WEB BRANDING

AT VIETNAMESE MANUFACTURING ENTERPRISES

Thesis

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ABSTRACT

The research stream on Website quality has evolved in recent years. Although several research issues have been addressed, there remain gaps in literature about the facilitators of Website as a brand. Therefore, the general purpose of this study is to identify, describe and analyze factors that have had an impact on customer awareness and loyalty to a Website.

Based on the literature review, a theoretical model and hypotheses have been developed. The research has incorporated the concepts of AIPDB (which stands for the five strategic functions of a Website: **A**ttract, **I**nform, **P**osition, **D**eliver and **B**uilding relationships) into the model and proposed to be tested the potential effects on the formation of Web awareness and loyalty.

Data was collected from 477 Internet users through a survey in Vietnam. It was first used to assess and refine the measurement scales through factor analysis. Then it was used to validate the model through the multiple regression equation. Based on the statistics derived, test of hypotheses were undertaken and the results were discussed. A single case study was also investigated to illustrate the Web branding practice at the local pharmaceutical company, the Traphaco.

The key findings of this research show that the Website as a brand serves as an invitation and gives the audience a reason to visit the Website. The information quality, site appearance, download speed and personalization are the critical success factors that significantly impact loyalty to a Website. However, Vietnamese manufacturers in general and the Traphaco in particular implement few marketing activities both online and offline to attract visitors to their sites and encourage them to come back.

This research has bridged gaps in existing theory in several ways. First, it focuses on the marketing communication function of Web branding, an important issue which has not yet been thoroughly researched. Secondly, it provides an integrative conceptual model for examining the determinants of customer awareness and

loyalty towards the Websites of manufacturers. It helps explain and predict the determinants for the acquisition of Web awareness and loyalty. The research also contributes the new measurement scales as well as suggesting effective ways to build Web branding potential.

This research is the first endeavor to comprehensively examine and test the determinants of Web branding in the Vietnamese e-business context. Findings of this research add to the growing evidence suggesting that Web marketing communication and Web design interface are the prominent keys to achieve the high Web performance as a brand. This research provides a Web branding framework to further research customer awareness and loyalty to a Website effectively.

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LIST OF ABBREVIATIONS

A

ADB	Asian Development Bank
ADSL	Asymmetric Digital Subscriber Line
AIPDB	Attracting, Informing, Positioning, Building
AMA	American Marketing Association
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of South East Asian Nations

B

B2B	Business-to-Business
B2C	Business-to-Customer

E

E-business	Electronic Business
E-commerce	Electronic Commerce
EIU	Economist Intelligence Unit
E-mail	Electronic Mail
E-transaction	Electronic Transaction

G

GDP	Gross Domestic Products
GIPI	Global Internet Policy Initiative
GMP	Good Manufacturing Practice
GSO	Vietnam's General Statistics Office

H

HCMC	Hochiminh City

HDI	Human Development Index
HTML	Hypertext Markup Language

I

ICT	Information and Communication Technology
IP	Internet Protocol
ISP	Internet Service Provider
IT	Information Technology
IXP	Internet Exchange Access Providers

J

JS Co	Joint-Stock Company

M

MIS	Management of Information System
MOH	Vietnam's Ministry of Health
MOT	Vietnam's Ministry of Trade
MPI	Vietnam's Ministry of Planning and Investment
MPT	Vietnam's Ministry of Post and Telematics
MRA	Multiple Regression Analysis

N

NIPTS	Vietnam's National Institute of Post and Telematics Strategy

O

OECD	Organization for Economic Cooperation and Development

P

PC	Personal Computer

S

SD	Standard Deviation
ST	Saigon Times Newspaper
SOE	State-Owned Enterprises
SPSS	Statistical Package for Social Science

U

UN	United Nations
UNDP	United Nations Development Program
UNTAD	United Nations Conference on Trade and Development
URL	Uniform Resource Locator
USA	United States of America
USD	United States Dollar

V

VDA	Vietnam Drug Administration
VDC	Vietnam Data Communication
VET	Vietnam Economic Times
VIR	Vietnam Investment Review
VND	Vietnam Dong
VNNIC	Vietnam National Internet Centre
VNPT	Vietnam Post and Telecommunications Corporation
VUC	Vietnam University of Commerce

W

WB	World Bank
WEF	World Economic Forum
WTO	World Trade Organization

1

INTRODUCTION

1.1   Background of the Research

More and more firms and other organizations have come to the realization that one of their most valuable assets is the brand names associated with their products or services (Keller, 2003; Moore, 2003). With the proliferation of competitors and products and services that are easily duplicated or replaceable, brands become an important means of simplifying consumer decision making, reducing risk, and setting expectations (Keller, 1993; De Chernatony and McDonald, 1998). Creating strong brands that deliver on that promise, and maintaining and enhancing the strength of those brands over time, is thus a management imperative.

Nowadays, the theories and practices of branding are entering a new phase, one that capitalizes on the boldness of the Internet in conjunction with the insight of traditional marketing strategies. The practice of brand marketing is about 100 years old. With the introduction of each medium – newspaper, magazines, radio and television – brand marketing practice had to adapt. The Internet is a new communication vehicles that is changing brand marketing in significant ways (Aaker and Joachimsthaler, 2000; Kania, 2001).

As a vast global network, the Internet gives buyers and sellers unprecedented reach and access to people, products, services and information. This is network communication and it makes the e-marketplace unlike any other market. In this new business environment, marketers encounter the thrilling and perhaps terrifying combination of two-way communication, global markets, virtual communities, new distribution channels, and faster cycle times (Kania, 2001). The winners in this networked environment will be those businesses that master the digital and physical branding game and leverage their brand throughout their customer touch points (Raisch, 2001).

The Internet has the power to revolutionize brand building, to create new forms of differentiation, to make brand-building programs more effective, and to help companies move toward the elusive goal of providing integrated, consistent, and synergistic brand building (Aaker, 2002). The Internet provides the opportunity for companies to reach a wider audience and create compelling value propositions

never before possible, while providing new tools for promotion, interaction and relationship building (Kleindl, 2001; Kincaid, 2003). As such, the Internet is changing fundamental about customers, relationships, service and brands, and is triggering the need for new brand-building strategies and tools.

The rapid development of the Internet affects the competitive environment of enterprises throughout the world, though the impact varies considerably by country. However, even in developing country as Vietnam, where general Internet usage is low, it is still possible for individual companies to participate in the global electronic environment (EIU, 2005; MOT, 2006). Since Vietnam continues to deepen its international economic integration process and gradually engages in e-business, the local enterprises are forced to think seriously about building strong brands based on both traditional and digital marketing tools, which can give them the long-term and sustainable development.

Despite the widespread acceptance of Internet use in corporate environments, the extent of Internet adoption continues to vary widely among Vietnamese manufacturing enterprises. However, while the Internet offers great potential to enterprises, especially in terms of important new communication tool and marketing channel, in reality it also poses great challenges. Given the importance of manufacturing enterprises in the country's economic growth and a effective role of the Internet in improving in manufacturing enterprises' general performance as well as in brand-building activity, this research seeks to explore how Vietnamese manufacturing enterprises should go about building a successful Web brand and to identify the critical factors that must be considered in Web brand development process.

1.2 Research Problem and Objectives

1.2.1 Problem Statement

Website is critical component of the rapidly growing phenomenon of e-commerce. Businesses are eager to know the customers' responses to different kinds of Website designs. Many researches in developed countries have paid high attention to examine the impact of various factors on Website performance and success in e-

business context. This research will try to assess Vietnamese manufacturing enterprises' practice in building and promoting their Website as a brand and give some ideas for enterprises to take full potential of the Internet to leverage their branding strategy and to enhance their competitiveness.

