonal communication applied to logo design and Web Site effectiveness.
5. There is a void in the literature relative to source credibility and credibility-based logo design per se and applied to company Web Sites to increase effectiveness.
6. There is a void in the literature relative to the use of non-verbal communication and how non-verbal communication can be used as graphic design forms in credibility-based logo design planning.

7. There is a void in the literature relative to credibility-based logo design per se. Spokescharacters, celebrities and other elements within advertising may be an extension relative to source credibility and credibility-based logo design.

8. There is a void in the literature that company logos have design requirements before they are created.

The gaps in the literature are summarised in the following table:

**Table 2.7 Gaps in the Literature Findings and Implications Summary**

<table>
<thead>
<tr>
<th>Study’s Finding</th>
<th>Implication</th>
<th>Gap in research?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logo design</td>
<td>Confusion as to logo design requirements; base design on credibility principles.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Brand personality</td>
<td>Confusion as to brand personality definition. Base definition on credibility principles with credibility-based logo design as the basis of credibility-based branding.</td>
<td>Yes.</td>
</tr>
<tr>
<td>SMCR models</td>
<td>Source as ‘who?’ Logos have source credibility requirements.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Interpersonal credibility</td>
<td>Source credibility in communication persuasion. Research that logos must be credibility-based to have persuasion value</td>
<td></td>
</tr>
<tr>
<td>Source non-verbal</td>
<td>Department store advertisements and layout messages. Research that logos can be designed to be credibility-based and communicate non-verbally.</td>
<td>Yes.</td>
</tr>
<tr>
<td>communication</td>
<td>Web Site credibility</td>
<td>Web Site credibility</td>
</tr>
<tr>
<td></td>
<td>Credible Web Sites more effective. Research that credibility-based logos will increase effectiveness of Web Sites.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Logo credibility</td>
<td>Credibility-based logos most effective. Build supporting theory of philosophy and test philosophy in real world on Web Sites.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Design has requirements</td>
<td>Design element requirements must be defined first before design phase. Research that logo credibility traits be defined as requirements before logo design creative phase</td>
<td>Yes.</td>
</tr>
</tbody>
</table>

Source: Developed for this research
2.5.1 Thesis hypothesis

The literature review and identification of gaps has led to the possibility that studies in interpersonal communication persuasion, particularly studies in source credibility, may provide a basis for developing credibility-based logo design theory. In addition, if this theory is confirmed, it is possible that a company’s credibility-based logo may have an influence on increasing the effectiveness of the company Web Site. This has led to the development of the researcher's thesis hypothesis as a theoretical model:

Table 2.8 Researcher's Theoretical Research Model

<table>
<thead>
<tr>
<th>Source</th>
<th>Message</th>
<th>Channel</th>
<th>Receiver</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credibility-based logo design</td>
<td>Motivate action desired by the company</td>
<td>Web Site</td>
<td>Perceives the company as credible</td>
<td>Visitor accesses the company Web Site navigation bar for more information thus 'converting' the visitor toward a company goal such as a purchase.</td>
</tr>
</tbody>
</table>

Source: Developed for this report

2.6 Conclusion

Based on the gaps in the literature, the research phase described in the next chapter covers a case study research to address these gaps. The research objective is to first develop the validity of the credibility-based logo design theory, including working with the theory to create company logos. This is the inductive stage to confirm or deny the theory. If the theory is confirmed, the deductive stage commences which tests the theory relative to increasing the effectiveness of company Web Sites with a credibility-based logo design.

These objectives are listed as research issues (RI) as follows:

**RI-1** Validate credibility-based logo design theory.

**RI-2** Validate the differences between credibility-based logos and logos which are not credibility-based.

**RI-3** Validate the credibility-based logo design theory that credibility-based logos can be designed effectively with actual cases as examples.

**RI-4** Validate that credibility-based logo designs will be effective on company Web Sites to achieve company goals.
Chapter Three follows with methodology based on conducting case research using multiple case studies developed to resolve these issues. The most important issue is to validate credibility-based logo design theory. The intent is to further extend the body of knowledge that a credibility-based logo is viable and can be designed. Then, the credibility-based logo placed on the company Web Site will have a positive effect in achieving company goals in terms of visitor (customer) action. The analysis of the research will be in Chapter Four and the implications and conclusions to the research are discussed in Chapter Five. Chapter Six is the researcher’s epilogue which is an extension of the credibility-based logo design theory.
The Earth revolves around the sun.
The speed of light is constant.
Apples fall to Earth because of gravity. 
Source-credibility principles are linked to company logos. 
Credibility-based logos are linked to Web Site effectiveness.
3.0 STRUCTURE OF CHAPTER THREE

3.1 Introduction

Chapter Two culminated by stating that the most important research objective was to develop credibility-based logo design theory. This chapter describes the methodology to collect data in order to validate the theory. The researcher’s case was a multiple case study using a mixed-methods approach to collect data. There were two stages, an inductive stage and a deductive stage.

The first stage was the inductive stage and it had two phases. The first phase was the initial theory building phase which was conducted in three steps to collect qualitative data. The purpose of the first phase was to build the credibility-based logo design theory. The second phase consisted of seven cases which were actual companies participating in the logo design development and testing. One of the cases was a pilot case to determine and then correct problems with the processes used in designing logos according to credibility-based logo design theory. The purpose of this second phase was to confirm or disconfirm the initial theory developed in the first phase.

The second stage was the deductive stage. The purpose was to test the seven credibility-based logos in the first stage. This was to triangulate the findings from the first or inductive stage to confirm the process for developing credibility-based logo design is valid.

Figure 3.1 below diagrams the case study process based on Carson et al 2001, Eisenhart 1989 and Leonard-Barton 1988.
Figure 3.1 Case study diagram

Source: Adapted from (Carson et al. 2001, p. 97; Eisenhardt 1989; Leonard-Barton 1988)

The outline of Chapter Three is shown in Figure 3.2.
Developing the credibility-based logo design theory is central to gaps in the literature.

3.1.1 Review of gaps in the literature

It was found in Chapter Two that there were gaps in the literature which this case study will attempt to answer. The following is a review of the gaps in the literature.

1. There is a void in the literature in logo design.
2. There is a void in the literature in brand personality.
3. There is a void in the literature in transmission or communication models, aka SMCR models.
4. There is a void in the literature in source credibility in interpersonal communication.
5. There is a void in the literature relative to credibility-based logo design applied to company Web Sites to increase effectiveness.
6. There is a void in the literature relative to the use of non-verbal communication and how non-verbal communication can be used as graphic design forms in credibility-based logo design planning and design.

7. There is a void in the literature relative to credibility-based logo design.

8. There is a void in the literature that company logos have design requirements before they are created.

3.1.2 Research objective

The research objective is:

To validate credibility-based logo design theory, identifying the differences between credibility-based logos and non credibility-based logos. To work with the theory in developing actual credibility-based logo designs. This phase confirms, or disconfirms the credibility-based logo design theory.

To further validate the credibility-based logo design theory and to confirm if a company's credibility-based logo will have a positive effect on the company's Web Site by encouraging potential visitor/customers to take action on the navigation bar. (In the real world, the navigation bar normally has important company goals.)

The research issues are:

R1-1 Validate the credibility-based logo design theory.
R1-2 Validate the differences between credibility-based logos and logos which are not credibility-based.
R1-3 Validate that the credibility-based logo design theory can be used to design logos effectively with actual cases as examples.
R1-4 Validate that credibility-based logo designs will be effective on company Web Sites to achieve company goals.

3.2 Using case study research

According to Yin (2003, p.5) selecting a research strategy will depend on ‘(a) the type of research question posed, (b) the extent of control an investigator has over the actual behavioural events, and (c) the degree of focus on contemporary as opposed to historical events’. See Table 3.1.
Table 3.1 Relevant situations for different research strategies

Figure removed due to copyright restrictions

Source: Yin (2003: 5 – Figure 1.1)

The most common definition of a Case Study is that it is a description of a management situation. Thomas V. Bonoma (1985, p.199) stated that: ‘it is the marketing analogue of the physician’s clinical examination and relies on a similar appeal to multiple data sources for reliable diagnosis’.

3.3 Research methodology

The methodology proposed for this study is a multiple case study to follow ‘replication logic’. Yin (2003 p. 33) stated that: ‘if two or more cases are shown to support the same theory, replication may be claimed’. Therefore, the researcher applied a case study research methodology using a mix-methods approach for building credibility-based logo design theory. There were two stages, an inductive stage, and a deductive stage. Each stage had two phases. The stages included interviews and experiments. The experiments in the test stage included statistical analysis. The case study methodology followed the research approach advocated by Yin (2003), Eisenhardt (1989) and Leonard-Barton (1988).

3.3.1 First stage, first phase

The first phase of the first stage was the initial theory building or inductive stage. This phase had three steps.

1. The first step was to validate the credibility-based logo design theory first proposed in the researcher’s Master of Arts thesis in 1979. The first step reviewed the researcher’s knowledge and experience in credibility-based logo design. The researcher’s Master of Arts thesis written in 1979 postulated a theory that credibility-based logos would
have an influence on respondents in a pre-test/post-test study. In this study, the
credibility-based logos induced more action than logos which were only likeability-
based (a term used then for non-credible). The conclusion to the Master of Arts thesis
was that credibility-based logo design had an influence when inducing desired action
greater than logos which were considered just likeability-based, that is, were not
credibility-based. Validating the study results 25 years later was the first step.

2. The second step was to review the researcher’s book, *The Power of Logos: How to
Create Effective Company Logos*, Wiley, 1997, New York. The book was based on the
researcher’s Masters of Arts thesis, 40 years’ work experience in logo design planning
strategy, including work with Saul Bass.

3. The third step was to interview a purposeful sample of experts in logo design to
confirm that the theory was still applicable. Personal interviews were conducted on the
Internet using a questionnaire sent through E-mails as this allowed the interviewer and
interviewee to respond with instant feedback. The researcher’s criteria for selecting
the logo design experts was based on two factors: (1) leadership in the field as
recognised by the researcher based on the researcher’s long experience and
consultation with other logo designers known to the researcher with similar long
experience; and (2) diversity in location including areas in the USA and overseas.
Reporting was based on excerpts from the E-mails. A summary of responses is
included in Chapter 4. A complete narrative of responses is included in Appendix D.

4. E-mail interviews with experts. Letters were used to protect confidentiality. A content
analysis of the case study interviews is presented in Chapter Four. Responses to the
total interviews are in Appendix D.

3.3.2 First stage, second phase.

The second phase of the first stage confirmed or disconfirmed the initial credibility-based
logo design theory developed in the first phase. This phase had seven cases which were
the participating companies for which credibility-based logo designs were planned and
created. One of the cases was a pilot case to determine and correct any process issues.
The purpose of the second phase was to plan and create actual logo designs with specific
credibility traits appropriate for each of seven companies. The companies were
purposefully selected from a diverse range of business. The objective was to reduce bias
as much as possible with multiple sector businesses. The logos were also designed by
different designers to show that the theory was valid despite the location of the designer.
The table below outlines the listing of the companies in the test, their business sector, and where the logo was designed. A Case Study Protocol which describes the logo design process is included in Appendix E.

**Table 3.2 Test company background and logo designer origin.**

<table>
<thead>
<tr>
<th>Company</th>
<th>Business Sector</th>
<th>Designer Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>4minutes2fitness, Santa Monica</td>
<td>High level gym</td>
<td>Porto, Portugal</td>
</tr>
<tr>
<td>California</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your Own Cookbook, Baltimore, Maryland</td>
<td>Cook book publisher</td>
<td>St Petersburg, Russia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Movie Tours, Kauai, Hawaii</td>
<td>Visitor tours</td>
<td>St Petersburg, Russia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walk Safe Solutions, Phoenix, Arizona</td>
<td>Home safety Product</td>
<td>Porto, Portugal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Starting Line Sports, Princeton, New</td>
<td>Runners retail store</td>
<td>Porto, Portugal</td>
</tr>
<tr>
<td>Jersey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Next Level Trading, Fort Lee, New</td>
<td>Securities trading</td>
<td>Sao Paulo, Brazil</td>
</tr>
<tr>
<td>Jersey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snobby Little Wine Club, Glen Carbon,</td>
<td>Wine party accessories</td>
<td>St Petersburg, Russia</td>
</tr>
<tr>
<td>Illinois</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Created for this report

### 3.3.3 Second stage

This was the deductive stage to triangulate the findings in the first or inductive stage. The purpose was to confirm or disconfirm that the process developed in the inductive stage was valid. A quantitative test was conducted to collect data by measuring the effectiveness of credibility-based logo design theory with actual respondents using the Internet. The test compared one credibility-based logo design with three non-credible logos for each company that was used as a case. The unit of analysis for this research was the credibility-based logo design.

As the objective for this research was theory building, there was the possibility of a cause and effect relationship between source credibility of company logos and desired action on company Web Sites. Bonoma (1985 p.199) stated that:
once causation is established, replications usually by other high data integrity methods may be used to test the limit of, or to corroborate, observed relationships. Often it is difficult in theory building at a low level of understanding to know what to count. Judgment is therefore required in analysing the data provided in quantitative research.

Trochim (2002 http://trochim.cornell.edu/kb/) stated that ‘much contemporary social research is devoted to examining where a program, treatment, or manipulation causes some outcome or result.’ Trochim called this kind of social research ‘research into causal relationship’. This was uniquely appropriate to the research issue, and to a possible explanation for the relationship of credibility-based logo design on company Web Sites to influence visitor action.

The key to causal relationship research is being able to introduce a valid stimulus to cause the change. In Chapter Two, several studies were referenced to support source credibility as a valid stimulus. This research used a credibility-based logo as the stimulus on a Web Site in comparison with non-credibility based logos. It was within these limitations that quantitative triangulation was chosen to support the credibility-based logo design theory. A quantitative methodology was designed by the researcher to test the effectiveness of credibility-based logo design theory on the Internet. The objective was to place one credibility-based logo on seven company test Web Sites. The credibility-based logo was compared with three non-credibility based logos on the basis of the number of clickthroughs on the navigation bar each logo induced. The hypothesis was that the credibility-based logos would cause more clickthroughs than non credibility-based logos. This supported the source credibility premise in communication persuasion which, again, was the basis for credibility-based logo design theory.

3.3.4 Quantitative research methodology

The same seven companies were used for this study. The process for designing the logos for each company is described in 3.3.3 above and detailed in the Protocol in Appendix E. The methodology uses each company's credibility-based logo design together with three non-credibility-based logo design alternatives for comparison. The non-credible logos were selected to give distinct contrast to the credible logos.
The objective of this research was to investigate the hypothesis that a logo design rich in credibility attributes would cause desired action when visitors viewed a given Web Site where that logo was prominently placed. Fogg (2003) stated in a phone conversation with the researcher that logos must be prominent on the Web Site to have a testing effect.

‘Desired action’ is defined as that information usually placed on the home page navigation bar for visitors to access. It is typical in Web Site design to have the home page give general information about the company and its products and/or services. The navigation bar leads the visitor into other areas by categories important to the company, such as product or service details and prices, employment opportunities, investor relations, or any other action goal the company deems as important for the visitor to access on the Web Site. The tests Web Sites, however, had very simple navigation bars.

This test methodology utilised existing analytical resources available on the Internet for data collection from visitors considered to be an interested self-selected sample of respondents to the Web Site. The test methodology is summarised as follows:
1. Seven companies were selected for logo testing. One was used in the pilot test. A test Web Site for each company was designed to be published, or otherwise known as going ‘live’. A special home page was prepared for each company, with minimal text giving only sparse information about the company product or service, and a navigation bar to access for more information. The only additional information on the home page was an alternative company logo to be tested. The logo was prominently placed in the upper left hand corner of the Web Site, being the usual placement for logos.
2. Four actual logos for each company were designed. One was designed to be highly credible by the researcher and four design experts chosen to assist the researcher. In addition, three were deliberately designed to be non-credible. That is, the credibility-based logo design was judged by the researcher and the design experts to have non-verbal graphic design traits which were specific to the company's credibility. The three non-credible logos did not have these traits. The four logos appeared one by one in consecutive order for the duration of the research.
3. Each logo was live on the given company test Web Site home page until 100 respondents had visited the page. For example, credibility-based Logo #1 was live until 100 respondents had visited. Then Logo #2 replaced Logo #1, and Logo #3 replaced Logo #2 and so on until Logo #4 was reached.
4. One company was used for a pilot test. Adjustments were made to the test methodology and six companies were used in the final test.

5. The final six company Web Sites were placed live on the Internet for world-wide access by Host My Site dotcom, a Web Site hosting company. The procedures were simple and cost about $60. A search engine consultant was retained to drive respondents to the test Web Sites using Google Ad Words. Obtaining traffic to the test Web Sites originally proved to be the most challenging part of the research. To obtain up to 800 visitors from a search engine to a test Web Site that is buried down several pages for the same general search (key word) information was a lengthy wait of about a month per logo in the pilot test. A search engine specialist familiar with search engine marketing, such as Google AdWords, was able to drive up to 200 visitors per logo in a day or two and to complete on the test Web Site in eight days.

6. Respondents were self-selected to the company Web Site by using search engine key words. As mentioned above, the researcher, through a hired search engine specialist, bought an advertisement on Google's AdWords advertisement placement program on a pay-per-click basis to obtain respondents to the test Web Site as quickly as possible. The cost was established through bidding, and usually cost about 30 cents per click for the 5600 visitors to all seven Web Sites. The researcher chose key words so that each company would appear high up on the list that appeared on Google's Web Site listing for each company. Otherwise, upwards of 400,000 Web Sites are listed for some companies. The objective was to have each company advertisement on the first page of the visitor search engine results if possible. This was to obtain 800 visitors per company, or 200 for each logo test, in a short period of time. Because the visitors to the Web Site ultimately came so quickly, the researcher decided to increase the visitor respondent sample to 200 per logo, or 800 per Web Site company. The rationale was also to mitigate any double clickthroughs by visitors who might have entered the Web Site more than once, or any other data bias. The downside was paying Google AdWords the bid price for each visitor to the site which averaged about $600 per site.

To recap at this point, 200 self-selected respondents (visitors) would see one company Web Site with one logo to be tested. Another 200 would see the same Web Site with another logo and so on until all four logos were tested for each of the seven companies.

7. When a visitor accessed the company Web Site pages with the various logos, the visit was measured by the number of clickthroughs to the navigation bar. Clickthroughs
The navigation bar was limited to ‘contact us’. In the real world, this is usually expanded to include such important company goals as investor or employment information. The hypothesis was that the expected credibility-based logo would produce the most clickthroughs on the navigation bar.

8. Clickthrough measurement reports can be provided by several ‘web analytics’ data services. SmarterStats aka SmarterTools in Phoenix, Arizona was used as it was considered the most reliable in providing ‘clean’ data. Smarter Tools also was able to provide web analytics to measure several additional clickthrough data such as length of stay, time of day, day of the week, search engine referral, country of respondent, and other useful data. However, the click through measurement to the menu bar as a function of the logo stimulus was considered the most useful data for the purposes of this research. The additional data is available as may be requested.

9. The data obtained were tabulated and subjected to a SPSS statistical analysis using Chi-Square statistics. Chi-Square was chosen for the final data tabulation because the data was in the form of frequencies in which the dependent variables were in a 'yes' or 'no' 'form. It was decided by the researcher and one of the researcher's supervisors that Chi Square was the correct statistic in this case. As background to Chi Square for the reader, Issac and Michael (1981) state that:

'Chi Square is a means of answering questions about data existing in the form of frequencies, rather than scores of measurement along some scale. Typically, the question we want answered when we have such a frequency data is whether the frequencies observed in our sample deviate significantly from some theoretical or expected population frequencies. The frequencies refer to the categories with which we have classified our data. Examples of the latter include such common classifications as male or female, yes or not, agree or disagree, pass or fail, or achiever or non-achiever.' (Issac and Michael, 1981, pg. 177)

10. The procedure was repeated for all seven companies and twice again for one of the seven companies.

Figure 3.3 outlines the online research model in a simple diagrammatic form for each of the seven companies.
Figure 3.3 Online research model using seven company test Web Sites.