In theory, the key functions of Web marketing activities, such as Attracting, Informing, Positioning, Delivering and Building relationships, should have the positive impact to the Web branding potential – Web awareness and Web loyalty (Simeon, 1999, 2001; Yang *et al*, 2003; Loiacono *et al*, 2002; Yoo and Donthu, 2001; Schubert, 2002; Kurnia *et al*, 2005). The research problem is therefore stated as:

To examine the relationships between the key functions of Web marketing activities (Attracting, Informing, Positioning, Delivering and Building relationships) and Web branding potential, Web awareness and loyalty, among the Vietnamese manufacturing enterprises' sites.

1.2.2 Research Objectives

Accordingly, the following research objectives are addressed in this study:

- – To explore how the Internet is changing the brand-building environment, and to identify sources of value, tools and strategies to build the Website as a brand to attract visitors and to keep them coming back;
- – To gain insight the Vietnamese manufacturing enterprises' Internet adoption in their brand building practice;
- – To identify the key factors and characteristics that contribute to the development of successful Website as a brand at Vietnamese manufacturing enterprises;
- – To develop a framework for Web branding development in the Vietnamese electronic environment, especially in manufacturing sector;

1.3 Justification for the Research

Findings in this study will assist manufacturing enterprises' owners/managers understand the effects of Internet marketing and Website design elements on their Web brand building program and assist them make informed decisions about online adventure. The research is justified by the following points:

1.3.1 Role of Manufacturing Sector in Vietnam Economy

Manufacturing sector is considered the engine of economic growth in developing countries (Felipe, 1998; Do, 2001). As a result of the current economic policy of the Vietnam government to give a high priority to the industrialization and modernization, the manufacturing sector has been the fastest growing sector in the country during the last five years Manufacturing promotion is focused in the country in order to attain rapid growth, employment creation and poverty reduction (WB, 2003; ADB, 2006).

Vietnam's Socio-Economic Development Strategy aims at "*accelerating industrialization and modernization and creating a foundation for Vietnam to become an industrialized and knowledge-based country by 2020*" (MPI, 2001). This vision has articulated by specific targets with the share of industry to increase from 30.5% in the year 2000 to 40-41% for the year 2010, and the manufacturing sector within industry is expected to grow more than 10% per year and to generate most of the jobs as well as more of the higher paying jobs. At the same time, the agriculture sector will reduce from 24% to 16-17% of GDP and agriculture labor will drop from 60% to around 50% of workforce (Do, 2001).

Yet, the experience of the established and newly industrialized economies indicates that becoming industrialized involves much more than expanding the manufacturing sector, but the manufacturing focused orientation and target is consistent with the pattern of other successful stories in East Asian countries at the similar stage of development (Rasiah, 1996; WB, 2001). Manufacturing is given such a special attention because it plays a dynamic role in expanding its own growth and that of the other sectors. In the Vietnam industry development strategy, the manufacturing

sector is obligated to both main trends: making products for export-orientation and for import-substitution to meet increasing domestic demand. It is argued that this sector continues to offer Vietnam the best hope for rapid economic growth, export expansion and employment generation (WB, 2003; UNDP, 2005).

1.3.2 Brand's Importance in Enterprises' Performance

Studies on branding issue receive the great attention in marketing area in other countries. The growing interest is reflected in the proliferating conferences, articles, and press attention on branding, as well as the companies' huge investments on this area. Brands are powerful strategic weapons which, if handled correctly and managed sensibly, can provide their owners with considerable rewards in terms of market share growth and corporate profitability (Aaker, 1996).

Branding has always been crucial for anyone who wants to sell something to gain credibility (Keller, 2003). Yet, the concept of a brand which represents the specifics of a product or a company, like a name which describes the character of the person it belongs to, is a new one in Vietnam. Most Vietnamese firms are small or medium sized and have not dealt with problems related to the branding issue. The media had not highlighted it until several Vietnamese brands were recently appropriated overseas (VnExpress, 2002; VET, 2003).

The severe shortage of commodities in the late 1980s and early 1990s consolidated manufacturer's lack of awareness about branding, particularly bearing in mind the low per capita income of Vietnamese people. But the mushrooming of new producers and service suppliers and the arrival of foreign competitors has caused things to change drastically. An abundance of goods and services of higher quality, advanced technologies, and shorter product life spans have forced local businesses to think seriously about building brands which can give them long term and sustainable development (VET, 2003). Right now, building brands is a very important issue in developing country as Vietnam, and it can be considered to be a useful topic for conceptual development and managerial relevance.

1.3.3 Internet Impacts in Brand Building Practice

The Internet is considered to be one of the major technological innovation of the 20th century with the potential to radically affect the economic development as well as social, political and cultural relationships (Barwise *et al*, 2002; UNCTAD, 2003). However, the extent to which digital media such as Internet will revolutionize business in general and brand marketing in particular is still controversial.

The Internet has become one of the most discussed topics in business and academia. Contrary to earlier hype, the Internet does not change the fundamental principles of marketing. As Barwise *et al* (2002) argues that Internet is not a silver bullet, rather it will be a useful tool for some firms and some tasks.

Meanwhile, some other early researchers have a visionary predictions that Internet technologies would reduce search costs and enable consumers to compare products and prices anywhere in the world easily, as well as low setup and distribution costs associated with this new electronic capability would represent a major potential threat to brands and make brand strength weaker than ever before (Wigand and Benjamin, 1995; Kalakota and Whinston, 1996).

Evidence indicates that these predictions have yet to approximate reality. In fact, trusted brands may be even more important in a busy "over communicated and untrustworthy world", where consumers are money-rich/time-poor, and where product quality still cannot usually be reliably judged online (Barwise, 1997; Brynjolfsson and Smith, 2000; Dayal *et at*, 2000; De Chernatony, 2001). It is likely, therefore, that users will continue to gravitate towards brands as a way to simplify choices, reduce search costs and build trust, security and an expectation regarding product quality. Despite the World Wide Web's relatively recent arrival on the marketplace, it has had a major impact on brands and brand building theory and practice (Aaker and Joachimshaler, 2000).

One thing is clear that we have entered a digital age and the strong brands of this era will be those that best utilize the Internet as a tool for building awareness and loyalty. And it is also clear that the Internet combines many of the features of existing media with some new and unique capabilities of interactivity,

addressability, ubiquity, super high speed and low cost which has the potential to transform many aspects of brand marketing (Barwise *et al*, 2002; Kania, 2001).

By the start of the 21st century, the Internet had already been adopted on a massive scale, especially in North America, Australia/New Zealand and Western Europe, and its effects will continue to be felt in almost every market and almost every aspect of marketing (Barwise *et al*, 2002; EIU, 2003). But Vietnam as many developing countries has lagged far behind wealthy countries in the availability and access to the Internet technologies and infrastructure (ITU, 2002; MOT, 2006). According to the 2005 e-readiness rankings (EIU, 2005), Vietnam is standing nearly at the bottom of the list (61/65) with e-readiness score of 3.06/10. And EIU considers that e-commerce in Vietnam is still at a decidedly fledging stage. Major reasons cited for this underdevelopment include the insufficient telecommunications infrastructure and Internet connectivity, expensive Internet access, absence of adequate legal and regulatory frameworks, shortage of requisite human capacity, and failure to use local language and content (ITU, 2002; EIU, 2005)

Though the Vietnamese present e-business environment is still unfavorable, all difficulties mentioned by Vietnam businesses such as low transmission speed, inadequate online payment system, information protection and high cost can be solved (UNDP, 2003). Thus the local businesses should have a strategic vision on the e-commerce issue. Establishing a Web brand in Vietnam has a great possibility now as the Internet markets are still not saturated like the ones in other developed countries (EIU, 2005). Building and maintaining Web brand consistent with off-line tools can be a bold step which give the company a big step forward to have higher competitive advantage.

We expect Internet's impact to brand marketing in Vietnam to increase over the next five years, as the Internet's adoption and usage are increasing steadily among consumers and businesses; as businesses are learning better how to use it as a medium in its own right and in combination with other media; and as technology (broadband, mobile Internet, wireless LANs, digital TV, etc.) is still developing very fast and will be cheap enough to achieve mass market adoption over time.

1.3.4 Inadequacy of Current Research

From a review of previous research, studies of the manufacturing sector in Vietnam are numerous (GSO, 1999; UNIDO, 1999; CIE, 1999). Most of them have focused on macro solutions and strategies for promoting and enhancing manufacturing development. While on another side, research on branding practice in Vietnamese enterprises has currently attracted special interest (Viet Brands, 2002), very little effort has gone into investigating how enterprises explore the powerful medium as Internet in branding purpose. There are several studies on Internet applications in Vietnamese business community have been conducted (GIPI, 2004; MOT, 2006), but to our knowledge, virtually no comparable work regarding brand on internet exist because of the novelty of the problem in the country. There's no study conducted to examine how Vietnamese companies use their Web pages to present themselves, manage their reputations, and build their brands.

In this context, our research will focus on the micro level of manufacturing enterprises in order to contribute to the understanding in a different dimension. Particularly, this research examines the impact of Website features and functions on Web branding performance and may shed some light on relationships between Web marketing activities relative to Web branding potential.

Thus, the importance of manufacturing sector, the significance of brand and Internet, and the lack of a study of Web brand practice at Vietnamese enterprises are the justifications for this research.

1.4   Theoretical Model

A research model, the AIPDB model, derived from relevant literature was developed in chapter three and is summarized in Figure 1.1 showing the relationships between Website's functions (Attracting, Informing, Positioning, Delivering and Building relationships) and Web branding components (Web awareness and loyalty).

To test this theoretical model, ten hypotheses were formulated. The nine hypotheses examine the relationships between Website's functions and Web branding potential.

There is one hypothesis focus on the relationship between the two components of Web branding, specifically the impact of Web awareness on Web loyalty.

Attracting Function:

H1a: There is a positive relationship between company's offline communication activities and Web awareness;

H1b: There is a positive relationship between company's online communication activities and Web awareness;

H1c: There is a positive relationship between Web Awareness and Web loyalty;

Informing Function:

H2: There is a positive relationship between information quality and Web loyalty

Positioning Function:

H3a: There is a positive relationship between Web navigation and Web loyalty;

H3b: There is a positive relationship between Website appearance and Web loyalty;

Figure 1.1: Research Model of Relationships between Company's Web Marketing Activities and Web Branding Potential
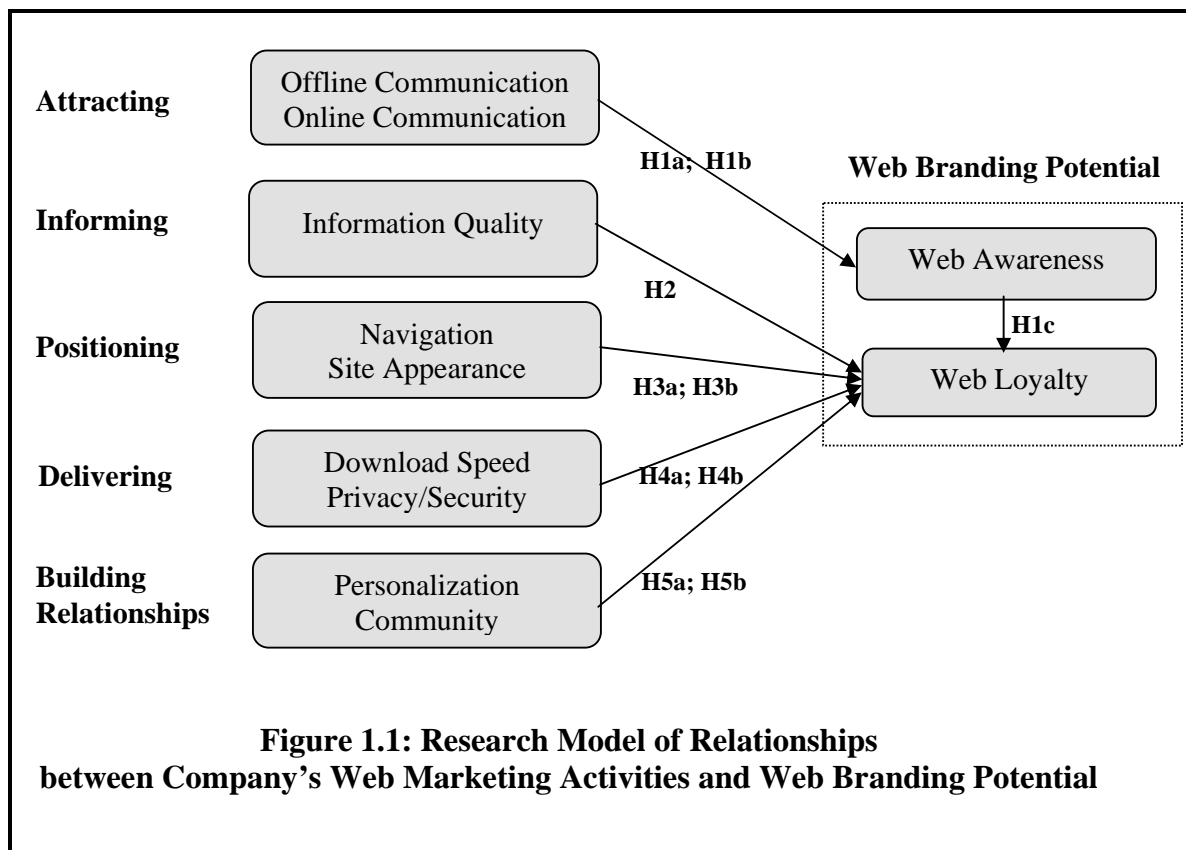
Delivering Function:

H4a: There is a positive relationship between downloading speed and Web loyalty;

H4b: There is a positive relationship between Web privacy/security and Web loyalty;

Building Relationships

H5a: There is a positive relationship between personalization level and Web loyalty

H5b: There is a positive relationship between online community and Web loyalty;

As noted above, these ten hypotheses will be further developed in chapter three. A brief outline of the research methodology is discussed in the next section.

1.5   Research Methodology

This research will apply both quantitative and qualitative approaches to collect and analyze data to solve the research problem stated above.

1.5.1 Quantitative Approach

A quantitative survey is the main method employed to test the hypotheses described in previous section. This empirical part will be conducted from customer perspective to evaluate the Web branding practice among manufacturing enterprises. The main issues of this approach are the following:

- The target population of the study consists of all Internet surfers which have online experience with Websites of manufacturing companies, who are living and working at the two big cities in the country, Hanoi and Hochiminh city;

- The sampling technique is convenience method that begins from locations which have high concentration of Internet users, such as universities, offices, institutions and IT parks. The personal contact will be used to collect data. A sample size of 450-500 usable responses is expected;

- The multiple regression analysis will be used to assess the theoretical model for quantifying the relationships among variables;

1.5.2 Qualitative Approach

A case study will be designed as an additional method to help examining the Web branding development process at a specific manufacturing company. Traphaco, the

local pharmaceutical company, was chosen for in-depth study for several reasons justified in chapter six. A framework of Web branding development will be built from theory. This theoretical framework and the AIPDB model will be used as a guide for the case analysis.

Both secondary and primary data will be gathered for the case study. The secondary data is gathered from company documentations (annual business reports, company brochures, and other company internal records). The primary data is obtained through the content analysis of Traphaco's Website and through personal interviews with some specific individuals within the field of our research problems.

1.6 Definitions of the Key Terms

This section presents definitions of key terms used in the study. There are: brand, brand awareness and loyalty; Internet and Website; Web branding, Web awareness and loyalty.

1.6.1 Brand, Brand Awareness and Loyalty

Brand: The concept of the brand lies at the heart of marketing theory and practice. It gives the foundation for further development of other key definitions of this research. There are numerous interpretations of this concept presented in chapter 3. For the purpose of this study, the brand definition highlighted in the online dictionary Wikipedia (2006a) is the most suitable:

"A brand is a symbolic embodiment of all the information connected to a company, product or service. A brand serves to create associations and expectations among products made by a producer".