The researcher combined the following elements for setting up the research, quantitative data collection and statistical analysis.

Table 3.3 Combination of research elements for data collection

<table>
<thead>
<tr>
<th>Tool</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Site design</td>
<td>To prepare the Web Site for live publishing by researcher and assistant.</td>
</tr>
<tr>
<td>Alternative logos</td>
<td>To prepare four alternative logos for placement on each Web Site by logo designer at researcher's direction.</td>
</tr>
<tr>
<td>Host My Site</td>
<td>To host the test Web Site on the Internet.</td>
</tr>
<tr>
<td>Google AdWords</td>
<td>To drive visitors to the Web Site being researched through this search engine marketing service with the objective of obtaining data more quickly. Search engine specialist assisted the researcher.</td>
</tr>
</tbody>
</table>
### Tool | Task
--- | ---
Smarter Tools | To collect data. Web analytics service collects data from first party cookies and prepares visitor/navigation bar activity reports accordingly
SPSS software | To analyse data. Data subjected to ANOVA and Chi-Square statistical analysis

Source: Developed for this research

#### 3.3.5 Internet sampling frame

Internet users were the sampling frame in this study. Within this frame, the sample comprised Internet users wanting information about the seven companies chosen. The sampling frame was self-selective and therefore assumed to be non-biased by the very nature of the self-selection process to the Web Sites.

It is important to justify that Internet users obtained with this method were actually a statistical sample to support external validity. The respondents were drawn from the same population of Internet users/browsers. They were also self-selective to key words such as sports equipment, wine accessories, or Hawaii tours.

The independent variables of age, gender, income, and geographical origin, or any other audience information, are not important to source-oriented logo design. This is particularly important, and essential to using Internet users as a statistically representative sample, where such information is not given in web analytic reports, with the exception of geographical information. Only the dependent variable of source credibility was measured by respondents going to the Web Site and accessing (or not accessing) the navigation bar, and correlating users’ respondent actions as recorded by the web analytic report.

In this research, the sample self-selected itself to the Web Site, and they can be considered as a stratified random sample. The stratified random samples in this case were Internet users who were self-selected to obtain more information about the companies in the test. As the same weight for each of the six final Web Sites was required to be at least 400 respondents, proportional stratified random sampling was conducted. Because of this stratification, there would be enough Web Site visitors as respondents from each group to make meaningful subgroup inference.
3.3.6 Accuracy of Web analytics data

SmarterStats aka SmarterTools of Phoenix, Arizona provided the data for measurement. The authenticity of their work was substantiated by a letter from the head of technology for Smarter Tools which is included in the Appendix F.

3.3.7 Logic linking the data to the proposition

The research proposition is that credibility-based logo design is effective in causing favourable action. In this research, the company Web Site is context for predicting action, as action can be measured by navigation bar clicks. Credibility-based logo design and navigation bar clickthroughs indicate a causal link between the two.

Pattern-matching logic was the most common means of reaching a prediction that credibility-based logos were influential from the data obtained. Patterns were observed in the data collected to reinforce that the prediction was correct, and that there were no other possible explanations which an irregular pattern may suggest. Yin, (2003, pp.26-27) stated 'to explain a phenomenon is to stipulate a presumed set of causal links about it.'

Timing is current evaluation, not historical. The navigation bar clickthroughs were measured in the present. Logic was predicted by observing clickthrough responses across cases and linking the data to the research proposition.

3.3.8 Data Set Up

Data from web analytics was collected each day for a given period. There were four sets of data for each of the six final test companies. The time varied for each company, as the respondents were self-selective and accessed the Web Site depending upon the interest in the product or service. Broad nature interests such as ‘marketing consultant’ had a larger interest than ‘house painting’. The time to conduct each test was therefore different, but the data remained valid and it’s set up was the same.

The data was transferred from Smart Tools to the researcher’s data base. Transferring the data, developing and documenting a database structure that integrated the various measures were completed in this step, and the data was then cleaned for accuracy.
The data was tabulated and subjected to ANOVA and Chi Square statistical analysis for significance using software provided by SPSS.

### 3.4 Justification for the case study research methodology

The foregoing case study research methodology is discussed and justified in this section. A research methodology contains the framework and assumptions which guide researchers in their work (Healy & Perry 2000; Thompson & Perry 2004). Case study research is used in this research because (Yin 2003, p5):

1. The research question addressed is a how and why question.
2. The researcher has no control over behavioural events i.e. he cannot control how people would react to a credible logo on a website. He can only observe how people would react to different types of logos – credible and non-credible.
3. The research focuses on contemporary events – the influence of the Internet on brand awareness is a contemporary phenomenon that is of great interest to organisations using the Internet to communicate effectively with its customers.

### 3.5 Expected quality of the research

To build the credibility-based logo design theory, case studies were designed to address both validity and reliability issues as the research was interpretive and qualitative in nature. (Yin, 1994, 2003). Validity of the data used in the research design related to the treatment of the data. Reliability of the data related to how the data was managed. Sensitivity of the data related to how the data was analysed. The four tests can be summarised as follows:

1. **Construct validity** test to establish the correct operational measures for the concepts being studied.
2. **Internal validity** test to establish a causal relationship whereby certain conditions are shown to lead to other conditions, as distinguished from unauthentic relationships.
3. **External validity** test to establish the domain to which a study’s findings could be generalised.
4. **Reliability** test to establish that the operations of a study - such as the data collection procedures - could be repeated with the same results (Yin, 2003. p.34).

The following table outlines the case study tactics applied in the researcher’s study.
3.6 Interpreting findings

Yin (2003 p.137) cautioned that four principles should be used in interpreting the findings. Yin’s principles are identified and explained as follows:

1. *'All major evidence must be included. If a case has an alternative answer, this must be included. Nothing can be ignored'*. The data collected is presented accurately with alternative data to the credibility-based logo design theory explained in the findings.

2. *'All major evidence must be challenged. This alternative answer must be considered a rival to the hypothesis. An explanation must be given to the rival explanation, or be submitted to further study alone'*'. Any alternative challenge to the credibility-based logo design theory is explained in the findings or explained as a flaw in the research requiring further study.

3. *'An analysis must be given to the significant aspects of the study. The best analytical skills come into play here in explaining the salient defined issue. Avoid explaining a lesser issue'*'. The analysis draws upon the source credibility principles in communication persuasion, and how credibility traits are created as non-verbal graphic design communication in logo design. The implications are described in Chapter Five that all marketing communication must be created with the same credibility-based logo design traits. This is done with careful planning and management of the company’s total brand image.
4. *'All prior knowledge must be used in explanation. The most current thinking here must be explained.'* The implications of this study builds on the prior research, in particular the recent research of Hutton (1997), Henderson et al. 2003), Aaker (2004), and Erdem and Swait (2004) among others as reviewed in Chapter Two.

### 3.7 Ethical issues

Specific ethical considerations were followed in the conduct of the research as follows:

1. All potential respondents in the first phase (third step of the research) were provided with a letter explaining the purpose of the study and what would be asked. The second research stage did not require respondents, and therefore no letter was needed. The third stage was conducted online where the respondents self-selected to the Web Sites. There was no way the respondents could be contacted before they provided clickthrough data in a real world setting.

2. A coding system was developed for all respondents to the first phase, third step, to ensure confidentiality and anonymity.

3. Hard copy responses were printed out from E-mail responses. They are secure and available.

4. Approval was applied for and given by the SCU Ethics Committee. Approval Number ECN-O4-209

5. A letter was provided by SCU indicating compliance with their code of ethics and research rules and procedures on 23-12-04.

The following ethics checklist is used in shaping the research.

**Table 3.4 Ethics checklist**

<table>
<thead>
<tr>
<th>Concern</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will the research cause any harm to either the respondents contacted or the online Web Site self-selected respondents?</td>
<td>No. The researcher assured the respondents contacted privacy, anonymity and confidentiality. The online respondents were unknown to the researcher.</td>
</tr>
<tr>
<td>Will the research violate commonly accepted community standards?</td>
<td>No. The researcher assured commonsense and decency in this regard at all times.</td>
</tr>
<tr>
<td>Will the research violate commonly accepted research practices?</td>
<td>No. The researcher obtained prior approval of the research methods before any research commenced.</td>
</tr>
</tbody>
</table>

Source: Adapted from Hussey & Hussey (1997, p. 39)
3.8 Conclusion

Multiple case study research is a valid methodology for this research problem. It is particularly useful in theory building, theory application to actual logo design and theory testing which is appropriate for the research as outlined.

The researcher has recombined qualitative and quantitative data to formulate conclusions as suggested by Yin (2003 p.109). Yin stated that unlike statistical analysis, the theory building and validation process depended ‘on an investigator's own style of rigorous thinking, along with the sufficient presentation of evidence and careful consideration of alternative interpretations’.

The researcher’s case was a multiple case study using mixed methods to collect the data in two stages: (1) qualitative data for the inductive stage, and (2) quantitative data for the deductive stage. The case studies used together produced more rigor in the final analysis of findings and interpretation of results and conclusions. The credibility-based logo design theory building included the researcher’s own experience and interviews with seven logo design experts. The theory that credibility-based logo design could be accomplished was demonstrated by creating actual examples based on the theory. For triangulation, an online Web Site test would demonstrate that credibility-based logo design had a positive effect on company Web Sites.

This chapter also presented a justification for using case study methodology, expected quality of the research, how the findings were interpreted and ethical issues. The results of this study are provided and analysed in Chapter Four and concluded with implications in Chapter Five.

This thesis now proceeds to Chapter Four. The gaps in knowledge discovered in Chapter Two will then be presented along with an analysis of the research findings. Chapter Five will discuss the conclusions and implications of the findings. Chapter Six is an epilogue extending the credibility-based logo design findings to broader implications for improved marketing communication creativity.
The Earth revolves around the sun.
The speed of light is constant.
Apples fall to Earth because of gravity.
Source-credibility principles are linked to company logos.
Credibility-based logos are linked to Web Site effectiveness.
4.0 **STRUCTURE OF CHAPTER FOUR**

4.1 Introduction

Chapter Three discussed the Case Study Process, and then gave justification for the methodology used to collect data. The Case Study Process model is available in Appendix E for review.

In this chapter, the information gathered is presented in three sections according to the above model. The objective of this chapter is to examine and categorise the data obtained and identify the core patterns and themes obtained. An explanation for the patterns relative to the research issues is provided (Perry 2002).

Chapter Five will relate the data results obtained in this chapter to the literature in Chapter Two. Chapter Five will also discuss the conclusions and implications of the results.

An outline of Chapter Four is as follows:

**Figure 4.1 Outline of Chapter Four**
4.2 Review of research study

Chapter Three described the research as three interrelated steps:

1. Verification of the credibility based logo design theory as a multiple case study. This included responses from seven respected designers.
2. Verification of the credibility-based logo design theory with actual designs of seven company logos.
3. Verification of the credibility-based logo design theory to determine if a company’s Web Site would be more effective in producing action because of the new credibility-based logo compared to non credibility-based logos. A summary of the research problem is stated again:

The research issues were to:

RI-1 Validate the credibility-based logo design theory.
RI-2 Validate the differences between credibility-based logo design and logos which are not credibility-based.
R-3 Validate that the credibility-based logo design theory can be used to design logos effectively with actual cases as examples.
R-4 Validate that credibility-based logo designs will be effective on company Web Sites to achieve company goals.

The researcher’s case was a multiple case study using a mixed-methods approach to collect data. There were two stages, an inductive stage and a deductive stage. The inductive stage had two phases. The first phase was the initial theory phase which was conducted in three steps to collect qualitative data. The purpose of the first phase was to build the credibility-based logo design theory. The second phase of the first stage consisted of seven cases which were actual companies participating in the logo design development and testing. One of the cases was a pilot case to determine and correct problems with processes used in designing logos according to the credibility-based logo design theory. The purpose of this second phase was to confirm or disconfirm the initial theory developed in the first phase.

The second stage was the deductive stage. This was the testing stage which triangulated the findings in the first stage that the process for developing credibility-based logo design in the inductive stage was valid. The case study methodology followed the research approach advocated by Yin (2003) but modified to a method used by Leonard-Barton
(1988) for investigating innovations. The unit of analysis for this research was the company credibility-based logo design. A brief description of the methodology follows.

The inductive phase established the theory of credibility-based logo design based on prior research and experience of the researcher, interviewing experts in the field and creating actual logo designs based on the theory.

The deductive phase research collected quantitative data to measure the effectiveness of specific company credibility-based logo designs live in a ‘real world’ setting on actual company Web Sites. In essence, the methodology was as outlined below:

Seven companies were selected from a range of business fields. A pilot test with one of the companies was conducted first. Modifications were made to the testing process. Then six more companies were tested. Three trials were conducted to collect quantitative data during deductive the stage to verify the testing process leading to the final test.

A text only Web Site was created for each company with very basic information about the company product or service, including basic information on the site’s navigation bar. The navigation bar contained the action responses the company wanted of the visitors, usually a response to purchase. Otherwise, the site resembled a very basic Web Site with a test company logo prominent in the upper left hand corner on the home page. The company logo was intended to be the only visual stimulus of credibility, or no credibility.

One credibility-based and three non credibility-based logos were rotated consecutively after between 100 and 200 visitors accessed each logo within the six company Web Sites. When a logo was on the test Web Site, it was measured for navigation bar action, i.e. how many clickthroughs on the navigation bar the credible or non-credible logo induced. This was a function of imparting company credibility or non-credibility communication through non-verbal communication of the logo’s credibility traits. The test Web Sites were actual companies applying the actual credibility based logo design developed for each company. The credibility-based logos designs were created by international designers as directed by the researcher.

The credibility-based logo was tested for greater Web Site effectiveness in comparison to three non-credible logos. The hypothesis was that the credible logo designs would produce a higher number of clickthroughs for more information than the three non-credible
logos. A further hypothesis was that non-credible logos visually inferred that the company behind the Web Site was less credible, therefore less persuasive.

Respondents were self-selected visitors who use key words on search engines, and then found the test sites through Google AdWords. The data was collected by a Web analytics service, SmarterTools, and provided to the researcher. The data obtained was evaluated for significance applying the Chi Square statistic.

The following section is theory development phase one of stage one, conducted in three steps to collect qualitative data to confirm or disconfirm the credibility-based logo design theory.

4.3 Credibility-based logo design theory development

RI-1 Validate the credibility-based logo design theory

The first step explored the credibility based logo design theory as being valid describing the researcher’s experience and education.

4.3.1 The researcher's Master of Arts thesis, 1979

During the 1960s, the researcher had the opportunity to work and study under logo design legend, Saul Bass. In that capacity, the researcher was Bass’ Logo Planning and Account Manager supervising the logo planning and development for Continental Airlines, Rockwell International, and AT&T (Bell symbol).

*Communication Arts* (March/April, 1999 pp.24-30.) writes about Saul Bass:

The design accomplishments of Saul Bass (1920-1996) encompass many areas of visual communication, graphic design, movie title and films, and corporate identity programs. For more than five decades, Bass was a design innovator, in the corporate world with logos for AT&T, United Airlines, Rockwell International and working with directors such as Alfred Hitchcock, Martin Scorsese and Otto Preminger. The scope of Bass' long and prolific career has influenced legions of designers and filmmakers. When Bass died in 1996, his New York obituary hailed him as ‘the minimalist auteur who put a jagged arm (*The Man with the Golden Arm* film symbol) in motion in 1955 and created an entire film genre…and elevated it into an art’.

Whether a film symbol or a company logo, his work was based on credibility principles in communication. The core essence of the film or company must come through. He would
always start a logo assignment with, ‘this logo must symbolise the company business and character attributes.’ The same credibility-based philosophy applied to his successful film titles and film symbols as it did with logo design. A brief biography of Saul Bass and logo design examples are in Appendix G.

The researcher’s work with Bass and learning his philosophy led the researcher to find a basis for his logo design success. The researcher attended the University of Hawaii, Graduate School of Communication from 1975 to 1979, after 20 years working in logo design, including work with Bass. The teachings of Bass guided the researcher’s interest into why Bass designed logos (examples of which are given in following sections) which were so successful. The core meaning of his logo design strategy was always to symbolise the company business. Then he used graphic design styles based on an understanding of the company personality. Thus the company business and the company personality were the logo design objectives.

Source credibility persuasion principles in communication became the researcher's core interest. The hypothesis of the researcher's study was (Haig 1979, p.13):

To test whether a company source with a projected image perceived as predominately ‘credible’ would have greater persuasion value than a company source with a predominately ‘likeable’ image. The means of image expression is the associated company symbol. It was intended that the design forms of the symbol would non-verbally express the ‘credible’ and ‘likeable’ attributes and selected accordingly by three design professionals.

Accordingly, the following hypothesis was formulated:

A company source will be effective in changing attitudes and influencing potential behaviour in subjects to a greater degree if its image as expressed by the company symbol is perceived as predominately ‘credible’ rather than ‘likeable’.

A fictitious airline was chosen as the source company. A pre-test/post-test was used. To obtain ‘would do/would not do’ ratings on a Likert scale, questionnaires were given to 96 subjects with the specific company goal achievements the logo was to influence, such as ‘fly the airline’, ‘use the airline for shipping’, ‘recommend the airline for employment’ and so on.
The subjects marked a ‘would do or would not do’ somewhere along the scale, depending on the strength of their position about the action requested on the pre-test and again on the post-test. A text-only description about the airline was on the pre-test. The text and either one of two credible logos, one of two likeable logos, or one of two control logos was given in the post-test.

The measurement was the shift in scores by the respondent from the pre-test to the post-test. Thus if a respondent shifted from -75 to -25 this was a 50 point shift, and was just as valid as if another respondent shifted from 0 to +50.

A t-test and ANOVA were used to tabulate the data. The analysis supported the hypothesis that the ‘credible’ logos actually did produce statistically significant responses than the ‘likeable’ logos. This study permitted the possible conclusion that credibility based logo design would be effective as a process for planning and designing logos that would influence messages to accomplish company goals.


In late 1994, the researcher contacted Ms Laurel Harper who was then Editor of HOW magazine, a major publication for design professionals. The purpose was to interest Ms Harper in the credibility-based logo design conclusions of his Master of Arts thesis as a possible article. This chance meeting and suggestion to Ms Harper ended up as a book instead, with Ms Harper as the co-author.

The book jacket written by the publisher summarises the essence of the book.

In this trailblazing new book, authors William L Haig and Laurel Harper provide a comprehensive study and foolproof method for creating the most important business marketing tool – a winning logo – through that vital communication principle credible persuasion (the researcher’s emphasis). *The Power of Logos*, the first instructional book ever published on the subject, offers concise yet complete lessons on how to plan, develop, evaluate, and implement effective logos. Just what constitutes good and bad logo design, from both a creative and business perspective? Complete with examples of great hits, these pages answer that question, demonstrating the power of credibility persuasion (researcher’s emphasis) in logo design. This book shows how to avoid creating logos that project the wrong message, and focus instead on the essential elements that give a logo its power to attract, motivate, and influence the various audiences a company needs to reach.
In 191 pages, the book advanced the theory of credibility based logo design. Introduced in 1997, the book sold over 10,000 copies spanning five printings. It is used as a textbook in eight US universities and received the highest book reviews in *Communication Arts* and *Marketing Review* in 1997. *Communication Arts* has been generally considered the premier magazine for the graphic design industry for over fifty years. This is an excerpt from a book review of the researcher’s book, *The Power of Logos* (Feris 1997, Oct/Dec. pp.18-19):

*The Power of Logos* is an examination of logos that have become effective business marketing tools. It offers observations on how to plan, develop and implement a competitive logo. It doesn't tell you how to design a logo, but rather lists the factors that a logo needs to succeed in the business framework. It evaluates the power of a logo as a shorthand signature to express the company or product. It argues that a logo must be distinctive and memorable and denote something about the company it stands for. The book discusses the qualities of identity and memorability and shows examples of logos, some that have drilled themselves into all of our brains.