This definition works to remind us the important key point: a brand is combination of features (what the product is), customer benefits (what needs and wants the product meets) and values (what the customer associates with the product). A brand is created when marketing adds values to a product, and in the process differentiates it from other products with similar features and benefits (Kapferer, 1992).

Brand awareness: *"Customer's ability to recognize or recall that a product/service is a member of a certain product/service category"* (Aaker, 1991, p.11).

Brand loyalty: *"The strength of the relationship between the consumer's relative attitude toward a brand and repeat purchase"* (Dick and Basu, 1994, p.99).

1.6.2. Internet and Website

The **Internet "***is the worldwide, publicly accessible network of interconnected computer networks that transmit data by packet switching using the standard Internet Protocol (IP). It is a "network of networks" that consists of millions of smaller domestic, academic, business, and government networks, which together carry various information and services, such as electronic mail, online chat, file transfer, and the interlinked Web pages and other documents of the World Wide Web"* (Wikipedia, 2006b).

It is a general term used to describe an international network of networks (**internet**work) which enables PCs to transmit information and communicate with each other around the world at low cost (Barwise *et al*, 2002).

Since the birth of the World Wide Web (or the Web) in the 1993, the Internet has experienced impressive growth among businesses and commercial organizations that has begun to see the potential for the online market.

A **Website** (or web site) *"is a collection of web pages, typically common to a particular domain name or sub domain on the World Wide Web on the Internet"* (Wikipedia, 2006c).

A web page is a document, typically in written in HTML/XHTML, that is almost always accessible via HTTP, a protocol that transfers information from the website's server to display in the user's web browser. Web pages are interactive documents that have a unique address and it is also the name the visitor use when they navigate on the World Wide Web.

1.6.3 Web Brand, Web Awareness and Loyalty

Borrowing from branding literature and based on Simeon's definition of virtual branding (1999, 2001), we define Web brand here and arrive to suggestion that Web brand consists of Web awareness and Web loyalty:

Web Brand: *"as the ability of a firm's Website to gain recognition, to establish its presence in the minds of customers and to repeatedly attract potential customers to the Website".*

Similar to brand awareness and loyalty as well as developed from definitions of site awareness and e-loyalty applied for Vietnamese e-business environment (see chapter 3), we conceptualize:

Web Awareness: *"as the customers' ability to remember or identify the Website across a reference in their online and offline environment".*

Web Loyalty: *"as the customers' favorable attitude toward Website and their intention to revisit and recommend the site".*

1.7   Research Organization

This study is organized into seven chapters, as illustrated in figure 1.2.

Chapter 1 provides an introduction of the research, including the background to the study, identification of the problem, research objectives, scope and limitation of the study, research methodology and the definitions of key terms.

Chapter 2 presents a review of Vietnam economy and the manufacturing sector. Specifically, this chapter outlines the current state of the country's economy and its economic integration process in general as well as the country's ICT development in particular. It also presents the role of manufacturing enterprises in the economic reform, their strengths and weaknesses, and their current status of Internet adoption. Finally, a brand management practice in Vietnam is reviewed from previous works.

Chapter 3 reviews the literature concerning relationships between dynamic Web marketing activities and Web branding potential, concentrating on Website functionalities of attracting, informing, positioning, delivering and building customer relationships. A theoretical framework for evaluating Website from the customers' perspective of user/customer satisfaction will be offered in the chapter.

Chapter 4 explains the research methodology of the study. It will present the survey design, measurement development, population and sampling, data collection and analysis methods of the study.

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                         ┌─────────────────────────┐
                         │        Chapter 1         │
                         │       Introduction        │
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Figure flow:

Chapter 1 — Introduction

↓ splits to:

Chapter 2 — Vietnam Economy and Branding Potential over the Internet

Chapter 3 — Determinants of Web Branding

↓ merge to:

Chapter 4 — Research Methodology

↓

Chapter 5 — Findings and Discussion

↓

Chapter 6 — Framework for Web Branding Development

↓

Chapter 7 — Conclusions and Implementations
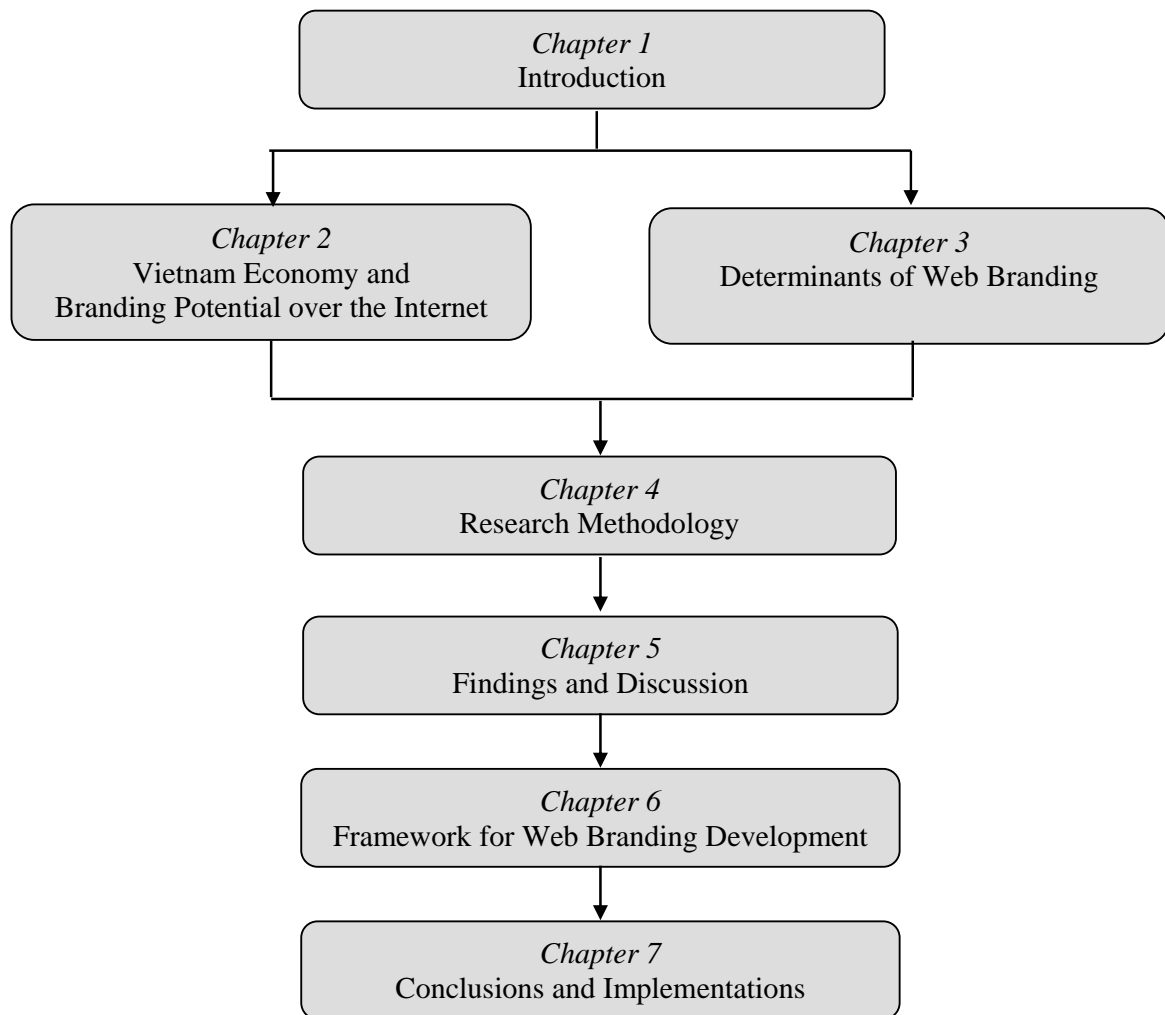
Figure 1.2: Outline of the Research

Chapter 5 provides discussion and analysis of findings from a quantitative survey conducted in Hanoi and Hochiminh city with thorough interpretations.

Chapter 6 proposes a framework for Web branding development process in Vietnamese companies, especially in manufacturing enterprises. The chapter will also examine the specific case study of Traphaco, the local pharmaceutical company, with its Website's building and promoting activities.

Chapter 7 draws out the conclusions and recommendations for future improvements of Web brand development in Vietnamese manufacturing enterprises. Directions for further research are also presented in this chapter.

1.8   Research Limitations

There are some limitations of the study:

- First of all, due to the dynamic nature of the Internet media, Website and Internet users' characteristics are likely to change with time. Basically, this study only provides a "snapshot" rather than long-term longitudinal study in e-business;

- Second, the sample may not be representative of the population of Internet users in Vietnam because the sample is not derived from a random sampling procedure. Moreover, this study will be conducted only in Hanoi and Ho Chi Minh city, the two biggest cities in the country, where concentrated almost companies having Internet presence. Hence, it may be necessary to undertake further research if universal generalization in Vietnam is to be claimed;

- Third, this research will concentrate only on manufacturing enterprises' Websites. It may not be possible to apply conclusions to the sites of all sectors in the economy;

- Forth, in this study, the Web Branding independent variables accounts for a limited influence on the dependent variables (Web Awareness and Web Loyalty). More independent variables need to be identified and specified in future research for a better understanding of Web marketing effectiveness on Web Branding;

1.9   Summary

This chapter explains briefly the structure of the study, beginning with the background to the research, research problem and objectives. The research was justified, and followed by a summary of the research model and hypotheses. Research methodology was briefly explained and definitions of key terms were presented. Finally, limitations of the research and content of each chapter of the thesis were outlined. The next chapter will review the Vietnam economy and branding potential over the Internet.

2

VIETNAM'S ECONOMY AND BRANDING POTENTIAL OVER THE INTERNET

2.1   Vietnam's Economy

2.1.1   Country Profile

The Socialist Republic of Vietnam is a communist country in Southeast Asia. It is situated in eastern Indochina - bordering China, Laos and Cambodia, as well as the South China Sea. Some key facts about Vietnam from the year 2005 are presented in Table 2.1.

Geography: Vietnam is the largest of the lower Mekong countries, stretching along the China Sea for 1650 kilometers from north to south. The country's territory is long and thin. The nation has a total land area of 331,689 square kilometers. Almost 75% of the land is mountainous. Vietnam is located in both tropical and temperate zones. The whole country has a considerable amount of sunshine, a high rate of rainfall and a high level of humidity. It is also affected by monsoons.

Population: Vietnam's population was approximately 83.120 million people at the end of 2005, and it is expected to grow to 88 million by 2010, with an annual growth rate of 1.3% (GSO, 2005). The mean population density is 249 people per square kilometer, one of the highest levels in the world. In 2005, about 27% of Vietnam's population was urban and 73% rural, down from 85% in the early 1980s. Vietnam is one of the world's youngest populations with over 60% under the age of 30 (AcNielsen, 2005).

Politics: Vietnam is governed through a highly centralized system dominated by the Communist Party of Vietnam (CPV). The country's leadership is divided into three structures: the Party, the National Assembly, and the Government. The President, as the head of state, represents Vietnam in domestic and external affairs and is elected by the National Assembly. The political stability of Vietnam remains the main characteristic in attracting direct foreign investment.

Economic and Social Development: The last two decades have been an extraordinary period of time for the people of Vietnam. The country has undergone a dramatic transformation, sparked by *Doi Moi*, a comprehensive reform process, which has transformed the country from a centrally planned economy to a socialist-

Table 2.1: Key Facts about Vietnam (2005)

General	
Capital	Hanoi
Currency	VND; 1US$ = 15,900 VND *(December 2005)*
Major language	Vietnamese
Political structure	Communist single-party state
Land area	331,689 km^2
Population	
Population	83,120,000 *(12th in the world)*
Portion of rural population	73.2%
Population density	249 people/km^2
Annual population growth	1.31%
Economy	
GDP per capita	US$ 640
GDP per capita (PPP)	US$ 2782 *(131st in the world)*
GDP total	US$ 52.7 billion *(VND 838 trillion)*
Real growth of GDP	8.4%
Annual average GDP growth	7.25% (2001-2004) and 6.95% (1996-2000)
Sectoral Share of GDP	
Agriculture	20.9%
Industry and Construction	41.0%
Services	38.1%
Inflation	8.4%
External debt	35.5% of GDP
*Principle exports***:** crude oil (23%); garments and textiles (15%); footwear (9.3%); sea products (8.5%); rice (4.3%); rubber (2.4%); coffee (2.2%); others (35.3%)	
*Principle imports***:** capital equipment (14.2%); refined petroleum (13.5%); steel (8%); cloth (6.5%); textiles and leather materials (6.3%); electronic components (4.6%); motorbikes (2%); fertilizers (1.8%); others (43.1%)	
*Principle export markets***:** USA (20%); Japan (14%); China (9%); Australia (7%); Singapore (5%); Taiwan (4%); Germany (4%); UK (4%); France (2%); Holland (2%); others (29%)	
Competitiveness	81 *(ranking out of 117 countries)*
Technology Index	68
Public Institutions Index	62
Macroeconomic Environment Index	39
Social Development	
Life expectancy at birth	70.21 years
Adult literacy rate	93.4%
Human development index	108 *(ranking out of 177 countries)*

Source: Synthesized from GSO (2005); UNDP (2005), WEF (2005a), ADB (2006)

oriented market economy. Vietnam's economy doubled in size during the 1990s, and the rate of poverty was halved from around 70% to 35% (UNDP, 2003; 2005). Savings rate rose six-fold to around 25% of GDP and export rose by an average of 25% per year. Vietnam changed from a nation with a food deficit to become the world's second largest exporter of rice (WB, 2003).

Social indicators improved markedly and there were widespread and visible improvements in the lives of Vietnamese citizens. Vietnam has achieved a very high literacy rate of 93.4% among adults. The overall quality of healthcare is regarded as good, as reflected by 2005 estimates of life expectancy (70.61 years) and infant mortality (25.95 per 1,000 live birth). Vietnam's human development index (HDI)[1] continues to improve. Sustained economic growth has propelled Vietnam's human development ranking to 108 out of 177 countries, from 112 in 2004 (UNDP, 2005).

International relations: In addition to the economic reform, international relationships between Vietnam and other countries have been significantly improved. In February 1994, the U.S.A lifted its trade embargo with Vietnam and began the process of normalizing relations. In 1995, Vietnam became the first Communist country to join ASEAN. In 1998, Vietnam was admitted into APEC. In the November 2006, after 10 years of negotiations, Vietnam had officially joined the WTO.

2.1.2 Economic Performance

Since the re-unification of the country in 1975, Vietnam's economy has experienced two significant periods. From 1975 to 1986, the State adopted a centrally planned model. The period 1986 – present has seen a transition to a market economy. In December 1986, in response to the high inefficiency of the tightly controlled economy, Vietnam took a decisive step towards a market economy through the launching of a series of economic reforms known as "*Doi Moi*" (Vu, 1994; Dodsworth *et al*., 1996).

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[1] **HDI** *(Human Development Index) combines indicators of economic growth, education and health outcomes, measures long-term progress in human development. (**life expectancy** at birth; **knowledge** as measured by adult literacy rate; **standard of living** as measured by GDP per capita, & cost of living).*

Doi Moi has provided substantial structural reforms (Webster, 1999). The government has acted to develop a multi-sector economy and open the economy to the world market. Private companies, along with a rapidly growing foreign investment sector are contributing to the relative decline of state ownership. In 2005, the private sector accounted for nearly one third of all industrial output, but employed four times as many workers as the state-owned sector. Despite these changes, the Government will retain ownership of the larger corporations for some time (MPI, 2005).