Many major logos are analysed and discussed, however. Since William Haig taught courses on company logo planning at the University of Hawaii, some of the commentaries have a Hawaiian flavour that is intriguing. But the main thrust of the discourse is of high value. The authors have chosen to define their story of what gives power (credibility) to certain logos, and the logo examples thread through a well organized and easy-to-read.

The authors subtitle their book 'How to Create Effective Company Logos' and truly seem to understand that logos are a force in the marketplace and in the corporate world. After a good study of what they have to say, the force may be with you.

### 4.3.3 Logo design expert interviews

The third step of the credibility-based logo design theory development was to interview logo design experts. The Protocol is given in Appendix E. The interview with experts in the field had to be done twice. It was discovered in the first interview that the theory was too new for respondents to comment on questions #4 and #5. The questioning model was thus reviewed and revised (Eisenhardt 1989, Gummerson, 2003, van Aken 2004). Gummerson (2003) referred to this as the *hermeneutic spiral* process. Van Aken (2004) referred to this as the *reflective cycle*. The purpose is both the same, to sharpen and improve the theory and constraints. As the process continued, some interviewees were probed further as the answers were free flowing. The purpose was to confirm or
disconfirm the theory. The questions asked in the first and second interview are shown in Appendix H.

Use of Quotations.
Quotations are used in this section to capture the importance of the credibility-based logo design theory from the respondents’ perspective, and are shown in quotation marks and recognised by the case letter in brackets. For example, (A) on 19.5.05 stated ‘I agree with the theory and the points you make’. It should be noted that credibility-based logo design theory is new and innovative, and is not the usual basis from which designers create logos. These quotations enhance the theory espoused in this research.

A content analysis was made of the respondent comments which follow together with the respondent code. The complete comment for each respondent is in the Appendix D.

A. A US nationally recognised logo designer:
   I think the article summarises the process of creating a logo. I have never used the terms, credible, expertise, or trustworthy while discussing the attributes a client wishes to project in his logo because I was never taught how to translate these verbal terms into visual forms. Your process works (however) because most credible designers have been using the process for decades. It is just a very difficult thing to explain. In reviewing your approach and mine, I find that basically they are the same. We just use different terms for various aspects of the process.

B. A lesser known US logo designer:
The (credible logo philosophy) is an excellent example of what makes sense when you think deeply about the purpose of a logo, which is to communicate the core branding of the company.

C. A highly regarded and published US university professor in logo design:
I really like your points and examples. My only concern is that you do not take into consideration the credibility of fonts (in the overall logo design).

D. A noted Hawaii logo designer:
In the article there is a means of establishing the distinguishing character of (logos). The credibility persuasion logo design philosophy is vital to understanding the importance for a company to establish a persuasive and credible foundation.
E. A noted Portuguese logo designer:

(The credibility-based logo design philosophy) provides me with a starting point by knowing better the end point (which are) the objectives, attributes and motifs of the logo to be delivered. Planning is then vital to achieve the required goal in less time. Overall, the credibility-based logo design philosophy is a tool of indispensable use and benefit.

F. A noted Indian logo designer:

Clients normally say only I want a logo for my company. When we proceeded, we used to be swimming like fishes in a tank in all directions. With the credibility-base logo design philosophy, we are now able to support our logo designs, and give the client a direction to think and channel his thoughts and make a decision. The best part is the simplicity. The benefits: (1) easy to convey expertise, and trustworthiness in the logo, (2) clear direction for the designer, (3) lesser rounds for revisions, and (4) faster acceptance by clients.

G. A noted Chicago, US, logo designer:

(credibility based logo design) is a results specific process. (This) logo communicates and builds memorable image equity what will compound with each viewer exposure. The philosophy delivers. It takes out the trial and error guesswork of the design process, producing a cost effective, time efficient and successful on-target logo design.

The following is a summary of the comments:

Positive

1. Planning based on credibility gives the logo design important direction as a design procedure. The criteria for the logo design reflects the credibility-based core meaning of the company.
2. Planning based on credibility gives the logo design final objective judgement by both designer and client.
3. Credibility-based logo design is a new way of doing what designers have often done by instinct. In other words, the philosophy gives a reference point to many logos that have been successful, not necessarily planned to be credibility based. Referring to comment (A) again, ‘In reviewing your approach and mine, I find that basically they are the same. We just use different terms for the various aspects of the process’.
Negative
1. ‘My only concern is that you do not take into consideration the credibility of fonts.’
2. ‘I was never taught how to translate credibility principles into design elements’.
   Those can only be translated at a personal level at best’.
3. ‘A logo can do only so much’.

Overall, the comments supported the credibility-based logo design philosophy advocated by the researcher, even the negative comment about the font. Credibility-based logo design theory means that the whole logo, including the font, must be credibility-based according to the researcher’s philosophy. As expected, many credibility-based logos have been designed with this philosophy, and many have not. This is to be expected. In fact, all of the logos by Bass were not initially designed to be credibility-based. The successful design direction by Bass might be said to be instinctively based on credibility principles and were continued for each client because of Bass’ extraordinary success with this style of logo design.

4.4 First stage, second phase.
The first stage, second phase, was to confirm or disconfirm the initial theory developed in the first phase. The first issue was to describe the differences between credibility-based logos and non credibility-based logos. This was important relative to being able to develop a process for logo development based on credibility-based logo design theory. This is RI-2 Validate the differences between credibility-based logos and logos which are not credibility-based.

4.4.1 Non-verbal communication and logo design.
This section begins with a review of non-verbal communication as it relates to logo design.

Non-verbal communication includes all forms of human communication that transcends the oral and written word. Examples are body language, such as gesturing, nodding and smiling. In graphic design there are internationally recognised symbols such as traffic signs, or those used for money exchange at airports. Logo design is another form of non-verbal communication.

Historically, businesses have identified what they sell with a pictograph: the shoemaker has a shoe in a sign over the shop door; the key maker has a key in a sign over the shop.
door; the pawnbroker and barber have their own unique shop sign symbology. These pictographs tell the consumer what is being offered inside the store. Presumably, the person in the shop knows how to fix shoes, make a key, take personal belongings on loan, or cut hair. Furthermore, we generally assume that they are ‘expert’ in this business.

Bass’ philosophy for effective logo design started with a symbol of the company business. In this way it was easy to symbolise a house painter: the core of the company logo would be a house and a paintbrush. This says that the company is expert at house painting. But it was more difficult to symbolise a marketing consultant. In this case, the core of the company logo would be what the company did to give it expertise as a marketing consultant. For example, marketing consultants are known to ‘think-out-of-the-box’. What that company does to be an expert in marketing consulting, is ‘thinking-out-of-the-box’. Other marketing consulting symbols are appropriate as well. This is what is symbolised as the core of the company logo.

Communicating ‘trustworthy’ in a credibility-based logo is a more difficult concept. The logo makes the company look believable or trusted in order to conduct its basic business. This is accomplished by applying non-verbal design overtones to the logo’s ‘expertise’ content. For example, Bass’ philosophy was that a company in a high tech or high service/efficiency businesses would have a contemporary looking logo. A company selling candies with time-tested recipes like See’s Candies will have a more old fashioned period design motif. The circle and square communicate stability, or that the company has been around a long time. This was Bass’ philosophy in the 1960s through the 1990s. This philosophy was verified in the researcher’s Master of Art’s thesis which related credibility principles in communication to Bass’ successful logo design philosophy. The term credibility-based logo design emerged in 1979 and was supported by Bass in conversation with the researcher in 1979.

Credibility-based logos can employ as many design overtones as there are car model designs. Each must fit the individual company to send the correct credibility-based message in the company logo. It must also fit the company in reality. Companies such as IBM, CBS, Prudential, United Airlines and AT&T have pioneered the use of non-verbal credibility communication both as part of their value system and their communication system. Credibility-based logo design is therefore part of the brand personality communicated non-verbally, in contrast to the functional requirements research by
Henderson & Cote (1998) and others mentioned in Chapter Two. For example, brand personality logos are descriptive traits rather than functional requirements such as ‘memorable’ or ‘awareness building’. As brand personality oriented (also known as core personality), credibility-based logo design follows the research described in Chapter Two relative to source credibility which has specific credibility traits. These traits are defined for each company before logo design begins. The logo designer then interprets these traits into a visual logo form which is a non-verbal statement of the same verbal credibility traits.

**Difference between credibility-based logo design and logos which are not credibility based.**

1. Credibility-based logo design incorporates the specific company credibility traits to be non-verbally communicated. The researcher concludes that specific company credibility traits is a better understood requirement than the nebulous terms ‘brand personality’ or ‘core meanings’ per se.

2. Non-credibility based logos do not incorporate specific company credibility traits. For example, in attempting to describe brand personality Aaker (1996) uses ‘quality’ and Young & Rubicam Brands (2006) uses ‘esteem’ as branding requirements. Again, the researcher concludes that ‘quality’ and ‘esteem’ are too nebulous for describing brand personality in contrast to credibility-based company traits in logo design.

**4.4.2 Logo design based on credibility principles**

The second phase of the first stage is to actually design logos for companies based on credibility principles. This is **RI 3 Validate that the credibility-based logo design theory can be used to design logos effectively with actual case histories**

The Protocol used is described in Appendix E. The following is a recap of the logo design process in narrative form.

**Online questionnaire**

The following process for creating a credibility-based logo design is summarised for one of the test companies, Walk Safe Solutions. The process started with an understanding of the company for which the logo was to be designed. For the purposes of this thesis, this was an understanding of the company’s credibility traits.
The researcher provided an online questionnaire to Walk Safe Solutions’ owner which asked questions resulting in responses that were specifically credibility-related for this company. This questionnaire was designed to elicit answers about Walk Safe Solutions’ credibility profile. The questionnaire is in Appendix I. The researcher reviewed the questionnaire to obtain ‘expertise’ and ‘trustworthy’ traits, the two most important elements in a credibility-based logo design. The following is a description of the credibility traits of Walk Safe Solutions:

**Step 1. Credibility trait analysis:**

Company expertise: *markets a product which prevents slipping and falling.*

Company trust: *state-of-the-art, cutting-edge, quality, high customer service.*

**Identifying credibility traits versus non-credibility traits**

From the above example, credibility traits are the descriptions of the company’s *expertise* and *trustworthiness*. Traits of trustworthiness are those which describe the company as being able to do what it says it can do. Traits of expertise are those which describe what the company does, its products or service. For example, Walk Safe Solutions sell a product which prevents slipping and falling accidents when applied to home flooring. The company describes the product as the highest quality, most advanced use of adhesive technologies, and high in quality. These traits describe why the product is superior, and associates this trust to the company. High quality customer service also adds a dimension of company trust. In contrast, non-credible trustworthy traits of old-fashioned, dated, and staid would be inappropriate for this company. Non-credible traits expressing a company’s expertise, of course, differ more obviously. A house painter logo symbol would be as a ‘house and painter’, not ‘prevent slipping/falling’.

The credibility traits for all seven companies represented in this research is in the test results Section 4.5.2. Note the differences from company to company. It should be noted that company expertise traits are not the *result* of the company’s expertise. Walk Safe Solutions’ expertise, for example, is not applying an adhesive product on the floor. A company in the floor adhesives business would have ‘floor adhesives’ as their expertise not ‘beautiful floors’ which is the result of floor adhesive. Therefore, ‘floor adhesive’ would be that company’s logo symbol, not ‘beautiful floors’. Another example would be a physical therapist specialising in muscle energy therapy for back problems. ‘Muscle energy’ is the therapist’s expertise, not the corrected patient’s back. Therefore, muscle
energy would be this company’s logo symbol, not the patient’s back. A final visual example is CBS Television’s ‘eye’ logo which was developed for this new television division during the early 1950s. This was the new CBS division’s expertise, rather than an ‘ear’, or just ‘communication’.

Every company, therefore, has its own expertise and trustworthy traits which make up the company’s credibility image. Credibility trait meaning is more specific than just brand personality, core meaning, or corporate image.

**Preparation of Logo Planning Report for client.**

The second step was to present the credibility trait objectives in a Logo Planning Report for the owner of Walk Safe Solutions. This report first reviewed credibility-based logo design philosophy, examples of other logos based on this philosophy, and a description of the credibility elements which were to be incorporated in the Walk Safe Solutions logo. The researcher recommended that a logo with a symbol communicating the credibility elements over the company name would be a better logo strategy than all letters, like IBM, or the company name, like Xerox. The recommended strategy was similar to logos for AT&T, United Airlines, and Prudential where a symbol is used over the company name. This strategy is for better credibility expression.

The content symbol of the logo will symbolise Walk Safe Solutions expertise: *markets a product which prevents slipping and falling*. The design form of the symbol will communicate Walk Safe Solutions trust: *state-of-the-art, cutting-edge, quality, high customer service*.

The report was reviewed by the client and either approved or modified slightly in order to more closely describe the credibility attributes Walk Safe Solutions. The owner approved the report without modifications. A sample Logo Planning Report is in Appendix J.

**Preparation of Logo Design Criteria direction guideline for designer.**

Following client approval of the credibility-based logo design objectives, the objectives were then sent to an associate designer in one of four international regions: Pune, India; Porto, Portugal; St. Petersburg, Russia; or Sao Paulo, Brazil. This was in the form of a Logo Criteria Design report, which succinctly described the company’s expertise and
trustworthy traits as agreed to in the Logo Planning Report. An example of the Logo Design Criteria direction guideline is in Appendix I.

In this case, the Walk Safe Solutions Logo Criteria Report was sent to the Portugal designer. The role of this designer was to interpret the verbalised expertise and trustworthy traits into a logo design. A similar analogy would be to give an apple pie recipe to a chef to interpret. That is, to combine the ingredients into the baked apple pie product. The chef has the ingredient proportions, the designer only has the ingredients and works with the proportions to arrive at a final solution.

**Design interpretation of credibility traits.**
Several designs were developed by the researcher with the assistance of design experts. The designs had in our collective judgement for specific expertise and trustworthy traits to incorporate into the logo design. This saved time as well as developing logos which met the planned objectives. These preliminary designs were sent to the Walk Safe Solutions client. Again, these were preliminary representations based on the objectives stated in the Logo Planning Report. These preliminary designs were winnowed down to a couple of the most promising logos which were judged by the client and the design team to best fit the credibility-based logo objectives. A final design followed and was selected. A sampling of preliminary designs and the final solution are included in Appendix L.

It is important to note that all involved were interpreting verbal requirements stated in the Logo Planning Report and the non-verbal equivalent communication of these requirements through graphic design. How accurate these judgments really were was put to another test in Stage Two, the quantitative phase of research, Section 4.4.

**Logo Implementation Report, stationery and business card designs.**
The final logo was then designed and approved. The objective of this step was to obtain as much consistency in the implementation stage which followed. The Logo Implementation Report contained the final logo design, colours and font styles. Stationery and business card designs were ready for printing. These two final products would start Walk Safe Solutions in the right direction for consistency. There were still problems with managing consistency which are discussed in Chapter Six. A sample Logo Implementation Report, stationery and business card design is in Appendix M.
4.5 Deductive stage, quantitative research

The previous stage was concerned with credibility based logo design theory building. The second stage was to triangulate the findings to confirm that the process developed in the first stage was valid. This is RI - 4 Validate that credibility-based logo designs will be effective on company Web Sites to achieve company goals. The research protocol in Appendix E describes the steps taken.

4.5.1 Quantitative research, pilot test

A pilot test was undertaken to determine any problems in the research. It was found that several of the non credibility-based logos used in comparison with the one credibility-based logo were too close in credibility traits to the credibility-based logo. In fact, the researcher used alternative logo design selections taken from the preliminary design for the seven companies. Only one pilot test produced the data results as hypothesised. The trait differences between the credibility-based design and the three non credibility-based designs were too close in value to induce differences in the data collected. This was corrected in three more trials. Each trial used non-credible logos with more and more visual separation from the credibility-based logo design. The differences between data collected during these trials continued to improve, indicating that even some credibility traits will bias the data between credibility-based logos and non-credible logos.

4.5.2 Quantitative research, final testing

The following is a review of each company background, credibility traits and logo used in the final testing. The credibility traits are those which the company desires, reminding the reader again that specific credibility, or expertise and trustworthy traits, are source-oriented. The traits are determined by the client, not the customer. These traits were obtained through the Logo Planning Questionnaire, Appendix I, submitted by the company manager. The questionnaire was analysed by the researcher and the Logo Planning Report is submitted to the client for approval. What defines expertise and trustworthy traits is defined earlier in this thesis. The test methodology was explained in Chapter Three.

Company A Background

Company produces self-published cookbooks for families, individuals, organisations and companies world-wide. The company’s online software accepts recipes typed in by
customers over the Internet and formats them into a press-ready book. Customers have complete control to preview and make changes.

- Data gathered from online questionnaire from client for Logo Planning Report and Logo Design Criteria brief sent to designer.

- Company credibility traits:
  - Expertise trait: personalised custom cookbook publisher online.
  - Trustworthy traits: responsive/personal service, cutting-edge, fun company.

**Company B Background**
Company specialises in van, limo and helicopter tours to famous movie filming locations in Kauai, Hawaii.

- Data gathered from online questionnaire from client for Logo Planning Report and Logo Design Criteria brief sent to designer.

- Company credibility traits:
  - Expertise trait: movie tours in Hawaii.
  - Trustworthy traits: highly entertaining, fun, quality operation, unique, enthusiastic staff, innovative, experienced.

**Company C Background**
Company sells and applies a unique product which prevents slipping and falling in the home. The company acquired the rights to the product as the owner is both an architect and a builder. Wife is a registered nurse, who works with elderly people. This is a new company with no previous brand image.

- Data gathered from online questionnaire from client for Logo Planning Report and Logo Design Criteria brief sent to designer.

- Company credibility traits:
  - Expertise trait: product prevents slipping and falling.
  - Trustworthy trait: state of the art, quality, high customer service.

**Company D Background**
Start up retail store specialising in the sale of quality running footwear and triathlon gear for the beginner and experienced competitive runner. Store offers a diverse selection of quality men’s, women’s and children’s footwear, apparel and accessories.

- Data gathered from online questionnaire from client for Logo Planning Report and Logo Design Criteria brief sent to designer.
• Company credibility traits:
  Expertise trait: quality retail store selling running footwear and triathlon gear.
  Trustworthy traits: quality, professional service (salespeople are runners too), latest products, diverse selection.

Company E Background
Company day trades stocks for international clients using an advance technology trading system.

• Data gathered from online questionnaire from client for Logo Planning Report and Logo Design Criteria brief sent to designer.

• Company credibility traits:
  Expertise trait: day trading of stocks.
  Trustworthy traits: cutting-edge technology, sophisticated system.

Company F Background
Company provides wine accessories, specialty gift items, logo imprinted products such as napkins, glassware, clothing, invitations, stationery etc. Company caters to elite connoisseurs of wines at wine tastings with fun products around a club theme.

• Data gathered from online questionnaire from client for Logo Planning Report and Logo Design Criteria brief sent to designer:

• Company credibility traits:
  Expertise trait: wine gift items
  Trustworthy traits: fun, fun, fun, quality, unique, snobby.

4.6 Data results.
The data for the third and final test with one of the six companies in the final testing, Starting Line Sports, is summarised as follows.