Vietnam achieved around 8% annual GDP growth from 1990 to 1996 and this continued at around 7% from 2000 to 2004, making it the world's second-fastest growing economy. Simultaneously, investment grew three-fold and domestic savings rose six-fold. The spending power of the public has also noticeably increased. Gross national income was US$640 per capita in 2005. However, based on purchasing power parity, Vietnam's per capita GDP was approximately UD$2,782 (UNDP, 2005).

Industry ownership was mixed, reflecting Vietnam's hybrid economy, as indicated by the following statistics. Percentage of output: state-owned, 35% and declining; private- owned, 30%; and foreign-owned, 35%. In 2005, inflation was 8.4%, higher than the 3.4% measured in 2000, but down significantly from 160% in 1988. Inflation was stabilized at the single digit level and exchange rate was fairly stable. The healthy performance in 2005 was achieved despite the adverse impact of avian flu, drought for part of the year, a more challenging export market for clothing, and rising prices of key inputs (ADB, 2006).

Despite these signs of progress, the WEF's Global Competitiveness Report (2005b) ranked Vietnam 81st in the world, down from 77th in 2004 and well behind its model China, which ranked 49th in 2005. Vietnam also lags behind China in terms of property rights, the efficient regulation of markets, and labor and financial market reforms. Therefore, further reform is needed to tap into its potential and enhance economic development.

The long-term outlook of the socio-economic development plan for 2006-2010 envisages average annual GDP growth of 7.5-8%. One goal is to bring poverty down, from 24% of households in 2004, to 15-16% of households by 2010. These targets appear achievable, given the strong domestic demand and surging private investment (ADB, 2006).

2.2   Branding Practice in Vietnam

2.2.1   Overview of Industrial Sector

Industry was the fastest growing sector, with growth averaging over 14 % 1991 – 1998. As a result, its share of total output expanded from 23 % in 1991 to 36.7 % in 2000, and now it accounts for 41% of GDP in 2005 (GSO, 2005). With a growth rate of 17.2% attained in 2005, the highest level for the past years, the industrial sector acts as the leading engine for the national economy of Vietnam (MOI, 2006).

For the whole year of 2005, industrial production value is projected to be over VND 415 trillion (roughly 26.3 billion USD). The domestic private sector posted the highest production value growth of 24.1 %, followed by the foreign investment sector, with 20.9%, and the State-owned sector, with 8.7 %. Table 2.2 shows the data of industrial production by ownership for both the percentage of total output and growth rate.

Table 2.2: Industrial Production by Sector of Ownership

Year	State-owned		Private-owned		Foreign-owned		Total industrial production	
	% of total output	Growth rate	% of total output	Growth rate	% of total output	Growth rate	Total output (trillion) VND)	Growth rate
2001	41.1	12.7	23.6	21.5	35.3	12.6	227	14.6
2002	40.3	12.5	24.3	18.3	35.4	15.2	261	14.8
2003	38.6	11.9	25.7	23.3	35.8	18.0	305	16.8
2004	37.2	11.8	27.2	22.8	35.7	15.7	354	16.0
2005	35.1	8.7	30.0	24.0	34.9	20.9	415	17.2

Source: Summarized from GSO (2005) and MOI (2006).

Manufacturing, which accounts for about half of the industry's value added, has been a major contributor to gains in both output and employment, with output rising by 13% in 2005. Furniture and electronic goods account for a fast-rising share of total manufactured exports and, though growth of clothing and footwear exports has decelerated, they are still important. Overall, the proportion of light manufactured goods in total exports increased from 36% in 2001 to an estimated 40% in 2005. The sector helps to generate growth, jobs and income, and helps to bring the country out of economic stagnation (ADB, 2006).

To make Vietnam an industrialized country by the year 2020, the industrial sector must grow by 15.2% - 15.5% per year for the next 5 years. To achieve this, the industrial network must be developed nationwide with diversification of both ownership and production on the basis of optimizating all home resources and international cooperations. In the phase from 2006 to 2010, export will continue to serve as a target for the industrial sector. Major export products are processed agricultural, forestry, and aquatic products, textiles and garments, footwear, mechanics, ships, wood furniture, etc. (MPI, 2005).

2.2.2 *Branding Practice among Local Manufacturers*

The concepts of marketing and branding, which have resulted from the open economic policies and globalisation orientation, seem new to most Vietnamese companies. Ten years ago, branding was understood as names or origins functioning as identities to distinguish one product from another. The most interesting turning point marking a rise in branding awareness among local companies was when Unilever bought the local brand P/S toothpaste for $5 million in 1998(VET, 2005). Such a large sum of money for an intangible asset! This unprecedented event provided motivation for Vietnamese companies to begin studying brand building. Furthermore, the market entry of global brands together with their impressive marketing activities has convinced local people of the power of branding.

There has been a significant improvement in brand development by Vietnamese firms during the past five years. In a recent survey[1], which aimed to measure public awareness of brands among Vietnamese customers, the local brand names made up half of the 500 most well-known brands in the market. Among the top 10 most famous brands are three local brands (Beer 333, Kinh Do confectionary and Vinamilk). These are in line with the most powerful global names such as Coca-Cola, Omo, Sunsilk and Honda (ST, 2006a).

Still, it must be conceded that most Vietnamese companies do not understand branding correctly, which has created many misconceptions. Some identify branding with advertising, while others merely think of it as a communication activity without giving heed to consistency in branding execution, distribution channels, or product quality. Vietnam's producers do pay attention to branding, but they are behind the pace with regard to "brand identity", which is a synthesis of all marketing activities (VET, 2005).

From a branding point of view, Vietnamese companies and their branding activities could be categorised as follows: (1) New companies, being aware of branding, like to do it correctly right at the beginning. They either build the brand by themselves or request external support from advertising agencies or consulting firms; (2) Developing companies, having acquired branding activities naturally without suitable direction, are conducting brand reviews to correct branding mistakes and build a new strategy; (3) Small companies, understanding the important role of branding but hesitating to work on it because of insufficient resources, are wondering how to build the brand within their limited conditions; (4) Established companies, having resources but paying no attention to branding, are now starting to build the brand and seeking external expertise (ST, 2006a).

One thing is certain: foreign enterprises in Vietnam better recognise the value of their trademark than their local counterparts. Furthermore, foreign companies'

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[1] *A survey jointly conducted by AC Nielsen and the VCCI (Vietnam Chamber of Commerce and Industry) in February and March 2006. It polled more than 3000 consumers in 10 key cities in Vietnam.*

marketing campaigns are usually backed by their international expertise. The advertisements for foreign products are usually made by foreign agencies with great marketing understanding and state of the art techniques for presentation. Thus, they are much more appealing and efficient than the Vietnamese ones and hold a particular attraction for customers.

In contrast, advertisements for Vietnamese products, mainly made by local advertising agencies, are usually not appealing to consumers due to the irrelevance between advertisement elements and product features. The claims used are often insufficient in terms of product information because, in many cases, they focus on the manufacturer or distributor's description rather than on rational or emotional appeals. So they rarely attract consumer attention or create an intention to buy (VIR, 2004).

Aside from the large gap in advertising creativity between local and foreign companies, there is the problem of lack of funds for marketing. While domestic producers struggle to find effective ways to deduct costs for media campaigns, overseas brands race ahead. Surveys have revealed that multinational companies invest an average of 7-10 per cent of their annual income on developing brands compared with less than 3 per cent spent by domestic operators. Some multinationals are even reported to reserve 25-30 per cent of their total revenue for marketing new products and brands (ST, 2006b).

A lack of professionalism is another barrier preventing businesses from achieving high marketing efficiency. A survey conducted by the Project for Enterprises Support in Building and Promoting Brands[1] showed that 49 % of the 500 enterprises questioned placed brand development activities under the direct control of management boards. It also showed that most local firms composed their brand development strategies without using external services, and made very little use of consultants from professional agencies. This money-saving approach is usually

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[1] *The project was implemented by the weekly Saigon Marketing Newspaper and the Vietnamese High Products Club, 2002. It's aimed to find the brand perception and practice among local companies with sample size of 500 units.*

ineffective due to the absence of professional aid like market surveys. On the other hand, a shortage of reliable consultancy resources has barred businesses from seeking professional assistance. A lack of satisfaction about the quality of services on offer to entrepreneurs was highlighted in the survey project mentioned earlier, although foreign consultants were highly regarded.

For the tools cited to promote brands, advertising through mass media (TV, newspaper, billboard, etc.) is given the highest importance (Viet Brands, 2002). 85% of firms reported advertising as a critical element in long term brand building. Whereas only 20% of local firms used sponsorship and consider it a powerful weapon to launch a new brand. Most of the firms avoid this tool because it requires continuity and depth that they can not meet.

Very few enterprises claimed to use the Internet as an effective channel for brand communication. A large survey[1] conducted in 2005 showed that while 91 % of the companies are connected to the Internet, only 30 % of them have a company Website. Local firms consider conducting business via the Internet to have little potential in Vietnam. The main difficulties which they mentioned included low transmission, high cost for visitors to obtain information and very small audience base. These difficulties make the Internet an unfamiliar and unfavorable medium for brand building practice in the business community (VIR, 2003).

2.3   Internet Development

2.3.1 Infrastructure

Vietnam is one of the major emerging markets of the ASEAN region. One of the elements underpinning this growth has been the expansion in telecommunication networks. The government of Vietnam has made the development of the ICT sector one of its highest economic priorities for the coming years.

ICT Network: In the past few years, Vietnam had made huge strides in terms of ICT metrics (Table 2.3). The total number of telephones in Vietnam jumped from 5

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[1] A nation-wide survey conducted by Vietnam Chamber of Commerce and Industry to find out how local companies were using IT. It was completed in 2005 with participation of 2233 firms.

Table 2.3: ICT Key Facts

	12/2001	12/2005
Fixed phone operators	3	3
Mobile phone operators	5	6
Internet service providers	5	16
Fixed lines per100 inhabitants	5.01	8.17
Mobile phones per 100 inhabitants	1.25	10.8
Internet subscribers per 100 inhabitants	0.5	12.9
PCs per 1000 inhabitants	8.9 (1999)	14 (2004)
Market structure: monopoly in fixed lines; competition in certain regions and services		

Source: International Communication Union (2002); VNPT (2005).

millions to over 15 millions in just five years (MOT, 2006). At the end of the year 2005, the country's fixed-line subscriber base has achieved 6.78 million for a teledensity of over 8%.

Growth in the mobile market has been especially dynamic, increasing at an annual rate of 150-200% on average in recent years. With recent deregulation and competition among 6 mobile service providers[1], Vietnam managed a nine fold jump within five years. This strong growth is likely to continue with the expectation that the total number of mobile subscribers will exceed 21 million by 2008 (ST, 2006b).

The growth in Internet and telephone use far outstripped the increases in per capita. The latest figures provided by VNNIC[2] indicates that there are a total of 3,350,075 Internet accounts in Vietnam and more than 14 million users in October 2006, or a penetration of 17.1%.

The increase in personal computer use was also rapid, with the number of PCs nearly doubling from 1999 to 2004. However, PC data tends to lag that of mobile phones or the Internet, as the retirement rate of older computers must be estimated. Now Vietnam ranks second worldwide for growth in Internet and mobile information service development (VET, 2006a). The rapid diffusion of ICT

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[1] *The mobile phone competitive structure: VNPT (91.84% = Vinafone+Mobifone), Viettel (4.26%), SPT (2.95),VPTelecom (0.59), Vishipel (0.27), Hanoi Telecom (0.08%).*

[2] **VNNIC** *is a non-profit affiliation to the Ministry of Posts and Telematics (www.vnnic.net.vn).*

awareness is basically sustained by a very young population that is comparably well educated and open to change and innovations.

Although the ICT infrastructure in Vietnam has developed in a number of ways in recent years, the general level of ICT remains poor in comparison with the average level worldwide. Table 2.4 shows the country's position in the global IT map. There have been many different ratings studies that evaluate the e-business environment and performance between countries. Each of these evaluation projects investigates a different set of countries, looks at different aspects of technological/social infrastructure, and is based on different methodologies. However, drawn together, these studies provide a useful indication of how Vietnam compares to other countries.

Table 2.4: Vietnam's Ranking in the Global IT Map

	Information Society Index[1]		Networked Readiness Index[2]		E-readiness[3]		E-government Index[4]	
	Rank	**Score**	**Rank**	**Score**	**Rank**	**Score**	**Rank**	**Score**
2001	-	-	74/75	2.42	58/60	2.76	-	-
2002	-	-	71/82	2.96	56/60	2.96	90/169	3.25
2003	53/53	182	68/102	3.13	56/60	2.91	97/191	3.57
2004	52/53	-	68/104	-0.46	60/64	3.35	112/191	3.38
2005	52/53	199	75/115	-0.47	61/65	3.06	105/191	3.64

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[1] ***Information Society Index*** *(ISI): Introduced by IDC/World Times, which is based on 23 variables in four categories -- computer, Internet, information and society infrastructure facilities (www.idc.com).*

[2] ***Networked Readiness Index*** *(NRI): the degree of preparation of a nation or community to participate in and benefit from ICT developments. NRI's framework is based upon 3 aspects: development and use of ICT of three stakeholders -- individuals, businesses and government; general macroeconomic and regulatory environment for ICT; degree of usage of ICT and degree of readiness of these stakeholders (WEF, 2005).*

[3] ***E-readiness****: The index is based on 6 criteria - level of networking, legal and policy environment, social and cultural infrastructure and supporting electronic services. Score of 10 (EIU, 2005).*

[4] ***E-Government Index****: Introduced by UNPAN to evaluate 191 member nations of the United Nations. It's a composite measurement of the capacity and willingness of countries to use e-government for ICT-led development. The indicator was based on 3 areas: Web Measure index, Telecommunication Infrastructure index and Human Capital index Score of 10 (UNPAN, 2005).*

The figures show that Vietnam was almost at the end of the list of the information society index (52/53 for ISI). In the 2005 Index, Vietnam scored 199. This score can be broken down into the components as: computer (25), telecom (25), internet (29) and social (121). In the 2005 EIU study, Vietnam ranked 61st out of the 65 largest countries in the world. This was the worst ranking of any Asian country in the study. Out of a total of 10 points, Vietnam received 3.06 points. Meanwhile, the latest report of UNPAN (2005) showed that in terms of e-government, Vietnam improved 7 grades compared to 2004, ranking 105th out of the total 191 nations rated. In general, Vietnam has a long way to go to improve its ICT physical infrastructure and its low e-readiness ranking in the global IT map.

Competitive structure: The structure of the Vietnam telecommunications sector is currently undergoing major change as new operators enter the market and existing operators increase the scope of their business activities. However, the government owned incumbent operator, VNPT, still dominates the sector. Today most of the top ICT companies in the world have already established offices in Vietnam. Nonetheless, only a tiny fraction of these companies have contracts to provide telephone operations in Vietnam. Foreign ownership in telecommunication is not currently permitted. From the low level in 1999, the latest Internet usage data from national sources suggests very rapid growth. The high growth rate appears to be due to a government decision to make it cheap and easily available with multiple ISP's. Given the low-cost Internet cafes in urban areas, facilities in schools and public places, and the declining cost of Internet access and PCs, this spread is not entirely surprising.

Access to the Internet is not only a matter of cost but also of speed. Vietnam was just starting to offer an ADSL service in July 2003 and the broadband market was expanding very fast but there is still a situation of excess of demand over supply. There are many speed/cost options for ADSL services, but the actual speeds are much lower than advertised and the Internet connection quality is also not reliable (Depice, 2005).

Until the year 2002, Vietnam Data Communication (VDC) had been the sole Internet Exchange Access Provider. Now Vietnam has six IXPs, three of which have been providing services. There are 16 Internet Service Providers (ISP), five of which are very active in the market. What seems to be missing at the moment though is a joint effort to provide a proper web portal for Vietnam, as the portals offered by the different ISPs vary in quality and content (MOT, 2006).