Four logos were tested and compared in relation to accessing the navigation bar or not. Logo 3 was the credibility-based logos, Logos 1, 2, and 4 were non-credible. The researcher, with the assistance of one of his thesis professors, first tabulated the data with the one-way ANOVA statistic. The ANOVA statistic indicated significance between credible Logo 3 and non credible Logos 1 and 2, but not between Logo 3 and non-credible Logo 4. The results of the ANOVA test are in Appendix N. The statistical analysis was
conducted again with a satisfactory conclusion to support the research objective. The researcher, again with the assistance of one of his thesis professors, tabulated the data using the Chi Square statistic. The results are as follows with comment at the end.

As a final comment about using Chi Square rather than ANOVA, the data was first tabulated using the ANOVA statistic which calculated data with the dependent variable being interval/continuous data. The dependent variable, however, was calculated in frequencies (how many clickthroughs) making it nominal/ordinal data. Therefore, the Chi Square statistic was more appropriate than the ANOVA statistic.

**Chi-Square Test Results**

<table>
<thead>
<tr>
<th>Logo Test 1 and 3</th>
<th>Yes</th>
<th>No</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logo 1</td>
<td>17</td>
<td>208</td>
<td>225</td>
</tr>
<tr>
<td>Logo 3</td>
<td>24</td>
<td>126</td>
<td>150</td>
</tr>
<tr>
<td>TOTAL</td>
<td>41</td>
<td>334</td>
<td>375</td>
</tr>
</tbody>
</table>

Degrees of freedom: 1
Chi-square = 6.59047758142252
p is less than or equal to 0.025.
*The distribution is significant.*

<table>
<thead>
<tr>
<th>Logo Test 2 and 3</th>
<th>Yes</th>
<th>No</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logo 2</td>
<td>14</td>
<td>177</td>
<td>191</td>
</tr>
<tr>
<td>Logo 3</td>
<td>24</td>
<td>126</td>
<td>150</td>
</tr>
<tr>
<td>TOTAL</td>
<td>38</td>
<td>303</td>
<td>341</td>
</tr>
</tbody>
</table>

Degrees of freedom: 1
Chi-square = 6.37832597147838
p is less than or equal to 0.025.
*The distribution is significant.*

<table>
<thead>
<tr>
<th>Logo Test 4 and 3</th>
<th>Yes</th>
<th>No</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logo 4</td>
<td>16</td>
<td>142</td>
<td>158</td>
</tr>
<tr>
<td>Logo 3</td>
<td>24</td>
<td>126</td>
<td>150</td>
</tr>
<tr>
<td>TOTAL</td>
<td>40</td>
<td>268</td>
<td></td>
</tr>
</tbody>
</table>
Degrees of freedom: 1  
Chi-square = 2.34901643680332  
For significance at the .05 level, chi-square should be greater than or equal to 3.84.  
**The distribution is not significant.**  
\( p \) is less than or equal to 0.20.

Degrees of freedom: 3  
Chi-square = 9.13708126550644  
\( p \) is less than or equal to 0.05.  
**The distribution is significant.**

Notes to the Chi Square results:

1. The test shows a 2X2 for Logos (1 and 3), (2 and 3), (3 and 4) as well as a 4X2 for all four logos.
2. There is a significant relationship between the variables with the chi-square test.
3. It was better understood to pinpoint the relationship between the variables by looking at the relationship between the individual logos.
4. Therefore, a significant relationship exists between the variables for Logos (1 and 3) and (2 and 3).
5. The relationship between (3 and 4) is not significant. The response results for Logo 4 were what would be expected from the population.
6. The file which follows has the numbers from the data results. Logo 3 is the credible logo.

<table>
<thead>
<tr>
<th>Logo Test for 1, 2, 3 and 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clickthrough</strong></td>
</tr>
<tr>
<td><strong>Yes</strong></td>
</tr>
<tr>
<td><strong>No</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>

These data numbers were obtained in the last logo testing when the final corrections were made. From the results from both the ANOVA and Chi Square statistical analysis it was reasonable to conclude that credibility-based logo design theory was valid, and that credible Logo 3 contributes to inducing more action on the navigation bar than the non-credible Logos 1, 2 and 4. The researcher feels that subsequent testing would produce the same conclusions about credibility-based logo design. To continue would have been time consuming and expensive with a limited budget paid by the researcher. A Web analytics service is possibly interested in subsequent funding to include advertising research and direct mail research, as well as logo research using the same methodology.

However, quantitative research had mixed results. Both the pilot test and one of the final testings had positive ANOVA statistical results for one of the credibility-based logos in each test. The two companies both had test Web Sites without the logo similarity.
problems. However, one had the long text and the other the short text on the index page, rather than the ultimately preferred medium length text.

Finally, Fogg (2003, pp.155-156) had a relevant comment about interpreting data with a large sample:

When a study has a large number of responses, [referring to his study on Web Site credibility] even small differences in means can add up to being statistically significant. But these small differences may not be large enough to have much *practical* significance. One of our challenges in interpreting the data, therefore, was to determine which data have practical as well as statistical significance.

### 4.7 Summary of Chapter Four

#### 4.7.1 General problems then success with data collection

The credibility-based logo design theory building in the inductive stage was presented without problems in collecting the support material as data. However, the researcher encountered several problems in collecting data within the final testing, with two failed attempts initially. Working through the problems finally produced the predicted data results in the third final testing. The lessons learned follow.

#### 4.7.2 Increasing visitors to the test Web Site.

The first problem was obtaining enough visitors to the test Web Sites. In the pilot test, this took about one month per logo. There were ten logos in the pilot, so obviously the researcher did not proceed past four or five logos. Four logos were used in the final testing.

In the final testing, the researcher attempted to increase the visitor traffic without incurring the cost of Google AdWords. The researcher did not obtain visitors to the site in a timely manner, so Google AdWords was finally utilised with very satisfactory results. Google AdWords’ search engine marketing service uses a bidding process to allow Web owners to place a small descriptive text about a Web Site to drive visitors to the Web Site. This method proved very effective in reaching visitors with key words and a small advertisement. The test to the Web Site was finished within two days compared to a month in the pilot test.
4.7.3 Increasing the visitor sample count

In the pilot test the researcher’s sample was about 80 visitors. Because of the ease of obtaining greater numbers of visitors through Google AdWords, the researcher increased the visitor sample to between 140 and 200 in the final testing in order to mitigate visitors who may have visited the site and entered a clickthrough more than once, even though this was unlikely over a two-day period.

4.7.4 Modifying the test Web Site home page copy length.

The test Web Sites were very plain, giving prominence to the logo in the upper left hand section as suggested to the researcher by Fogg (2003). In the pilot test and the final testing, the logo placement was always in this position. The purpose of the test logo as the prime stimulus on the page was to induce action, or no action. However, in the pilot test the text copy was quite long in the description of the company and its product/service. The researcher thought this might discourage visitors accessing the navigation bar for more information.

In the final testing, the Web Site copy text was shortened to the other extreme of one or two sentences. If the visitor wanted more information, it was available on the navigation bar. However, when the data results were completed, all logos measured produced about the same number of clickthroughs. The hypothesis that the credible logo would produce more clickthroughs than the non-credible logos was not achieved. The researcher speculated that visitors who came to the Web Site with very little information were interested in the company’s product or service and wanted more information anyway, regardless of the company logo.

Speculating that this might have been the case, a retest was conducted with one of the companies, Starting Line Sports used as a case study. Three paragraphs of basic text about the company and products were considered the best length. The visitor could obtain more, or leave without feeling the Web Site was otherwise inadequate. This proved to be the right modification. More clickthroughs were induced by the credibility-based logo in the test results, which supported the researcher’s hypothesis.
4.7.5 Increasing contrast between credibility-based logo and non credibility-based logos.

The researcher learned in the pilot test that there was not enough separation between the perceived credibility-based logo traits and non-credibility logo traits. The credibility-based logos were actual logos prepared for companies using the design protocol described in this thesis. These logos were rich in the desired credibility communication for the given company. The non-credibility-logs chosen for comparison in the pilot test were ‘rejects’ from the design development stage. For timing purposes, and supposed logic that these were not good enough to be considered credible as well, the researcher used the rejects in the pilot test. The researcher learned that the rejects were too close in credible trait perception to the credible logo. While the credible logo was rich in credible traits, the logos in comparison were ‘somewhat rich’. The clickthrough scores were about even for all logos in the tests. In retrospect, this should have been expected.

In the final testing which followed, the researcher used logo symbols which were different, but the name font was the same in the non-credible logos (the logo symbol and the name font together become the company logo). Although the credibility-based logo had its own simple name font, the non-credible logos in contrast had a closely resembling simple name font. The perception of the logos then was only half corrected from the pilot test. Both the logo symbol and the name font were changed in each of the non-credible logos for greater contrast in the final testing, which then produced the predicted results.

4.7.6 Using the correct Web analytics data.

SmarterStats obtains user information from Web Sites with what they claim is the most advanced web analytic software currently available. See Letter in Appendix F. Like other web analytics services, SmarterStats provides data through what is called data mining, largely unheard of only six years ago. Web analytics is continuing to show promise of consolidating and stabilising data used for predictive web improvement.

The problem now was too much data and too many terms used to describe the data. This made it difficult to apply the right data using the right terminology for the research problem. For example, overlapping of terminology made the use of proper data files confusing. Web Site ‘hits’ and ‘visitors’ were two different data numbers. The terms ‘visits’, ‘unique visitors’ and ‘new visitors’ were still different data numbers. Knowing
which term to use became more complicated when web analytics companies had the same term in different data locations meaning different data numbers. Visitors who accessed the researcher’s test Web Site per se were different from the visitors in a data file named Daily Visitor. The visitors in another data file named Daily Activity file were different yet again. The terms and data files were compounded by about thirty files to choose from. The file which must be used is determined by the research question. The researcher wanted to measure the number of daily visitors over one, two or three days. In the final testing, the researcher was first convinced that this data was provided in the Daily Visitor file. Then the researcher wanted to measure the number of clickthroughs by these visitors to the navigation bar. This was provided in the Daily Activity file. These data files had first to be accessed by going to a special file called Data Mining. There were several terms in Data Mining which were close to Daily Activity, such as Visitors. This data, however, was incorrect for the research problem. The researcher did not want aggregate visits and aggregate clickthroughs. ‘Paths’ data was ultimately selected as it provided the number of visitors classified as ‘visits’ to the site, and the number of visitors who took the path to the navigation bar, or not, classified as ‘hits’.

It was also learned that further Paths data could be obtained in subsequent testing to learn if a visitor to a Web Site accessed a navigation bar, say for product information, then accessed the purchase of the product. This was recorded in the Paths data, giving more rigor to the credible logo compared to the non-credible logo data. Which file data to use was not a help feature on the Web analytics company site. The problem was in explaining the research objectives. One suggestion was to replace the navigation bar (for more information) with the four logos, and the visitor would select the logo best liked. However, this was obviously not the research objective.

4.7.7 Summary using Web analytics per se

The Internet can be used for both traditional questionnaire data gathering such as the methodology used by Fogg et al. (2001) in their report on a large quantitative study of Web Site credibility. It can also be used for user Web analytics data collection as in this thesis, and is probably the best use. As a Web analytics resource, it is not recommended for large ‘big question’ research where change is not measured. Rather, Web analytics research is suitable when measuring user action when changes occur on the test Web Site. What causes the change, such as a different logo, can be tracked over a given period. Therefore,
collection of data over a period of time, even a couple of days, shows continuous action users take for research purposes.

Web analytics is also used for controlled research. This is when any researcher limits the number of changes in a controlled context during the time period. The researcher for this study limited the change to just four logos as stimuli within the context of plain text which remained constant. The method was to change one logo, then to change the first logo for a second and so on over a week period. The data collection then could be said to be related to the research objective of testing one controlled visual stimulus on the Web Site. Testing company logo design while at the same time testing logo effectiveness on the Internet in this thesis was perfectly suited for Web analytics. As mentioned, a Web analytics company is possibly interested in funding further research to assist the researcher and others in learning how to use Web analytics for research purposes. These companies have grown with the advent of E-commerce on the Internet which seems to be totally directed for commercial applications.

4.8 Conclusions

The research issue was to apply case study research to support the credibility-based logo design theory; demonstrate that specific company credibility-based logos could be designed based on the theory; then to test the theory to determine if credibility-based logos would add to the effectiveness of company Web Sites. The results of the case research supported these research issues.

The theory was that credibility-based logo design was validated by the experience and writings of the researcher, by interviews with logo design experts locally, nationally and internationally, and by the actual logo design based on the theory.

An online test was conducted to further validate the credibility-based logo design theory. In addition, to validate that credibility-based logo design would increase the effectiveness of company Web Site, inducing visitors to take action on the navigation bar.

The chapter also discussed problems and lessons learned using Web analytics for research purposes. The pilot test provided the researcher with changes for the final testing. However, more changes were learned over three subsequent tests within what was supposed to be the final testing. The researcher learned:
1. how to increase visitors to the test Web Site for more timely data collection with Google AdWords;
2. what best visitor count achieve as a representative sample;
3. what Web Site copy, or text, length is adequate to not bias the action to the navigation bar;
4. what complete contrast credible and non credible logos means to data results; and
5. how to use the features Web analytics for data collection for tracking data in a ‘controlled’ research context.

Chapter Five presents the conclusions and implications to the research findings.
The Earth revolves around the sun.
The speed of light is constant.
Apples fall to Earth because of gravity.
Source-credibility principles are linked to company logos.
Credibility-based logos are linked to Web Site effectiveness.
5.0 STRUCTURE OF CHAPTER FIVE

5.1 Introduction

Following the analysis of the data collection and comments on the results in Chapter Four, Chapter Five now reviews the conclusions and implications from the research findings.

Figure 5.1 Chapter Outline

Source: Developed for this report

5.1.1 Summary of findings leading to conclusions and implications

The thesis investigated the application of source credibility principles in communication persuasion to the planning and design of company logos. The term credibility-based logo design is introduced. The term embodies the basis for planning and creating company logo designs based on specific credibility traits defined for a given company.

An online testing methodology was developed to demonstrate that credibility-based logo designs were effective per se, and would induce more navigation bar clickthroughs,
thereby increasing the effectiveness of company Web Sites. The premise was that increased Web Site usability was a predictor for increasing company goals placed on the Web Site navigation bar. Credibility-based logo designs outperformed logos without credibility traits from twice to up to four times the effectiveness.

The conclusion from this research is that credibility-based logo design philosophy is important to the planning and creative development of company logos based on projecting specific credibility traits, and that specific company credibility-based logo design contributes to the effectiveness of the company Web Site. The research is a benefit for logo designers, Web Site designers, and company managers. Also, lessons were learned in using the Internet for research. A further implication from this research is the possibility for extending the credibility principles demonstrated in effective logo design to the creative development of all marketing communication activities. This is explored in Chapter Six as an epilogue.

In summary, the first two contributions below are supported by the research in this thesis for increasing marketing effectiveness. The last two are possible extensions of the conclusion and could stimulate further research.

1. The theory of credibility-based logo design.
2. The contribution of the company credibility-based logo design to increase the effectiveness of the company Web Site.
3. The implication that consistent and coordinated managed company credibility-based marketing communication system leads to achieving Brand Credibility.
4. Brand Credibility is a better measurement of brand equity and is better understood among ‘creatives’ and management.
5. It may be helpful to the reader to briefly review the previous chapters as background.

5.1.2 Chapter review

Chapter One introduced the possibility that credibility principles in communication persuasion could be applied to company logo design which, in turn, would have an affect on company Web Site effectiveness. Credibility-based logo design philosophy was introduced, which proposed that source credibility could be communicated non-verbally through the content and design motifs of a company logo. The differences between credibility-based logo design and non-credible logo design would be explained. It was
postulated that credibility-based logo design would increase the effectiveness of company Web Sites. The research issue then is two-fold: (1) confirm or deny credibility-based logo design theory, and (2) confirm or deny that company credibility-based logos would be effective on company Web Sites. In conclusion the chapter briefly explained the methodology to be used in the research, working definitions and limitations to the research.

Chapter Two reviewed the relevant parent discipline literature in logo design, branding, communication models, credibility, logo credibility Web Site credibility, and credibility-based branding management leading to the term Brand Credibility. Chapter Two concluded that there were gaps in the current knowledge about credibility-based logo design theory, and that specific company credibility-based logos might be important in inducing Web Site action on the navigation bar. The chapter accordingly identified the research issue as to whether or not a credibility-based logo on the Web Site would induce more action on the navigation bar than logos which were not credibility-based.

Chapter Three described the research methodologies that would lead to a process of developing credibility–based logo design theory, and confirm or deny the hypothesis that a credibility-based company logo would increase the effectiveness of company Web Sites. Chapter Three presented a multiple case study in two stages, an inductive stage and a deductive stage. The first stage presented two phases and three steps to confirm or deny the credibility-based logo design philosophy. The second stage presented the methodology to triangulate the findings to confirm the initial theory, and to test the effectiveness of a company credibility-based logo design on the company Web Site. The chapter provided a detailed evaluation of research procedures, unit of analysis, and instruments used. The chapter also included ethical considerations, how validity and reliability issues were addressed in the research and limitations.

Chapter Four presented the data from the two stages. The chapter concluded that credibility-based logo design theory was viable and had an influence on inducing action, as demonstrated by increasing the effectiveness of the company Web Site. Thus, the concept of credibility-based logo design theory has important new knowledge implications for logo designers, company managers and Web Site designers. First, that logos based on credibility principles will not only have a positive effect per se, but credibility-based logo design can be planned and created with a specific design direction more efficiently and
with rational judgement for accepting the final logo design solution. Secondly, credibility-based logos will increase company Web Site effectiveness. This has important financial implications as even small increases in visitor action means more product purchases.

Chapter Five concludes with the implications of the current research findings to theory and practice. It also lists the limitations of the research and point to areas for further research.

5.1.3 Restatement of the research objective, research problem and research issues

The objective of this research is:

_To verify the credibility-based logo design theory and to determine if company specific logos can be designed based on this theory; then to determine if a specific company credibility-based logo design, compared to non credibility-based logo design, would increase the effectiveness of company Web Sites._

As a research problem, this is phrased:

_How and why is credibility-based logo design viable in theory, and in creative development? How and why are credibility-based company logos more effective on company Web Sites?_

The research issues presented here are in response to gaps discovered in the review of literature described in Chapter Two. There is initial research on logos and branding, ample research on Communication Models (SMCR Models), ample research on interpersonal credibility persuasion, initial research on credibility-based logo design, and initial research on Web credibility per se, without the credibility-based logo contribution. However, there is a gap in the research specifically about credibility-based logo design and company Web Site effectiveness.

The research issues identified through the literature review are as follows:

**RI - 1** Validate the credibility-based logo design theory.

**RI - 2** Validate the differences between credibility-based logos and logos which are not credibility-based.
RI - 3 Validate that the credibility-based logo design theory can be used to design logos effectively with actual cases as examples.

RI - 4 Validate that specific company credibility-based logo designs will be effective on the company Web Site to achieve company goals.

These research issues are based on the identification of gaps in the literature as described in Chapter Two and were used to guide the development of the research in Chapter Three and analysed in Chapter Four. This chapter will discuss the findings of Chapter Four and explore the conclusions and implications of the research.

5.2 Conclusions about the research issues

The final conclusion to the research is that there is reasonable evidence to support the claim that the company credibility-based logo design theory is valid. This is RI - 1. The difference between credible logos and non-credible logos is explained. This is RI - 2. Logos which are based on credibility traits can be designed. This is RI - 3. The research results are also likely to support the hypothesis that credibility-based logo design is an important contribution for increasing the effectiveness of company Web Sites. This is RI - 4.

5.2.1 Major contributions

There is presently a lack of understanding as to the planning and designing of logos based on credibility persuasion principles and applying credibility-based logos on the company Web Site to increase effectiveness. This research provides a better understanding of the foregoing and is summarised as follows:

1. The effectiveness of credibility-based logo design theory, including the differences between credibility-based logos and non credibility-based logos is explained. This research increases the understanding as to how and why credibility-based logo design expresses credibility traits, (i.e. ‘expertise’ and ‘trustworthy’ traits). This is a contribution to the need for planning and designing more effective company logos.

2. The effectiveness of credibility-based logo design theory is source-oriented, rather than receiver-oriented with reference to communication model theory. This research increases the understanding as to how and why credibility-based logo design will be more effective as message endorsers as perceived by receivers to induce action. This is
a contribution to the need for planning and designing logos, and possibly all marketing communication, to express source credibility.

Table 5.1 summarises the contribution of source credibility to credibility-based logo design theory and increasing Web Site effectiveness as a communication model.

**Table 5.1 Research Contribution of Source Credibility to Credibility-Based Logo Design and Increasing Web Site Effectiveness.**

<table>
<thead>
<tr>
<th>Source</th>
<th>Message</th>
<th>Channel</th>
<th>Receiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credibility-based log</td>
<td>On navigation bar</td>
<td>Web Site</td>
<td>Visitor accesses navigation bar for more information and possible conversion to buyer status.</td>
</tr>
</tbody>
</table>

Source: Developed for this report

1. The effectiveness of credibility-based logo design for increasing action on the company Web Site. This is a contribution to the need for contributing credibility in company Web Sites to increase effectiveness.

2. As a secondary contribution, this thesis adds to the effectiveness of conducting the quantitative research on the Internet, adding to a better understanding for using this resource for ‘live response’ research.

Table 5.2 outlines the research issues, status of the research issue in the literature and the contribution of this research to marketing knowledge.

**Table 5.2 Research Contribution Summary**

<table>
<thead>
<tr>
<th>Research Issue</th>
<th>Status of Research Issue in the Literature</th>
<th>Contribution of this Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>RI-1 What is credibility-based logo design?</td>
<td>No agreed definition</td>
<td>An addition</td>
</tr>
<tr>
<td>RI-2 Can credibility-based logos be created?</td>
<td>No agreed conclusion</td>
<td>An addition</td>
</tr>
<tr>
<td>RI-3 What are the differences between credibility-based logos, and non credibility-based logos?</td>
<td>No agreed definition</td>
<td>An addition</td>
</tr>
<tr>
<td>RI-4 Can credibility-based logo design increase the effectiveness of company Web Sites?</td>
<td>No agreed conclusion</td>
<td>An addition</td>
</tr>
</tbody>
</table>

Source: Developed for this project

The literature review relative to research gaps described in Chapter Two supports the research contributions as follows.
5.2.2 Communication models and source credibility

There are many studies cited in Chapter Two which conclude that source credibility is at the beginning of the communication process. Thus, source credibility influences messages through channels to reach important receivers to take action favourable to the source. Creativity then is source-oriented, not receiver-oriented. Creativity non-verbally communicates non-verbal source credibility traits planned specifically as ‘expert’ and ‘trustworthy’. This permits the conclusion from the research findings that company logo design begins with defining company credibility traits important to communicate in the company logo design.

5.2.3 Credibility-based logo design

The logo designer begins with defined company credibility traits of ‘expert’ and ‘trustworthy’. How this is accomplished is demonstrated in this thesis. It is an extension of the Saul Bass philosophy for successful logo design as mentioned earlier in this thesis. The Bass logo design philosophy was to symbolise the company business and personality for logo success. For example the AT&T logo is a ‘world wide communications’ symbol and the Continental Airlines logo is a ‘flight’ symbol. The research conducted for the MA thesis supported the Bass design philosophy. By symbolising the company business in the logo, the company is communicating its business expertise. By adding design motifs, such as a contemporary design for expressing ‘high tech’ and ‘efficient’, the Continental Airlines company logo is communicating its believability as an airline. It also supported the hypothesis that the company content of the symbol must always symbolise the company’s business in order to express the company’s expertise in that field. The research assumption was that the respondents would associate the company as being an expert in its business.

The creative development of the logo style or design motifs involves the non-verbal expression of trustworthy attributes required to support this expertise. Together the content of the symbol expressing expertise and the design motifs expressing the company’s ‘trustworthy’ character work to communicate a credibility-based logo design. Logos based on this premise were termed by the researcher as credibility-based logo design.
5.2.4 Credibility-based logo design contribution to the company Web Site.
The research conducted in this thesis supported the research issues that specific company credibility-based logos will be effective in increasing company goals on the company Web Site. This permits the following conclusions.

5.3 Conclusions about the research problem.
The hypothesis of this thesis is whether a credibility-based logo design would be effective in producing desired results when placed on a company’s Web Site. Several studies were cited in Chapter Two which established the hypothesis that logo design based on source credibility would be more effective, and that the credibility-based logo would increase the effectiveness of company Web Sites. The case study inductive stage research supported the hypothesis. The deductive stage statistical analysis had mixed results, which the researcher feels is due to the difficulties associated with a new testing method using the Internet and Web analytics than the theory. Lessons were learned doing Internet research as described in section 5.3.2. The conclusion is that case study provided reasonable research results and a contribution to marketing theory with additional research identified to be undertaken. This conclusion is based on:
1. the researcher’s experience;
2. the contribution to credibility-based logo design theory;
3. the application of credibility-based logo design to increase the effectiveness of company Web Sites;
4. the lessons learned using the Internet for research; and
5. the limitations identified for further research.

Further, there are no discrepancies in credibility principles and interpersonal communication when applied to business-to-people communication. Logo design creativity is source traits-oriented or defined, rather than receiver traits-oriented. The research outcome is consistent with what was predicted. The conclusion that credibility-based logo design can have an effect on Web Site effectiveness, suggests a broader conclusion that all marketing communication should be source credibility trait-oriented. Company advertising would reflect the character of the company, not the character of the audience. Advertising creativity is an extension of company values, including honesty. For example, the need for corrective advertising to ensure truthfulness in advertising may never had been, or ever will be, necessary as researched by Richard Semenik and Debra
Scammon (Semenik, 1980) and (Scammon and Semenik, 1982). Source credibility also has possible truth implications relative to discussions of government regulation of the Internet. Thus, source credibility carries important ethical issues for a company to embrace.

5.3.1 Contribution to theory

The case research findings may be considered a contribution to the literature review in Chapter Two. Credibility-based logo design theory builds upon the important work in the social sciences, logo design, brand personality and Web Site credibility.

The early work in communication theory and source credibility contributed to the underlying theory of credibility-based logo design. This is the communication model studies of Shannon and Weaver (1947), Osgood and Schramm (1955) and Berlo (1960). Further studies in source credibility include Hovland and Weiss (1951), Katz (1957), Katz and Lazarsfeld (1955), Berchied and Walster (1969), Rogers and Bhowmik (1970), Wheeless (1974a), and Rogers and Shoemaker (1971). Current theories of source credibility are offered by Sternthal and Craig (1982) and Helbig and Malewicz (1995). The possibility of credibility-based logo design began with these early studies and extended the social sciences theory of source credibility to the planning and design of company logos.

Further research into logo design per se provided the possibility that logos could be designed by rules or guidelines. Werkman (1974) (and others not reviewed) provided rules for ‘good’ design. Hutton (1997) increased this knowledge by adding to the understanding of company logos within a conceptual framework. Henderson and Cote (1998), Schechter (1993), and Janiszewski and Mayvis (2001) provided rules for better logo design. Non-verbal communication studies primarily by McCann (1955) provided the possibility that logos could be designed by understanding how graphic design communicates as non-verbal communication. The contribution of credibility-based logo design theory simplifies how logos should be planned to persuade as graphic design communication.

Several meanings of brand personality were offered such as ‘sole of the brand’, ‘core competency’, ‘goal of the brand’, ‘brand vision’, ‘basic brand values’, ‘character meaning’, and ‘key elements of brand personality’. Metaphors were used to describe the brand personality meaning within these terms, although the metaphors were not source credibility-based and the definition of brand personality was not clear. Erdem and Swait (2004) offered ‘credibility’ as a brand personality meaning but did not describe how credibility was translated creatively into non-verbal communication forms such as graphic design. The contribution of credibility-based logo design theory adds to the definition of brand personality and reduces the terms used to ‘company credibility’. Company credibility then is a more understandable term which designers and company managers can use to plan, create and implement company logos.

Finally, Web Site credibility studies primarily by Fogg (2003) offered the possibility that a credibility-based logo could increase the effectiveness of company Web Sites. Logos which were credibility-based proved to be effective for inducing Web Site action. New methods for logo testing and using the Internet and Web analytics for research were possible. The extension of credibility-based logo design theory was possible to include creating all marketing communication for more effective action. This possibility is discussed in Chapter Six.

5.3.2 From theory to practice
The case research methodology used for credibility-based logo design theory building using interviews, actual logo design and testing has several practical applications. One contribution is the application of a mixed-methodology used by Leonard Barton (1988) to study technical innovations for practical use in marketing by verifying theory through conducting experiments. Another contribution is a more effective method for logo designers and company managers to plan collaboratively to create credible company logos. The process used for logo testing on the Internet to verify how credibility-based logo design can increase the effectiveness of company Web Sites is another contribution. There are two keys which are important in credibility-based logo design testing and increasing Web Site effectiveness. One is how to use the Internet and Web analytics to obtain the data. The other is having a basis for judgement as to why credibility-based logos are an effective means for achieving increased data significance. In other words, having data is one thing, knowing why the data produces the results is another.
Logo design creativity

The credibility-based process learned for logo creativity has important implications for logo designers and company managers for planning and development. The process begins with a credibility specific questionnaire. The questionnaire goes to the heart of the company's credibility traits. By content analysis, the questionnaire produces the credibility traits the company feels are important to impart to achieve a specific credibility-based brand image. The questionnaire analysis produces the strategy for a Logo Planning Report. This report is agreed to by the company manager before design commences. This gives the designer and the company manager an agreed credibility-based logo design direction to explore in focused preliminary design effort. The Logo Planning Report is also the frame of reference for judging promising final alternatives, and, ultimately the final design.

This credibility-based process saves what would otherwise be wasted effort searching for that great logo idea, which may or may not have persuasion value. Too many clients ask for a logo without knowing what they want, leaving the logo designer to figure it out. The logo designer then spends hours on designs which often do not meet what the client couldn't express in the first place. Whether a company is large or small, this often results in financial disaster considering the costs to implement the logo to signage, vehicles, printed materials, and advertising – again all touch points. Often a logo that brings negative results must be changed at additional cost. The John Hancock Insurance company logo change about thirty years ago is a good example. A well known New York graphic design firm modernised the historical John Hancock signature. After spending millions to implement the new logo, the company went back to the old script which better communicated the company's solid reputation anyway. Recently XEROX changed it's logo to a large red X which not only negated (as a symbol of negativity) any company credibility, but communicated the common ‘x’ for mistake, or to be crossed out. This was also multimillion dollar mistake because of poor logo communication planning.

The logo design process can be reduced to an Internet-based business, taking advantage of this medium for transmitting planning questionnaires, Logo Planning Reports, design direction to outsourced offshore talented designers, and developing credibility-based logos from anywhere a computer or laptop can be plugged in and messages received. The economics of designing a logo for a business based on credibility-based logo design using
the Internet is welcomed by small business and is profitable for a logo design firm. Time is money. Credibility-based logo design is specific. The process of logo design and selection is more efficient. Along with little to no travel, design efficiency is a great by product of credibility-based logo design theory.

Credibility-based logo design is an honest representation of the company, and what the company stands for. The association with this image is important for employees representing the company face-to-face, or on a letterhead and business card.

**Logo design testing**
The process learned for testing logos on the Internet is of particular interest. The cost to test logos was relatively low in comparison to traditional questionnaire intercepts or focus groups. The number of respondents reached is very fast using search engine marketing such as Google Ad Words. Each company reached 1200 visitor/respondents in five to six days. The cost per visitor/respondent was low as well. For example our six company test of four logos per company cost about US$900 for each company, including Google AdWords, Web hosting, Web analytics and research assistants. This was about US$0.75 (75 cents) per respondent. This is an inexpensive logo testing service for non-profits, social entrepreneurs, and others involved in a positive change in health sustainability, peace and security.

Logo testing must be a visual test, which eliminates phone interviews. The Internet is made for this type of testing. The test is a ‘real world’ experience. It can be used to test the credibility power in a new logo prior to the client presentation. Currently a designer’s reputation for logo design is the basis for logo acceptance by company managers. The logo testing process can also determine the power of tired old logos, and whether a change or modification of the logo is necessary. As mentioned above, knowing why credibility-based logos score high and non-credibility-based logos score low is necessary for interpretation.
Web Site effectiveness

Logo testing on the Internet is also a web analytics marketing service not currently being offered. Web analytics companies offer a wealth of information ranging from how many visitors come to the Web Site daily to where they came from. This information helps marketing departments modify Web Site quickly. It is said that the Dell Web Site is monitored and changed daily resulting in millions in sales with just a few Web Site tweaks.

Logo testing is also an important adjunct service to digital marketing companies who are primarily interested in visitor conversion methods. This is converting visitors to a sale once the visitor accesses the navigation bar. Navigation bars are arranged by what the company wants to achieve with its Web Site, such as product or service sales, careers with the company, latest press announcements about a new product – whatever the company feels is important. Before conversion takes place, however, the visitor must first have trust in the Web Site, which a credibility-based logo can accomplish. As the research results show, credibility-based logo design increases navigation bar action. This action is the first step in visitor conversion.

These are a few immediate applications of the credibility-based theory to practical and needed applications for logo designers, Web Site designers, company managers, marketing managers, web analytics services, digital marketing firms, and Web masters.

5.4 Limitations

As stated in Chapter One, this thesis is multi-faceted, exploring new theories for possible explanations for better creative practices based on the social sciences and long held misunderstandings about what creativity is supposed to do and how creative talent is supposed to create for communication persuasion effectiveness. There are several opportunities for further research.

1. In Chapter One the researcher stated that the major limitation was the assumption that the credibility-based logo actually communicated the intended traits to Web Site visitors. The follow up sentence referred to the researcher's long time experience and attention to graphic design elements as non-verbal communication. The most important limitation is how creativity is communicated non-verbally. This is defining a credibility trait verbally and creating its equivalent visually in a design form. For example, if ‘old fashioned’ is a desirable credibility trait, what design motifs
communicate ‘old fashioned’. If ‘experienced’ is a desirable credibility trait, what
design motifs really communicate the desired attribute of ‘experienced’? Do
‘contemporary’ design motifs really communicate desired attributes of ‘cutting-edge’
or ‘high technology’? Do circles, squares and oblongs, as stable shapes, really
communicate desired attributes of ‘stable’ and ‘experienced’? Extensive experience
with design motifs helps, but to apply credibility-based logo design as a marketing tool
for all practitioners, there is a need for further research developing a DNA bank of
credibility attributes and design equivalents. The researcher acknowledges that some
of this could have been done within this thesis. But the main purpose of this thesis was
to explore credibility-based logo design per se.

2. The second limitation mentioned in Chapter One is that the researcher used a plain
Web Site for test purposes, giving the test logos prominence as a visual stimulant to
induce navigation bar action. Logos on the index page were purposely the prime
stimulus. There may be limitations whether the test Web Site had only the logo as a
change agent stimulus. That is, were there additional stimuli that might have
contributed to visitor (respondent) clickthroughs to the navigation bar. The researcher
learned that the length of text contributed a difference to navigation bar action. Also,
the complete separation in credibility traits between the credible logo and the non-
credible logos made a difference.

3. The third limitation mentioned in Chapter One was that the researcher did not know
the Web Site visitors as they were self-selected to the test Web Sites. There was no
traditional sampling of respondents. A larger sample was taken to mitigate a sample
bias. However, this was ‘real world’ research that is assumed not to be sample biased.
But the possibility exists. The researcher acknowledges that this might also be a plus,
not a limitation.

4. The fourth limitation mentioned in Chapter One was that the researcher did not factor
into credibility-based logo design theory or Web Site effectiveness what may be
termed ‘false positives’. Success in communication persuasion is a function of several
factors such as consistency, clear communication and most importantly repetition, any
one of which could produce positive results in spite of a lack of credibility. For
example, the famous Nike logo is not credibility-based in design per se. However, the
Nike Company has successfully established its logo through consistent repetition over
many years. During this time the logo has actually assumed experienced credibility
associations. Therefore, there is a ‘false positive’ that the logo is therefore successful.
The research in this thesis is a pure test of credibility-based logo design with presumed unknown companies, without previous 'false positives' which could skew the effectiveness of the logo in the real world.

5. A fifth limitation learned from doing the research is that further testing could be done as future research. This is described as ‘data mining’ in Web analytics terminology. The Internet is uniquely suited to test what is placed on it. For example, Internet advertising can be tested using the same methods applied for the research work in this thesis. This would give advertisers data not only to improve their advertising before publishing on a Web Site, but to measure the pure effectiveness of the advertisement with or without other visual stimuli. There are reports as well that the advertising sales companies hire people to click the Internet advertisement for information thereby showing the advertisement’s effectiveness. Supervised Internet logo testing modified for Internet advertising in a controlled test would produce accurate clickthrough data for advertisers. Further research opportunities are discussed more fully in Chapter Six.

5.5 Conclusion

The chapter started with a summary of the research findings leading to the conclusion and implications. The research question and research problem that was identified in Chapter Two was linked to the findings in Chapter Four. A reinstatement of the research objectives, problems, and issues followed with the conclusions. The contribution to the research is that credibility-based logo design theory is viable, and that the application of credibility-based logo design to increase the effectiveness of company Web Site is possible, with implications for further research using the Internet for research. The contribution to credibility based logo design theory is supported.

The practical applications of the theory were offered: increasing the efficiency of logo design; conduction of logo testing on the Internet; and using the Internet for increasing knowledge for continued effectiveness. Using case study methodology, this research has found that a company’s credibility-based logo design does have a positive effect toward increasing the company Web Site effectiveness in better achieving company goals. Even a few additional clickthroughs could mean more visitor action and possible income.

The research methodology used in this research can be a new tool for logo research in a real setting on the Internet as a ‘live test’. Logo designers might use the results of this
research to justify their final design before costly implementation, and company managers may demand it. There is no inexpensive method currently in use for testing logos, or testing logos on-line, nor better assurance that implementation dollars will be well invested.

Chapter Six extends the creative concept that credibility-based logo design is source-oriented, not receiver-oriented. The theory that creativity in all marketing communication is also source-oriented with source credibility traits is presented as an epilogue.
The Earth revolves around the Sun.
The speed of light is constant.
Apples fall to Earth because of gravity.

Source-credibility principles are linked to company logos.
Credibility-based logos are linked to Web Site effectiveness.
Credibility-based logo design theory is linked to creativity of all marketing communication
Credibility-based marketing communication is linked to branding effectiveness and brand equity
6.1 Introduction

This final chapter is a discussion relative to extending the research findings in credibility-based logo design to the creativity of all areas of marketing communication. The model for this chapter is as follows.

Figure 6.1 Chapter Outline

Historically, it is said that the idea of an epilogue started as a speech addressed to the audience by an actor at the end of a play. In this spirit, this chapter is an epilogue of the
researcher’s reflections about the credibility-based logo design theory research findings and how these findings might be extended.

The following reflections summarised here are based on the researcher’s many years’ work in the field of logo design and branding. This also includes teaching advertising and integrated brand promotion at university level. These reflections also stem from the research issues discussed in Chapter Two, which lacked the researcher’s ideas and opinions while focusing only on the theoretical foundation for source credibility principles applied to logo design and Web Site research in this thesis. Having presented conclusions and implications of the research in Chapter Five, this chapter extends the research findings about source credibility and credibility-based logo design as an epilogue.

As such, this epilogue continues the source credibility philosophy for creating company logos to include the planning and creative development of all company marketing communication. The premise is that source credibility traits expressed in the company logo can be the creative basis for company marketing communications. It is important to maintain the company’s credibility image throughout all marketing communication to form a unified branding system. Managed carefully with creative consistency and integrated marketing coordination, management will achieve the company's desired brand credibility image as a long term image building investment. This leads to a new term which the researcher calls Brand Credibility. The measurement of a company's achieved amount of Brand Credibility is an asset as brand equity.

This epilogue, then, sets the stage for critical thought about the relationships of credibility-based logo design to a consistent marketing communication to establish Brand Credibility as brand equity.

It is important to note that further research is required to support the researcher’s comments in this epilogue which are not covered in research findings in this thesis. It is hoped these comments will stimulate further interest.
6.2 Creating all company marketing communication based on source credibility principles.

The conclusion about credibility-based logo design philosophy extending to the creativity of company marketing communications poses important speculations:

1. Is it possible to extend the source credibility concept to creating all marketing communication such as advertising, Web Site design, product packaging, promotional materials and informational press releases? The key to this is that creating all marketing communication is source-oriented, not receiver oriented. Thus the same credibility traits planned and created in the company logo will be the same in creating all marketing communication.

2. If all marketing communication is credibility-based, is it possible that all marketing communication could be strung together as a total system of credibility communication coordinated and integrated with communication consistency to establish a planned credibility-based brand image?

3. Is the achieved credibility-based brand image an important measure of brand equity?

4. Is it possible for management to use the Internet for planning source credibility-based decisions in addition to logo design and Web Site effectiveness such as brand extensions, Internet advertising, direct mail, packaging design and other uses?

Based on the conclusions in this thesis, the extension of a credibility-based creative theory and management to the above question is possible and would make several interesting research projects. There are two keys: source credibility/source-oriented creativity, and management consistency/coordination.

6.3 Marketing communication creativity has source credibility traits which is source-oriented, not receiver-oriented.

The possibility that marketing communication is company-oriented refers to the planning and creative development of credibility-based logo design in the theory building stage described in Chapter Four. If the credibility-based company logo is placed on the communication model in the source column, then the company in marketing communication is placed there as well.

Table 6.1 demonstrates that communication persuasion begins with the source and ends with the receiver. This model extends the model in Table 5.1 in Chapter Five which
introduced the research conclusion that credibility-based logo design *endorses* company messages that the company feels are important to achieve its financial objectives on the company Web Site.

**Table 6.1 Marketing communication is source-oriented and credibility-based**

<table>
<thead>
<tr>
<th>Source</th>
<th>Message</th>
<th>Channel</th>
<th>Receiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credibility-based logo design</td>
<td>Relative to achieving company goals</td>
<td>All marketing communication</td>
<td>Purchase decision</td>
</tr>
<tr>
<td>Credibility-based marketing communication</td>
<td>Relative to achieving company goals</td>
<td>All marketing communication</td>
<td>Purchase decision</td>
</tr>
</tbody>
</table>

Source: Developed for this report

The second possibility from the research conclusion is that all marketing communications, like company logos, must be defined and planned to express company credibility traits. The credibility-based logo as defined provides the source credibility traits for all company marketing communication. The company as the source of marketing communication becomes the credible endorser of the message which reaches the receiver through selected media channels. Table 6.2 represents this proposed possibility.

**Table 6.2 Marketing communication express company credibility traits**

<table>
<thead>
<tr>
<th>Source</th>
<th>Message</th>
<th>Channel</th>
<th>Receiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credibility-based logo traits become creative basis for all marketing communication</td>
<td>Relative to achieving company goals and reason to take action</td>
<td>Media selected to reach target customer</td>
<td>Action taken</td>
</tr>
</tbody>
</table>

Source: Developed for this report

The creative direction for credibility-based marketing communication then falls on the ‘source’ end of the model as demonstrated. This also affects message style and image of the media selected. Table 6.3 represents this possibility.
Table 6.3 Credibility-based marketing communication in creating all marketing communication

<table>
<thead>
<tr>
<th>Source</th>
<th>Message</th>
<th>Channel</th>
<th>Receiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity to communicate company credibility traits in all marketing communication.</td>
<td>Style of message presentation</td>
<td>Image of medium</td>
<td>Action taken more predictable.</td>
</tr>
<tr>
<td>Company credibility traits important.</td>
<td>Company credibility image traits important</td>
<td>Company credibility image traits important</td>
<td>Receiver demographics not important</td>
</tr>
</tbody>
</table>

Source: Developed for this report

There are important implications for a source-oriented approach to planning and creating marketing communication.

6.3.1 Advertising projects company credibility traits, not presumed receiver traits

A common practice in advertising creativity is to use layout, pitch people, music, humour and a variety of other receiver-oriented strategies to reach the audience in order to establish common ground. Receiver-oriented advertising is the most common form partly because it is the most logical and partly because it is probably less expensive. Extreme examples include most car dealer advertising, most late night product pitch advertising, and most local advertising. Other examples can be seen nearly every day on television, in the newspaper, or heard on radio.

Credibility-based advertising creativity starts with the planned company credibility image, not the presumed demographics of the advertising audience. This creative viewpoint considers the way the company is to be perceived when communicating its message, not who is receiving or perceiving the company message. Take the car dealer again as an example. The dealer wishes to establish a credibility image of ‘honest’, ‘knowledgeable about cars’ and ‘a good community neighbour’ to do business with. This dictates the creative approach and sets the mood and tone for the dealer's message. If, however, source credibility traits and receiver traits are similar for a car dealer and a customer, say for a Lamborghini sports car, then appropriate traits for both car dealer and the customer might be the same. This is an example of homophilous trait communication which often occurs in a persuasion dyad. The proposition here, however, is that source credibility is never
compromised in marketing communication in order to achieve homophily with the receiver.

The possible benefit for all advertising creativity will be the appropriate use of spokes-characters and celebrity endorsers, message tone, layout style, and other image elements to communicate desired company credibility traits. This is the source-oriented approach, in contrast to personal styles and receiver-oriented practices. The same would be true in creating all marketing communications. Source-oriented advertising might also cure the ‘rubber stamping’ of the creative person’s talent on everything the person creates without regard for whether the non-verbal surface cues were appropriate for the advertisement or logo design. Art directors, like painters, have a particular style which they like to use. An extension of this problem is to apply technical knowledge learned in school about typefaces and desktop publishing which are the tools of the trade, most often not based on communication persuasion and creativity. Art director talent style and learned tools of the trade are often in conflict with the appropriate creativity to express company credibility traits.

To summarise, all marketing communication creativity must express company credibility traits, not receiver traits. This is a possible new addition to creative theory in advertising and other marketing communication, and this means that the creative approach among creatives is to relate to the customer or to achieve common ground.

6.4 Credibility-based marketing communication and Integrated Brand Promotion

The second part of this epilogue is that company-oriented creativity applied to all marketing communication requires that all the elements of marketing communication work together as a coordinated system with consistency to achieve a credibility-based company brand image. Credibility-based marketing communication coordination as a system means that a synergistic effect takes place resulting in a greater impact. This is one of the goals of branding.

A few years ago, branding with all marketing communication was termed, Integrated Marketing Communication, or IMC (Hutton, 1997). As late as 2001 it was referred to as Integrated Multiple Channel Brand Experiences. From the researcher’s class instruction text book in 2002
(O’Guinn, Allen, Seminik 2003), the popular term was Integrated Brand Promotion. The authors added this term because it recognised the importance of branding promotion in marketing. Integrated Brand Promotion was defined by O’Guinn, Allen, Seminik (2003 p.733) as ‘the process of using promotional tools in a unified way so that a synergistic communication effect is created’. The researcher would add that the promotional tools used be created so that they are credibility-based for a given company with a similar company ‘personality’ or ‘look’ expressing these traits non-verbally.

6.4.1 Credibility-based marketing communication and consistency

Credibility-based marketing communication consistency as a system means that the company personality is expressed with consistency with and between all marketing communication. Helbig and Milewicz (1995) stated that a company’s reputation developed with consistency over a period of time. Helbig and Milewicz (1997) further stated that a company’s reputation developed when a company activity was performed repeatedly in a similar fashion. The implication for this epilogue is that credibility-based marketing communications cannot be ambiguous or broken with inconsistencies. This is basic psychology relative to memory retention.

Finally, the management of marketing communication as Integrated Brand Promotion and for consistency is recognised as good management and becomes an image virtue in and of itself. The management of the IBM logo, advertising and other marketing communications by Thomas Watson Jr. is a classic example.

6.4.2 Possible new meanings to current marketing practices

There are several current practices in marketing which credibility-based logo design theory could affect, namely:

1. How brands are managed and measured. The researcher proposes that all marketing communication stewardship is source credibility planned and created. Credibility-based marketing communication is implemented to be consistent and coordinated as an integrated brand promotion system. The achieved amount of credibility is the measurement for branding success.

2. How brand equity is calculated. The researcher proposes that brand equity be calculated by how much credibility a company brand has achieved, as proposed above. Note: this is similar to assessing how much ‘goodwill’ a company has achieved.
3. How advertising is created. The researcher proposes that advertising be created to project the planned company credibility image as defined in the company credibility-based logo design. This gives ‘creatives’ a specific direction for their work and gives company managers a basis for judging creativity. This brings the ‘poets’ and the ‘killers’ together with the same creative strategy.

4. How advertising elements such as spokescharacters, slogans, jingles and other non-verbal cues within the advertisement are utilised. The researcher proposes that all elements work together in an advertisement to support the credibility-based company image. All elements are source-oriented, not receiver-oriented.

5. How marketing media is defined. The researcher proposes that all touch points be considered in addition to traditional electronic and print media. As non-verbal and verbal communication can be planned and implemented to achieve company brand credibility, all areas of public contact must be considered as credibility-based marketing communication. This includes how the company operates providing substance to the brand image.

6. How the brand image is defined. The researcher proposes that the brand image is always defined by company managers, not in terms of the customer's definition of the company. The brand character is source-oriented, not receiver-oriented. Nor should it be receiver-defined in terms of what the brand should stand for, as previous experience is a bias. On the other hand, customer perception of the brand image as feedback is important to measure, in order for company managers to make marketing communication adjustments or assessing brand image achievement.

7. How 'false positives' may be eliminated. The researcher defines ‘false positives’ as when an ill-conceived marketing practice in one area is related or unrelated to a positive result in another area. For example, the well-conceived practice of frequency of message repetition may cause sales results from an ill-conceived advertisement. The practice of repetition is working, not the advertisement as might be falsely given credit. Also, too much frequency may cause irritation, bringing bad associations to a well conceived advertisement. Many ill-conceived logos are well recognised because of exposure repetition.

6.5 Managerial relevance

This thesis has attempted to make a contribution to a better understanding of what is meant by credibility-based logo design; and, as an epilogue, how important credibility traits can be
communicated not only in the company logo, but communicated in all marketing communications working as a consistent, coordinated system. The implications for better marketing communication management are as follows:

1. Marketing communication planning and creative development are more efficient as defined credibility traits give management a decision basis for creating marketing communications.

2. Marketing communication dollars work more effectively to better reach and resonate with all company stakeholders.

3. Management decision time is reduced, leaving more time for core competencies to manage its products or services.

4. Better brand image is achieved resulting in a better consumer response to company products, new product extensions, and company stock implications among other important company goals.

5. Long range branding decisions are established as company policy to achieve company credibility.

6. Brand measurement is based on the amount of company credibility achieved.

7. Achieved company credibility leads to Brand Credibility which is a brand equity asset.

6.6 Implications for further research.

In addition to the researcher’s suggestions for further research outlined in Chapter 5, the following suggestions are made for further research based on the extension of credibility-based logo design made in this chapter.

1. Use Web analytics ‘paths’ data to obtain a more in-depth understanding about credible and non-credible logo influence and the overall design of Web Sites. For example, further research could vary the clickthrough pages to making navigation difficult, or deliberately produce non-credible page designs. The data obtained might demonstrate how strong the credible logo can be in breaking through these secondary non-credible experiences to a final sale. Research could also test the opposite where navigation and credible page designs all work together with the credible logo. Country of origin and search engine user profiles could also be factored into the data. It has also been suggested to give a visitor a short questionnaire on one of the path clickthroughs with questions about the credible versus non-credible logo testing. A final area for further research could be Internet advertising testing using the same methodology.

   Advertising can be tested by itself, using various layouts and copy themes. And the
advertising can be tested with credible and non-credible logos. These are a few uses of the methodology for further testing.

2. Address high priority areas of interest in current marketing issues with source credibility theory. In the United States, The Marketing Science Institute’s (MSI) Special Report on Brands and Branding: Research Findings and Future Priorities has also identified future research areas in their 2005-2006 report. The researcher believes that source credibility principles presented in this thesis are relevant to the MSI’s identified future research areas. These are listed below, together with the researcher’s own comments in italics:

a) MSI (2005, p.11): ‘Is brand personality more strategic or more tactical in terms of 'look and feel' of execution important?’ Researcher: Is Brand Credibility more strategic or more tactical in terms of 'look and feel' of execution important?

b) MSI (2005, p.11): ‘What is the value of the different brand personality dimensions? Are there others? Does the value vary by product category or by other factors?’ Researcher: What is the value of the different credibility-based brand personality dimensions?

c) MSI (2005, p.11): ‘How stable are these various branding personality dimensions, and what causes them to evolve or change?’ Researcher: How stable are these various credibility-based brand personality dimensions, and what causes them to evolve or change?

d) MSI (2005, p.12): ‘To what extent are brand-related experiences under the company's control? How can they be effectively controlled?’ Researcher: To what extent are credibility-based brand-related experiences under the company's control? How can they be effectively controlled?

e) MSI (2005, p.13): ‘How much corporate images are created by words versus actions?’ Researcher: How much credibility-based corporate images are created by words versus actions? How many credibility-based corporate images are created by non-verbal communication versus actions?


g) MSI (2005, p.14): ‘What are the brand-building contributions of brand logos and other non-verbal elements?’ Researcher: What are the brand-building contributions of credibility-based brand logos and other non-verbal elements?
h) MSI (2005, p.14): ‘Under what circumstances does marketing integration work better when it is based on consistency (sharing common meaning) versus when it is based on complementary (reinforcing different brand meaning)?’ Researcher: Under what circumstances does marketing integration work better when it is based on consistency versus complementary to clearly establish credibility-based branding as a management function to establish Brand Credibility.

i) MSI (2005, p.15): ‘How do customer contact points (personal and automated) influence brand equity?’ Researcher: How do all credibility-based customer contact points, verbal and non-verbal, help establish credibility-based branding to influence the Brand Credibility image?

j) MSI (2005, p.21): ‘For new-to-the-world products, what should be the relative emphasis on establishing and growing the category versus building the brand? How should a brand be built and managed as a growth platform? Which kind of brand associations facilitate versus inhibit the introduction of line and brand extensions?’ Researcher: What credibility-based brands and brand associations give expertise and believability extensions to similar product lines with similar expertise and believability attributes? Do companies brand extend because of these credibility associations? Should companies not brand unless there is a no credibility association?

6.7 Summary

It is speculated that credibility-based logo design theory can be extended to planning and creating the company’s entire marketing communication system. This is source-oriented credibility-based marketing communication. For the marketing communication efforts to succeed, management must be highly involved in the coordination and consistency of marketing communications to project a single verbal and non-verbal brand image, together with company substance in its products or services. This is because the company brand is defined as everything the company is and does as perceived by stakeholders.

All must work together as a planned and consistent credibility-based branding system to build the company brand image which the researcher has termed Brand Credibility. Company Brand Credibility may be a new measure for the company's brand equity measurement. The more Brand Credibility, the more effective are the company's various messages to the important audiences or stakeholders it wishes to influence. High Brand
Credibility is therefore an important company asset, and may be a new measure of brand equity.

6.8 Conclusion

This chapter concludes the thesis. The researcher has proposed in this epilogue extending the principles of source credibility and successful research findings applying source credibility to credibility-based logo design. This is extending credibility principles to creating all marketing communication. The speculation is that if the credibility-based logo is effective on the company Web Site, this permits the possibility that all company marketing communication might be created with the same planned source-oriented company credibility traits. Then credibility-based marketing communication working as a system achieves Brand Credibility a possible new measure of brand equity. Other areas were identified for further extension of the research findings, including what the US Marketing Science Institutes identifies as their top priority list which is primarily brand equity related. These and the research limitations are some of the extensions to explore in further research from the research conclusion in this thesis.

Finally, this thesis began with a statement that the purpose of this thesis was to increase the knowledge of the creative development of the company logo as an effective marketing tool per se and increasing the effectiveness of company Web Sites. Credibility-based logo design theory was supported by the research in this thesis. The purpose of the thesis has been achieved. Again, this has led to the possible extension of credibility-based logo design theory to credibility-based marketing communication theory to establish Brand Credibility as a possible new measure for brand equity. This could be a contribution for management to better achieve company goals. It is hoped that from these beginnings new theories will be explored as suggested in this epilogue.
The Earth revolves around the sun.
The speed of light is constant.
Apples fall to Earth because of gravity.
Source-credibility principles are linked to company logos.
Credibility-based logos are linked to Web Site Effectiveness.
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Appendix

Credibility Based Logo Design


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Appendix Credibility Based Logo Design


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## B. EXAMPLES OF CREDIBILITY-BASED LOGOS

<table>
<thead>
<tr>
<th>Figure removed due to copyright restrictions</th>
<th>Buyers Broker of Florida, Powerlogos Design/Keith Rollman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comment: Buyers Broker is unique in that it represents the buyer, not the seller. The logo symbolises this area of expertise. The design motif is contemporary which projects the look of highly reliable and efficient. We can believe that this company is credible.</td>
<td></td>
</tr>
<tr>
<td>Figure removed due to copyright restrictions</td>
<td>CIDE/UCLA, Powerlogos Design/Cygnus Advertising</td>
</tr>
<tr>
<td>Comment: CIDE is part of the Graduate School of Education at UCLA. Its mission is to promote international development for political and economic purposes through the dissemination of educational information world-wide. The book symbolises its area of expertise as a repository of information for networking. It looks like a large organisation which is cutting-edge, learned, stable and highly trusted. This design character projects a feeling of trustworthy or believability about this renowned education repository resource.</td>
<td></td>
</tr>
<tr>
<td>Figure removed due to copyright restrictions</td>
<td>Access Referral Network. Powerlogos Design/Cygnus Advertising</td>
</tr>
<tr>
<td>Comment: This company is a one-stop Web Site to locate professionals and needed information about them. Providing information through a single Web Site portal is this company's field of expertise. This is the main symbolism. The company is also highly professional, cutting-edge, competent, efficient and provides quality information. The contemporary yet stable design motif expresses non-verbally these trustworthy traits. The logo is very strong with high impact.</td>
<td></td>
</tr>
</tbody>
</table>
Catalina, Powerlogos Design/Cygnus Advertising
Comment: Catalina Island is just thirty miles off the coast of Los Angeles. The focal point of Catalina since the 20s has been the great Casino in Avalon. It is to Catalina what the Eiffel Tower is to Paris. It is only fitting that Catalina Island Vacation Rentals and its sister company, Catalina Island Real Estate, feature the Casino. It says ‘Catalina’. It is says ‘we know Catalina’. This is the company's expertise. The design style is contemporary which communicates that the company has the latest technology to serve its customers. High personal service is also a key trustworthy trait.

Earth Tec, Powerlogos Design/Cygnus Advertising
Comment: This company provides offshore web hosting and services from Panama. This is its area of expertise. It employs leading edge technology to give reliability, secure, speedy and comprehensive services. The contemporary design tells us this and gives us trust in the company.

Earth Keeper, Powerlogos Design/Cygnus Advertising
Comment: Earthkeeper Foundation is a humanitarian money fund based in Panama. The symbolism communicates that the fund helps people which is its area of expertise. It also communicates that the company is highly competent, people-oriented and stable, which gives it trust in what it does. We can believe in the company. A contemporary shape tells us that the company is forward thinking in its use of funds.
| Figure removed due to copyright restrictions | (Marquee, Powerlogos Design/Cygnus Advertising) Comment: Marquee Printing is a quality based printing company with very low prices for small business. Business printing is its area of expertise. The form is contemporary so we know that this company uses the latest printing technology to give us quality printing at low prices. We feel that the company is trustworthy and forward thinking. A great place for ‘value’ in printing products. |
| Figure removed due to copyright restrictions | (Prince&Phelps, Powerlogos Design/Cygnus Advertising) Comment: This company consults with business in employee issues such as drug abuse and workplace violence. It 'helps' people at work, hence the subtle communication of the word ‘helps’. This is its area of expertise. The use of typography is perfect for this company, giving it the dignity of the organisation. We get a feeling of trust and forward thinking from the contemporary character. |
| Figure removed due to copyright restrictions | (Vacuum Lady & Co, Powerlogos Design/Cygnus Advertising) Comment: Vacuum Lady & Co is a small shop, which sells high quality vacuums and cleaning products. This is its area of expertise. The company has grown on the basis of its high attention to personal service, care, clean/fresh store, honesty/trust and long relationships. These attributes are included in the symbolism to round out a feeling of trust. The contemporary shape tells us the company has the latest products available, and is forward thinking in this regard. |
C. EXAMPLES OF NON CREDIBILITY-BASED LOGOS

Comment: This company is worldwide, but neither the name nor other symbologies express the company business, therefore lacking expertise. It is also a dated form looking ‘slow’ and ‘sluggish’ two trustworthy attributes which are probably not intended. It is also not contemporary.

Comment: This is a good company name with appropriate symbology expressing the company business and therefore giving the company expertise. It is also ‘likable’ but lacks other dimensions of being trustworthy for a moving company such as ‘highly efficient’, ‘latest packing techniques’, or ‘on time’. These attributes could have been expressed just by making the whole design contemporary.
D. DISCUSSION OF NON-VERBAL COMMUNICATION

Non-verbal communication.

The relationship of non-verbal communication to source credibility is vital. Most of our impressions are non-verbal. Graphic design is a form of non-verbal communication and is a very important part of credibility-based logo design.

In the researcher's book, *The Power of Logos: How to Create Effective Company Logos*, (Haig and Harper, 1997, p.9) the researcher states that 'only about 35 percent of our daily communication experiences are verbal. A whopping 65 percent are non-verbal. How something is said is as important as what is said. Non-verbal communication serves to reinforce, repeat, substitute, compliment, accent, and regulate verbal communication. Unfortunately, in marketing communication creativity, it often contradicts verbal messages. We are all conscious of body language (gesturing, nodding, smiling), the octagonal shape and red colour of a stop sign, and even internationally recognised symbols for restrooms and airport money-exchange centres. Such examples are a reminder that we continually interpret non-verbal cues to help us understand the world in which we live. The same is true of the company logo. It can be the corporate world's most outspoken non-verbal cue. Notice how often the company logo becomes a part of our non-verbal communication. Think of Coca-Cola, CBS, AT&T, Red Cross and Nike.'

Archer and Akert (1974) stated that one of the main concerns of recent research (before 1974) in non-verbal communication has been to understand the interaction between the verbal and non-verbal components of communication. These two levels occur simultaneously in most natural situations. A number of researchers have addressed the question of how much each level contributes to the overall interpretation of behaviour. For example, Mehrabian (1967) studied ‘inconsistent messages’, i.e. words that intentionally contain one affect in the verbal channel, and a contradictory emotion in non-verbal vocal paralanguage such as tone, pitch and the like.

A real example of such an inconsistent message is sarcasm. Based on studies of perception of such inconsistent emotions, Mehrabian (1972) concluded that only 7 percent of the total impact of an emotion is attributed to the verbal channel itself, while 38 percent is attributed to the facial channel, at least in perception of emotions. Therefore these results indicate that non-verbal channels carry thirteen times the impact of the verbal channel.

Further examination of non-verbal communication has revealed the limitations inherent in single-channel decoding studies that focus on isolated non-verbal cues. For example, Hastorf (1970, page 9) concluded:

> Such cues do not exist is isolation. If content of the conversation can influence the meaning of an eye glance, then context can influence the meaning of the shrug or of a shoulder. The central issue must change from an expansion of the list of cues to a concern with the inference process by which those cues are added together to arrive at a perception. There must be factors that lead to the emphasizing of one cue or the discounting of another. The next important step, we think, will be more direct explanation of the processes by which cues are combined to from the total impression.
The research study presented in Hastorf’s paper introduced a new technique for studying the process of interpretation. This instrument presented brief sequences of imposed behaviour in several simultaneous non-verbal channels as well as in the verbal channel. Decoders were asked to reach an interpretation about each sequence, and the accuracy of their interpretations could be established unambiguously.

In Hastorf’s study, accuracy was compared in two conditions:

1. A purely verbal version of this instrument; and
2. The full channel, verbal-plus-non-verbal, version.

The author presented the Social Interpretations Task (SIT), which was a sophisticated technique developed over a three year period for use in studying his process of interpretation.

In conclusion, Hastorf stated that words alone were not sufficient for accurate interpretations. Social interpretation in a wide variety of naturalistic situations is much more accurate when one has available both non-verbal and verbal cues, than when one has only a verbal record of interaction. ‘Full channel’ information has an apparent advantage over purely verbal information, whether the interpretations are about single individuals or are about several people and their relationships and experiences.

Since the verbal and non-verbal channels occurred together in the full version of the Social Interpretation Task, Hastorf stated that he could not conclude that the non-verbal levels of interaction were alone sufficient for accurate interpretation. However, he said that the present study indicated that these non-verbal levels are, in ways yet not understood, indispensable to interpretation.

Books on non-verbal communication


*The Unspoken Dialogue: An Introduction to Non-verbal Communication.* Judee K. Burgoon, no date.

E. ALL LOGO EXPERT INTERVIEW RESPONSES

(A, 19.5.05) "I think the article summarizes the process of creating a logo. Your process works because most credible designers have been using the process for decades. It is just a very difficult thing to explain. Bottom line, your theory is sound."

(A, 19.5.05) "I guess credibility attributes are a lot like wine attributes. They are subjective and are defined by the beholder/taster. What one expert sees in a particular logo/wine is not what another sees or tastes. I wish there was a set of rules/credibility factors that could be defined and scored as to effectiveness. Unfortunately, no one has been able to come up with that."

When asked about how credibility based logo design principles worked with his design of the Fuller Paint and Ingram Paper logos, which were great examples of the philosophy applied, this was his response.

(A, 23.5.05) "First of all, I don't think the Fuller Paint logo was 'great'. It was such an 'obvious solution' that it lacked imagination and inspiration resulting in what I think is a mundane and uninteresting work. However, both Fuller Paint and Ingram are good examples of 'symbolic' logos. Both symbolize the product, i.e. paint can for paint (duh!) and folded paper making an 'I' for Ingram. They are good examples of logos that relate to the product, but not necessarily say anything about trustworthiness or expertise. Just because you show a paint can doesn't mean you make a good paint or that your can be trusted. Same with the 'I'."

My response was that the "contemporary", "cutting-edge" and "efficient looking" design motif for the "paint can" and the "I", communicated trust. The "paint can" and the "paper" symbols communicated "expertise", as this is there basic business.

(A, 24.5.05) "You say that both the Ingram and Fuller Paint logos 'symbolize the company business which translates to 'expertise' in that business. That's where I can't agree. How do those logos guarantee the quality of their products/services? Just because there is a paint can and a piece of paper doesn't say they are good at what they do, i.e. "expertise". This is where I have had a problem understanding the connection between a logo and being trusted or being expert."

My response was that a credibility based logo design does not guarantee that the company produces a quality product. It is only a symbol that this may be true. The company must perform, or a credibility based logo design will not be effective. Any logo can do only so much. It must symbolize how the company operates in reality, that is, producing quality products if it is representing this in its logo design.

(A, 25.5.05) "I definitely agree that a logo 'can only do so much' and that's why I don't believe a logo can say a company is expert at what it does and that it is trustworthy. I think a logo can look modern or old-fashioned, it can symbolize the nature of the product or service, it can be fun or serious, it can be masculine or feminine, it can be strong or
delicate. So I ask again, what are the attributes that say 'expert', 'trustworthy' or 'credible'?

My response was that it goes back to his Fuller Paint and Ingram Paper logos which communicate "expertise" and "trustworthy" in the symbol content, and the overall design form. I also sent the Great Logos and Why article, plus Successful Logos Explained. Both describe the credibility based logo design philosophy.

(A, 31.5.05), "In reviewing your approach and mine, I find that basically they are the same. We just use different terms for various aspects of the process."

I pressed on by asking what planning process he uses, and what "terms" are used as a basis for selecting what attributes a new logo design should have.

(A, 7.6.05) "I have never used the terms 'credible', 'expertise', or 'trustworthy' while discussing the attributes a client wishes to project in his logo because I was never taught how to translate these verbal terms into visual terms. To me it would be it would be the same as putting 'steadfastness', 'honorable', and 'appreciative' into a logo. First, those can only translate on a very personal level at best. What looks 'credible' or 'steadfast' to you may not look 'credible' or 'steadfast' to me. There are no universal images that express these terms. They are highly subjective and therefore open to misinterpretation. I agree that a logo should be 'memorable' and that is usually achieved by being 'unique/creative'.

My next questioning centered around defining attributes, and creating logos around attributes. If attributes mean different things to different people, how can a logo even be designed? What issues are discussed then with the client before a logo is designed? Could these be credibility attributes?

(A, 8.6.05), "All the answers and issues discussed with a client become my credibility criteria. (Note: he uses "credibility" here.) What do I do with these answers and discussions? Look at the work I have designed. I use all the information I can get to form directions to explore. My approach is not a simplistic one as you have created in your process of questions and recommendations. It is far more complex. I wish I could be satisfied with your process but if a credible logo for a shoe maker is a shoe, then what would you show for a proctologist? How do you symbolize insurance or a conglomerate with ten diverse companies? I haven't found an easy way out as you have. I wish I could, but total immersion into all aspects of a company is the only way I know. Again, I say if your process works for you, stay with it."

I continued by saying that all businesses have a common denominator which can be used to symbolize their business, their area of "expertise". If one has a craft, a learned specialty, or if a conglomerate has several products and services, these can all be reduced to a description of the company "expertise". "High technology", for example, was the area of expertise for Rockwell International. I am not sure what a proctologist symbol would be. The point is that this is traditionally the function of the creativity effort. I asked next how he "sells" his final logo design do his clients, and what basis he uses hoping he would come back to his earlier comment about "all the answers and issues discussed with a client become my credibility criteria."
"I would 'sell' my design by reviewing the criteria (all points made during input dialog) and hopefully without have to 'explain' anything, the work speaks for itself and the client feels we have met the agreed upon criteria. We've got a winner."

My last follow up presented the credibility based logo design theory again, and wrapped up where we agreed and disagreed. His answer?:

"Sounds good to me."

Another designer responded to the *Great Logos and Why* article with this comment:

"Yes, the (credible logo) philosophy is an excellent example of what makes sense when you think deeply about the purpose of a logo, which is to communicate the core branding of the company."

A Washington State University professor with a PhD in logos responded to the article with this comment:

"I really like a lot of your points and the examples. My major concern is that you do not take into consideration the credibility of fonts. Fonts in and of themselves can be very credible."

"In spite of their omnipresence, very little has so far been written about logos, the nature of them, and the way they produce meaning. *Great Logos and Why* not only encourages clients to commission logo that are both distinctive and descriptive and inspires designers to design them. In the article there is a means of establishing the distinguishing character of something. The credibility persuasion logo design philosophy is vital to understanding the importance for a company to establish a persuasive and credible foundation."

"From the article and from my personal experience (working with me as one of the Powerlogos Design design team), I can say that your logo design philosophy has helped me in various ways. It provides me with a 'starting point' by knowing better the 'end point'. Or, should I say, the objectives, attributes and motifs of the logo to be delivered. Following your design philosophy, I can avoid many common pitfalls (in going into a wrong direction.)

My work is shortcut because, as a designer, I can concentrate more on the design process per se, and just try and translate the best I can your *Logo Design Criteria* sent each time. This philosophy not only serves me well during the logo design process, but it also provides excellent key points to take notice when developing other kinds of design projects, graphic or not. It all goes back to being credible as you say.

This philosophy always helps to narrow the solutions initially available in the sense of quantity not quality. By knowing the logo requirements and objectives in a precise way, the planner and/or designer has less 'roads' available, the he may then follow the road that leads to the correct 'destination'."
Planning is then vital to achieve the required goal and in less time. The client usually has a 'word' to say too, so a balance is needed between understanding what he wants and what he, or his company, really needs. This is not always easy or made possible. However, if the client is made aware of the design process based on credibility principles, he may then approve a final design more easily and with more confidence. I know I do this.

Overall, the credibility based logo design philosophy is a tool of indispensable use and benefit if one can make the most of it. I believe you do. I only try to get closer in my role position."

(F, 20.6.2005)

"When a (design) brief for a logo was given by the client, he would say, 'I want a logo for my company.' The direction to the design team was the client's brief. We would design more than 25 logos, present it to the client and client would say, 'No! There is something missing.' We would come back and put the design team back to the task. Another 10 logos presented and the client would say, 'I think that is something close to what I want, but not quite close. Work on these 5 logos and present it within 2 days.' Another agonizing round of logos, till the design team became weary, having run out of forms, shapes and ideas!

We used to be swimming like fishes in a tank in all directions! Though the tank was small and since we were swimming directionless, we used to tire ourselves very fast without having even reached halfway through the goal. Then came the encounter with Bill Haig's credibility based logo designing principles. We were able to ask clients the right questions and more so, we were able to support the logos designs that we gave with the credibility based design principles. It gave the client also a direction to think and channelise his thoughts and make up his mind.

The best part of this is the simplicity. Logos become power logos once it is perceived by the audience as being credible and therein lays the graphic designer's competence. To convey expertise, credibility and trustworthiness! The benefits: (1) Easy for us to convince our clients based on this principle, (2) Clear direction for the designer to work upon, (3) Lesser rounds for revisions, and (4) Faster acceptance by clients."

(G, 26.6.05)

"Credibility Based Branding is a 'Results Specific Process.' There is a plethora of poorly conceived 'corporate identities' in existence that were probably created by 'willy nilly/knee jerk/wing it' emotion driven impulse rather than by a credibility based logo design process. Every organization or individual entity is by virtue of its existence is a legal person with its own persona. This image/personal is on constant display to various publics, i.e. uniforms, customers, product and service end-users and the financial community.

This image represented by a word, symbol, or word/symbol, functions as a 'visual shorthand' to the viewer and must have instant communications functionality that correctly represents the entity's persona (company/product/service) in all media environments. A credibility based logo design image will accomplish this. A credibility based logo communicates and builds memorable 'image equity' that will compound with each viewer exposure incident.
The (philosophy in the) article *Great Logos and Why* delivers. The credibility based logo design procedure technique represents a compendium of solid design disciplines that are based on logic, the ferreting out the salient aspects of an entity, the analysis of the entity's operation, and the application of this information to logo design creation and subsequent testing. The result virtually eliminates a need to 'go back to the drawing board'. In summary, it takes out the 'trial and error' guesswork out of the logo design process, producing a cost effective, time efficient and successful on-target logo design."

**Positive**

1. Planning based on credibility gives the logo design important direction as a design procedure. The design criteria reflects the core meaning of the company.
2. Planning based on credibility gives the logo design final objective judgment by both designer and client.
3. Credibility based logo design is a new way of doing what designers have often done by instinct. In other words, the philosophy gives a reference point to many logos which have been successful, not necessarily planned to be credibility based. "In reviewing your approach and mine, I find that basically they are the same. We just use different terms for the various aspects of the process."

**Negative**

1. "My only concern is that you do not take into consideration the credibility of fonts".  
   Answer: Fonts should supplement the credibility expressed in the logo symbol. Although, without a symbol, the font as the company name should of course be credible. This is harder to do, but possible.
2. "I was never taught how to translate credibility principles into design elements. Those can only be translated at a personal level at best."  
   Answer: Experience teaches this. However, more research needs to be done on nonverbal design communication.
3. "A logo can do only so much."  
   Answer: Agreed. But a logo is still valuable as part of the total branding system.
F. CASE STUDY PROTOCOL

Overview

Confirm credibility-based logo design theory, then applying the theory to placing a credibility-based logo on a company Web Site to increase Web Site effectiveness.

Research Issues

Three research issues are central to investigate the research topic in the Overview.

Research Issue 1.
Validate the credibility-based logo design theory. How and why do credibility-based logos increase action in respondents?

The identified issues are:

* Logo design theory.
* Branding theory
* Communication models
* Source credibility principles in communication

Research Issue 2.
Validate the differences between credibility-based logos and logos which are not credibility-based.

Research Issue 3.
Validate that the credibility-based logo design theory can be used to design logos effectively with actual case histories as examples.

Research Issue 4.
Validate that specific company credibility-based logo designs will be effective on specific company Web Sites to better achieve company goals.

Field Procedures

Participant interviews.
Application of theory to design logos.
Data collection through online Internet research.

**Topic:** Validate the credibility-based logo design theory.

**Procedure guideline:**

Use logo expert respondents. The following was given as an email question to eight experts nationally and internationally in logo design known to the researcher:

Interview Date and Time .................................................................

Name of Interviewee .................................................................

**Introduction – Purpose and Interview.**

Hello. As you may know, I am doing research as partial satisfaction of a PhD at Southern Cross University in Australia. This is research is relative to credibility-based logo design theory. Please read the attached article, *Great Logos and Why* which I wrote about this logo design theory. Then, let me know what you think about the credibility-based logo philosophy as described in the article. Do you agree that logos should be planned and designed on the basis of this philosophy? Why? Or why not?

**Confidentiality**

Information gathered during this interview will be used for the sole purpose of gaining on understanding of credibility-based logo design theory.

All data collected in this interview will remain confidential and anonymous. Your company and name together with any other identifying data will be disguised in the final research report. Information gathered during the interview will not be made available to any third party but will be retained by myself as supporting information.

May I have your permission to respond to this interview by email as it will assist me with my research?

Thank you for your assistance.

**Validation:**

Respondents validate or invalidate the 'Great Logos and Why' article which explains credibility-based logo design theory.

**Procedure Guide for Research Issue #2**

**Topic:** Validate the differences between credibility-based logos and logos which are not credibility-based.

**Procedure guideline:**

Use researcher judgment. Based on many years experience, and most recently owner of an online logo design service, the researcher defined credibility traits as the two prongs of being credible, *expertise* and *trustworthy*.
(a) **Expertise** – symbolise the company business as the logo content. The rationale is that by symbolizing the company business, this project the company as an "expert" in this business. Such as the key maker with a "key" in his shop sign.

(b) **Trustworthy** – create design motifs which support the company personality as defined by the company. These most often support the belief that the company can perform its particular business. Such as a contemporary design for an electronics company, and a stable-looking design for a bank.

In contrast, non credibility-based logos would not have the company symbolized, or have design motifs depicting the company personality.

**Validation**

By the researcher that this distinction can be made between logos whereby the company business is included as the overall literal meaning of the logo. And that design motifs, or style, can be communicated non-verbally through graphic design. This would require further testing which is Research Issue #3, but the distinction can thus be made as a logo design for planning and designing credibility based logos. This is summarized in Chapter Four.

**Procedure Guide for Research Issue #3**

**Topic:** Validate that the credibility-based logo design theory can be used to design logos effectively with actual cases as examples.

**Procedure guideline:**

Use test companies. Instruct seven test companies to fill out a questionnaire for credibility-based logo design planning to determine the company's *expertise* and *trustworthy* traits to be included in the logo design. The test companies are actual clients from the researcher's online logo design business www.powerlogos.com. The question asked to provide the desired trait information is outlined as follows.

The planning and design process for each company is as follows:

1. A seven part Questionnaire was given to each company manager with questions specifically included identifying company credibility attributes specific for each company. It is important to note that these source oriented attributes were deemed important. It is also to be noted that the attributes represented how the company behaved in reality which could be a description of present and/or future planned business or character. The planning Questionnaire is in Appendix H.

2. The Questionnaire was analysed for pertinent credibility attributes. These were 'expertise’ attributes as described by the company business activity, and 'believability/trustworthy' attributes which were described as character traits important to being able to conduct the particular business. For example being ‘cutting-edge’ would be important for a high tech company, whereas being ‘old fashioned’ would be important for a traditional candy maker.
3. Based on the questionnaire, a Logo Planning Report was prepared for the company manager. The most important section was a verbal description of the company’s ideal credibility-based logo design. These are credibility trait descriptions which are interpreted in the actual credibility-based logo design. These are the credibility-based logo design objectives for the designer to achieve in the creative process. The Logo Planning Report was agreed to by the company manager as being an accurate description of the company’s business expertise, and believable/trustworthy character. The Logo Planning Report is agreed to by the company manager before logo design commences.

4. A very simple Logo Design Criteria statement was sent to a qualified logo designer in India, Russia, Portugal or Brazil. This report described the company expertise as the logo content, and the believability/trustworthy attributes as the design motifs to be associated with the logo content. The name font was deliberately very simple, so as not to interfere with the content symbol. The importance of the Logo Design Criteria is to include only the credibility traits important for the designer’s creative effort. This saves time when only the important traits are identified before work commences.

5. The logo designer interpreted the Logo Design Criteria objectives. Like a food recipe, the designer had the ingredients (in terms of credibility attributes). But unlike a food recipe, the designer did not have the proportions. This is the creative challenge while at the same time keeping the logo simple, unique and having high impact. These are functional requirements for perception and memorability requirements.

6. Preliminary logo designs were sent to the company manager for comment relative to the Logo Planning Report objectives.

7. The comments were interpreted for further design direction leading to a final design which best met the Logo Planning Report objectives.

8. A credibility-based logo design was created.

**Validation:**

Successful case examples applying this procedure are presented as part of this thesis in Chapter Four.

**Procedure Guide for Research Issue #4**

**Topic:** Validate that specific company credibility-based logo designs will be effective on company Web Sites to better achieve company goals.
Procedure Guideline:
Use Web Site visitors. Following a pilot test, six companies are chosen to test whether a credibility-based logo design compared to three non credibility-based logos will increase the number of click-throughs on the test company navigation bar. 150-250 visitors are self-selected to the Web Sites, rotating each of the four logos per company. Therefore, up to 1500 respondents visit each of the six test company Web Sites. Note: the visitor count may change because the researcher keeps daily counts over a two day period. A higher number of visitors mitigate visitor sample bias.

Since the visitor/respondents are unknown to the researcher, no prior attempt was made to contact the visitor/respondent for permission to participate in the test.

Validation
Successful data results are obtained using SmarterTools, a Web Site analytics company. The results are presented in Chapter Four.
G. LETTER FROM SMARTER TOOLS

Figure removed due to copyright restrictions
H. Saul Bass: Wikipedia Entry

Figure removed due to copyright restrictions
Logos designed by Saul Bass and respective dates.

Figure removed due to copyright restrictions
I. INTERVIEW QUESTIONS

Question 1:
If you are a designer, what has been your experience in planning company logos before the logo is designed?

If you are a company manager, what has been your experience in working with your designer in planning your company logo before it is designed?

Please submit your answer as soon as possible. I am on a time deadline.
Thanks.

Question 2:
In Question 1 it was asked what had been your experience in planning company logos if you were a designer or company manager.

How would a better means of collecting information be handled in planning company logos before the logo is designed, and why would that be?

Question 3:
How would more precise question asking the client (or the design to you if you are the client) all about how his/her company be handled in planning company logos, and why would that help?

Note: This is called questioning to come up with a Logo Design Brief.

Question 4:
Following up on question #3, how would more precise questions which are about the company’s area of expertise/knowledge and trustworthiness/believability (credibility) help plan and design a company logo? Why would this give a designer (and client company) better planning information before the logo is designed?

Question 5:
Credibility-based logo planning and design incorporates the company business as the content of the logo (its area of expertise) and design forms which non-verbally give the company believability. For example, See's Candies has an old fashioned look. ToysRUs a fun look. And AT&T a high tech look.

Question for designers only: How would you use credibility-based logo design principles to design a company logo, and why would this information help the company logo design process?

Question for company managers only: How would you use credibility-based logo design principles to work with a designer to plan and judge your new company logo, and why would this information help the company logo design process?
Second and Final Question asked of Logo Design Experts

(date)

Hello (recipient):

Thanks for offering to participate in my PhD thesis research. Part of this research is to ask you to comment on the philosophy discussed in the attached article *Great Logos and Why*. This is the "credibility-based logo design" theory which I am advancing in my research.

Does it make sense? That is all I am asking in a few paragraphs from you. There are three parts to the research I am doing. This part is just for comments as to the theory presented in the article from authorities in the field such as you.

Thanks and aloha for now,

Bill
Appendix

J. QUESTIONNAIRE TO WALK SAFE SOLUTIONS

Logo Planning Report Questionnaire

Thank you for requesting Powerlogos Design to create your Credibility Based Logo Design. The first step is to answer the Questionnaire. From this, we will send you our exclusive Logo Planning Report with a verbal description of your Credibility Based Logo Design.

Please be as descriptive as possible when filling in the Questionnaire. The more detail, the better. Just ramble as if we were talking. All information is secure and confidential.

*NOTE: ALL fields are required.

Please start by giving your company name and any product/service names. If there are more than one product/service, what is their relationship to the company? How would you describe your company/business, products/service to someone who has no knowledge of its existence?

What makes your company, business, product/services unique in your field of business? Why do people do business with you?

What are the short-terms goals/plans? Long term?

What are your greatest strengths/attributes?
How do you think the public perceives you?

How do you differentiate your company from your competitors? Describe your most important competitor.

List all areas where your present logo appears ie stationery, signs, trucks, etc. List all areas of public contact where your logo COULD appear, but now does not.

How did you hear about us?

Reset
K. SAMPLE LOGO PLANNING REPORT

Powerlogos.com

LOGO PLANNING REPORT

November 6, 2006

To:

By: William L. Haig
Powerlogos Design
Specialists in Credibility Based Logo Design
www.powerlogos.com

Hello Kim,

Before we begin, I want to thank you for working with us. We have a proven process for logo success. Just follow the report logic and give me approval to the verbalized logo objectives on page three. That will set up our creative direction.

Let's get started.

This report will plan your WalkSafe Solutions Credibility Based Logo Design from the questionnaire you have sent me.

First of all, let me briefly walk you (again probably) through our process in creating successful logos design based upon the communication strategy of credibility persuasion.

Many studies in interpersonal communication (people to people) conclude that if the source (person) of the message (i.e. sales pitch, bank loan request, etc.) is expert and trustworthy, the message will be more readily accepted by the receiver (customer, bank officer etc.). Being expert and trustworthy is the basis for a person being credible.

For example, a computer wiz would be more influential on what software program to buy than, say, a chef. But the chef, on the other hand, would be more influential on where to find the best restaurant in town. One would not normally go to the computer wiz for restaurant suggestions. Nor would one go to the chef for computer-related suggestions. Well, in most cases. Each is an expert in his field of work. If he is also trustworthy then there is source credibility.
While studying successful logos as part of an advanced degree years ago, I discovered with supporting research that *credibility principles* also apply to company logos. If the logo symbolizes the company *business*, the company holds out that it is an *expert* in that business. Like the shoemaker (displaying a shoe) or key maker (displaying a key) sign in front of the shop. Further, if the company is in a high tech business it would symbolize its field of business with a contemporary motif.

This communicates that the company is “forward-thinking” and therefore, more readily trusted as a high tech business. On the other hand, a key maker would want a more “experienced” looking design motif. There is an old saying that classic cars look old fashion, but you would not want them to look otherwise. We can make the company logo design fit the appropriate personality character for any business.

Thus, knowledgeable and trustworthy companies are most persuasive. Logos which depict the company business in an appropriate design character to look believable relative to what they do are likewise more persuasive. I call this *Credibility Based Logo Design*.

A *Credibility Based Logo Design Case History*

There are many credibility-based logo programs I have helped create. (I am not a designer, but a logo design planner and director.) These range from Continental Airlines (circa 1968), Rockwell International, and AT&T among others. I have chosen a recent Powerlogos Design as an example.

Tom Housen is a small business house painter in a small New York city (Pawling). He does quality work with super service. His area of *expertise* is “house painting”; his *trustworthy* attributes are “quality” and “service”. We designed his credibility-based logo to look like this:

Figure removed due to copyright restrictions

I suggested that he keep his name, Housen, in the logo as well as his business to give the logo the feeling that Tom stands behind his work and is trustworthy. He again says “painting”, his area of expertise.

This is a highly successful credibility-based logo which works every day for Tom on his trucks, employee t-shirts, site signs, stationery, business cards, proposal covers — all areas of public contact in a consistent manner which builds his brand name.
**What Does Your Credibility Based Logo Design look like?**

I will describe it. From what you tell me in the questionnaire, your **area of expertise is: product prevents slipping/falling.** This is what the product does. This then is your area of expertise. No surprises here! **This will be your symbol content.** Like "house" and "painting in the Housen Painting example.

Your **trustworthy attributes are: state of the art or cutting edge, high customer service, quality/the best.** Again, no surprises here. **These attributes form the design style for the symbol content. How we do this is through many years experience working in nonverbal design motifs.**

The logo will be designed so that it will implement boldly and with authority. We want it to stand out when implemented. This also means it must be simple, and unique.

To do this, let me walk you through the three logo systems.

**Three Logo Systems**

It is important to understand that there are three basic logo systems that most all logos fit into.

There is the name only:

Figure removed due to copyright restrictions

There is the monogram:

Figure removed due to copyright restrictions

There is the symbol over (or beside) the company name:

Figure removed due to copyright restrictions
I usually rule out the first two logo systems because they limit the ability to project credibility attributes. The more one fiddles trying to add the company's expertise to monograms or the name only, the less the logo communicates. Also, monogram logos are hard to establish and are expensive to do.

Logos with the symbol over the company name (or beside as an alternative), however, offer the best alternative to express the company's credibility attributes. As mentioned, the symbol must also be bold and express authority. This is a must to communicate well on a business card or a website.

Schematically, then, your logo will look like this:

<table>
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<th>(Symbol/content)</th>
<th>or</th>
<th>(symbol/content) Walksafe Solutions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walksafe Solutions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Both versions are acceptable, depending upon the space within which the logo will be placed.

This will give your company great visual relationship between symbol and name. Your symbol will contain the main expression of credibility as presented. The name font will be simple, yet supporting the visual content/design motif of the symbol.

Kim, please give me your feedback on this Logo Planning Report.

When we agree on the verbalized design strategy above, we will continue to the design phase. Just email me that you agree.

Or call me at 808.922.4042 or toll free 877.922.4042 if you want to discuss any of the points remembering that I am in a different time zone, Hawaii.

All of this is strictly confidential, of course.

Respectfully submitted,

Bill

William L. Haig
President
w.haig@verizon.net
Figure removed due to copyright restrictions


William L. Haig Co-Author
2957 Kalakaua Ave. Suite 206,
Honolulu, Hawaii 96815
Phone: (808) 922-4042
or toll free: (877) 922-4042
w.haig@verizon.net
www.powerlogos.com

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L. DESIGN CRITERIA GUIDELINES

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**Powerlogos.com**

LOGO DESIGN CRITERIA

Date: November 6, 2006

WALKSAFE SOLUTIONS

Client: RICARDO

Designer:

JULY 20, 2005 OR SOONER FOR FIRST PRELIMINARY DESIGNS. Due Date:

Expertise symbol content: **a product that prevents slipping and falling in the house.**

Trustworthy traits or overall design motifs: **state of the art or cutting edge, quality/best, high customer service.**

Schematically, the logo will be:

```
[symbol/content] WalkSafe Solutions
```

or

```
[symbol/content] WalkSafe Solutions
```

Special comments: In this case, the company expertise is the product they sell. This is a non-skid new innovation for use in bath tubs, tile floors, etc. where falling my otherwise is a problem. It prevents slipping and falling.

Also, in the name font try "Walk" and "Safe" in two separate colors. The name fortunately also says what the product does. This might make it clearer. As usual, the font quietly supplements the symbol.

Thanks!!

---
M. WALK SAFE SOLUTIONS PRELIMINARY DESIGNS AND FINAL SOLUTION

1. Preliminary Design
Appendix Credibility Based Logo Design
2. Final Solution
N. SAMPLE LOGO IMPLEMENTATION REPORT, STATIONERY AND BUSINESS CARD FOR WALKSAFE SOLUTIONS

Implementation Report

PowerLogos Design℠

Guidelines & Specifications

Congratulations, attached are the final files and specifications for your new Powerlogos℠ design package. The index that appears below indicates all the various file formats that have been supplied to you for use on your printed materials, signage and other uses. The color specifications below will allow all of your various suppliers and vendors to coordinate the exact colors that have been selected for your logo design. We have also supplied templates for the production of letterhead, envelopes and business cards. Remember, continuity and consistency are the keys to successful implementation and maximum effectiveness of your Powerlogos℠.

For any questions, please call us toll free (977) 926-4992.

---

Vector Images

Encapsulated PostScript (EPS)
EPS-files are suitable for high-resolution printing, unlimited scalable, highest compatibility.

Color logo: WSS-COLOR.eps
Black and white logo: WSS-BW.eps

Rasterized Images

Joint Photographic Experts Group (JPG)
JPG-files are suitable for on-screen viewing:

Color logo: WSS-COLOR.jpg
Black and white logo: WSS-BW.jpg

Graphics Interchange Format (GIF)
GIF-files are suitable for on-screen viewing:

Color logo: WSS-COLOR.gif
Black and white logo: WSS-BW.gif

Stationery templates

Letterhead & envelope

Stationery #1: WSS-Stationery-1.jpg
Stationery #2: WSS-Stationery-2.jpg
Stationery #3: WSS-Stationery-3.jpg

Business card templates

Business Card #1: WSS-BusinessCard-1.jpg
Business Card #2: WSS-BusinessCard-2.jpg
Business Card #3: WSS-BusinessCard-3.jpg

---

PMS Specifications

- 100% PANTONE 186 CV
- 100% PANTONE 356 CV
- 100% PANTONE Process Black CV
- 50% PANTONE Process Black CV
- 20% PANTONE Process Black CV
- 100% PANTONE Process Yellow CV

CMYK Process Colors

- C:0 M:91 Y:76 K:6
- C:100 M:0 Y:91 K:27
- C:0 M:0 Y:0 K:100
- C:0 M:0 Y:0 K:50
- C:0 M:0 Y:0 K:20
- C:0 M:0 Y:100 K:0

---
Stationery
Business Card

Richard M. Parsons
individual’s title

1234 Anonymous Road
City, ST 56789 USA

(000) 999-1234 Phone
(000) 999-1234 Fax
info@walksafe.com
## O. ANOVA STATISTICS

### One-way anova

#### Descriptives

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### ANOVA

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### Post hoc tests

#### Multiple Comparisons

**Dependent Variable:** click

**Tukey HSD**

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* The mean difference is significant at the .05 level.
P. WILLIAM L HAIG: CURRICULUM VITAE

CV  William L. Haig, (Ph.D. in progress)
   2957 Kalakaua Ave.
   Honolulu, Hawaii  96815
   808 922 4042
   w.haig2@hawaiiantel.net

Highlights:  Ph.D. thesis in progress and work experience in source credibility principles applied to logo design, Websites, packaging design, advertising and other visual elements within a coordinated branding system. Work experience with Saul Bass (AT&T, Rockwell, and Continental Airlines gold tail era); and with a major transportation company managing all branding. Co-author of The Power of Logos: How to Create Effective Company Logos, NY: Wiley 1997

Specialties:
- Applying source credibility persuasion principles for planning and developing company logo/identity programs and branding systems.
- Strategic brand planning, subsidiary relationships, naming, integrated brand promotion and brand equity.
- Credibility-based logo design planning, development and implementation.
- Evaluation of present logo, packaging design, Website, and branding systems.
- Proprietary methodology for testing effectiveness of company logo, Website, Internet advertising, direct mail, packaging design.

I. Education

A. Degrees

2006  Ph.D. in progress in Management (logo/branding emphasis)
      Southern Cross University,
      Graduate College of Management,
      Tweed Heads, Australia.

1979  M.A. with honors, in Communication (logo/branding emphasis)
      University of Hawai'i, Manoa
      Honolulu, Hawaii.

1962  B.A. in Psychology (marketing emphasis)
      UCLA
      Los Angeles, California.

II. Professional Experience

2002 to present  President, owner
                 Powerlogos.com (www.powerlogos.com)
                 Honolulu, Hawaii. Started as an experimental logo design Website.
                 Successfully applies the economies of the Internet to plan and
design high level logo solutions with a collaboration of international design talent. Added a stationery and business card printing component in 2006. Adding Website design, signage, packaging, advertising and advertising specialties resources by 2007.

1992 to 2002
Manager, Customer Services (aka Marketing Department)
Oahu Transit Services (TheBus, Honolulu public transportation)
Honolulu, Hawaii. Responsible for all branding activities including: marketing, advertising, public relations, promotion, special events, newsletter, customer relations, employee relations and supervising information/customer services department.

1986 to 1990
President and co-founder
Hawaii Pacific Sports Marketing, Inc.
Honolulu, Hawaii. Responsible for organizing this non-profit arm of the State of Hawaii to market Hawaii as a location for sports events. Developed the Aloha State Games, now in 16th year.

1964-1969
Account Manager, Logo Programs
Saul Bass & Associates

Years not shown, general manager, Bruce Hopper Design, Hawaii; merchandising supervisor for Tidewater Oil Company, Western Division; new business director, Gould & Associates, Los Angeles; assistant media director, McCann-Erickson Advertising, Los Angeles; assistant research director, Hixson & Jorgensen Advertising, Los Angeles.

III. Published Work

A. Book

B. Articles


The Power of Logos and Graphic Design Systems in Public Transportation, September, 2003

Successful Logos Explained, June, 2002.

IV. Honors and Awards

Phi Kappa Phi National Scholastic Honorary, University of Hawaii Chapter.
Eight Pele Awards, one Excellence Award and. one Best in Show (with Sandra Hiraoka, designer.) Honolulu Advertising Federation
Seven national first place awards for company newsletter and various graphic designs (with Sandra Hiraoka, designer.) American Public Transit Association.

V. Teaching and Conferences

2002 Lecturer, Hawaii Pacific University
Department of Communication
Advertising and Integrated Brand Promotion.

1977-78 Lecturer, University of Hawaii, Manoa
College of Continuing Education
Integrated Marketing Communication and Branding.

1998 Speaker, American Public Transit Association National Conference, Phoenix, AR.
Graphic Design Strategies in Public Transportation.

1997 Speaker, National Identity Management Conference, Scottsdale, AR
Credibility-based Logo Design Strategies.

Guest lecturer: UCLA, Art Center, Los Angeles Art Directors Club, University of Hawaii, and Honolulu Community College among others.

VI. Other

Board of Directors, UCLA Bruin Club of Hawaii; Board of Directors and Executive Committee, Winners at Work; Board of Directors, Kalihi Business Association.; various committee work, Outrigger Canoe Club; American Marketing Association.(Los Angeles and Honolulu).
Mayor's Communication Team (Honolulu, Hawaii)
US Army
Swimming Team, UCLA
Three children and three grandchildren.

Date prepared: June, 2006