Digital Divide: Although there have been a number of strong developments in ICT in Vietnam over recent years, there is the danger of unequal access to ICT, creating a new generation which will include some knowledge-poor and information-starved people. The digital divide has become a reality in the world and Vietnam is no exception.

There is a distinct regional disparity in access to ICT tools such as fax machines, computers and televisions. The percentage of people accessing ICT in highland and remote areas is much lower than the average. This variation can be seen for computers, with 3% of urban households owning computers, compared to only 0.07% of rural households (ITU, 2002). A similar situation can be seen in telephone subscriptions. 39% of telephone subscribers were situated in Hanoi and HCM city, areas which have account for only 10% of the country's population. (UNDP, 2003).

Also the extremely rapid growth in Internet use by a high percentage of the urban elite and students has yet to be matched by a spread into rural areas and among the older population. Hanoi and Ho Chi Minh City are taking the lead in the number of Internet subscribers with almost 70 % of the total. The use of cheaper used PCs and wireless connections is expected to increase usage to 30% of the population in the future (MOT, 2006).

Nevertheless, the country's computer literacy remains in its infancy with many users unaccustomed to ICT and the potential that ICT can bring (UNCTAD, 2005). On top of this, even those who can access ICT, especially the Internet, struggle with language as the majority of the content is in English. This means that use of the Internet is mainly restricted to e-mailing, checking world and national news, and chatting (ITU, 2002). The attractiveness of the Internet could be enhanced if the

content was made relevant to Vietnamese, including information about the daily life of local people, business and learning.

2.3.2 Internet Policy and Strategic Framework

The Internet was recognized as a powerful tool for research and economic development. However, in contrast to the rapid leaps in Internet and telecommunication infrastructure, our laws, which used to offer ample protection and give security online, are now antiquated and have not been adequately amended to become responsive to the changing times. The uncertain regulatory situation and the delay in the passage of e-commerce related laws are the main challenges or inhibitors to e-business in the country.

Prior to 2000, e-commerce was a new legal concept in Vietnam. Between 2000 and 2005 policies and legislation frameworks have been greatly improved. The E-Transaction Law was approved by the National Assembly and began to enact in March 2006. It is scheduled to finish the drafts of decrees in five areas: banking transactions, finance transactions, state agency transactions, cyber digital services and e-commerce by the end of 2006.

The Trade Law, Civil Law, Customs Law, Copyright Law and others have been corrected and completed to create a more favorable legal environment for E-commerce (MOT, 2006). However, laws for data protection, computer crime, electronic fund transfers, and universal access are still waiting to be passed.

Vietnam set itself some ambitious targets for the expansion of its ICT infrastructure. According to the Master strategy of 2005-2010, Vietnam aims to reach an annual growth rate of 20-25%. For every 100 inhabitants, the country will have penetration ratios of 32-42 telephones, 8-12 Internet accounts, 25-35 Internet users, 30% broadband and 10 PCs by 2010 (NIPTS, 2005).There is good reason to believe that, within a decade, the sector of Internet and Telecommunications in Vietnam will be in line with the rest of the world.

2.3.3   Internet Usage and E-commerce

The number of Internet users in Vietnam has grown rapidly since the Internet became available for the public in 1997. Internet use in Vietnam at the end of 2006 was reported to have doubled since 2004, to 17.1 users per 100 inhabitants. This achievement gives great hope that Vietnam will catch up with the world's average rate (VNNIC, 2006).

Along with the strong growth of Internet infrastructure, business awareness and the application of EC has made a great step forward. A survey conducted among 504 enterprises in 2005 (MOT, 2006) showed that 89% of them are connected to the Internet (this figure is 30% for 2002), 80% use broadband (this figure is 66% for 2004 and 54% for 2003); 46.2% of firms have built Websites (in comparison with 10% for 2002 and 25% in 2004). Such a boom in a short time is a result of the introduction of ADSL services, the price drop of Internet and telecommunication since mid 2003, improvement in the quality of Internet services and the development of e-commerce supporting services (MOT, 2004, 2005, 2006).

Most enterprises are aware of the importance of promoting Websites in various ways. About 52% of the enterprises surveyed have already registered their Websites with online search engines, such as Yahoo!, Google or local online directories. More than 50% of those enterprises also use mass media as a marketing channel and exchange links with other Websites. However, there are still approximately 20% of enterprises which have not yet applied any measure to promote their Websites.

After the surge of economic integration and vigorous development of the information society, many enterprises consider an address on the Internet a vital part in their branding strategies. However, most of the existing Websites merely provide basic introductory information, thus cannot be regarded as the e-commerce which allows transactions between enterprises and their clients. Vietnamese enterprises' Websites are still at the infant stage of development with regard to their available e-commerce features. Most of the Websites are limited to a general introduction of the company and its products/services. This is the simplest form of Website, with static structure presenting general information and thus does not

require regular updates. Although a growing number of Vietnamese businesses are setting up websites, most still don't believe they can make a profit through the Internet (MOT, 2006).

The major stated barriers to e-commerce are problems of online payment and security. Other barriers are unsatisfactory information technology, human resources and telecommunications infrastructure. The ICT skills of enterprises' workers remain at elementary level. The average proportion of computer-literate staff is 51%, with office use the main purpose and only 64% taking initial steps to apply ICT to specific administrative tasks, such as financial accounting (MOT, 2005). Vietnam, in comparison with regional countries, is still in the first phase of e-commerce. Vietnam is currently trailing behind its Asian neighbors such as Singapore, Hong Kong and Malaysia in its use of the Internet, advancement in technology, and sophistication of regulatory frameworks.

Despite the fast growth in IT-related investments, it is not yet adequate for domestic e-business to take off. Cost for telecommunications and Internet service remained relatively high, the country was import-dependent in terms of IT products, the buying power of the population was weak, the legal environment was under the process of formation, the cultural demands of doing business using cash and doing it face-to-face was difficult to overcome, vocational training was weak, and media tilted towards providing entertainment rather than education (UNDP, 2003; EIU, 2005).

2.4   Summary

This chapter reviews the background of the research in terms of the country's economy and Internet development for branding potential. Vietnam's economy has undergone a tremendous transformation since *Doi Moi*. Over the past five years, Vietnam has sustained one of the highest growth rates in the region. Recent impressive development in ICT related sectors shows that Vietnam can take advantage and make full use of its most valuable asset, its own people, to advance and improve the country's well-being. However, Vietnam has to work more to improve the macro-economic environment that is conducive for e-business. The

local manufacturing enterprises still have a long way to go to learn the branding theory and practice in general, as well as to learn how to make use of the Internet's potential for their branding strategies.

3

DETERMINANTS OF WEB BRANDING

3.1   Role of Branding and Web Branding

3.1.1 Branding in Traditional Context

Brand and branding has long been a topic of high interest in both academia and business. For many years, branding has been recognized as one of the fundamental principles of a successful business because good brand confers many advantages on a company that help in establishing a sustainable competitive advantage (Aaker, 1991; De Chernatony, 1994; Keller, 2003).

The concept of the brand lies at the heart of marketing theory and practice. There are numerous interpretations of this concept (table 3.1). At a very basic level, a brand is merely a trademark or a symbol that helps a consumer identify the product/service of a manufacturer or service provider (AMA, 1960). A brand, however, does more than merely provide functional benefits to the consumer. It should be recognized that many practicing managers as well as academic scholars refer to a brand in terms of having actually created a certain amount of awareness, reputation, and prominence in the marketplace (Aaker, 1996; Oliver, 1999).

Brands represent intangible assets that are frequently more valuable than the physical and financial assets of businesses. The advantages enjoyed by a brand with strong customer loyalty include the ability to maintain premium pricing, greater bargaining power with distribution channels, reduced selling costs, and a strong barrier to potential new entries.

A brand is a combination of features (what the product is), customer benefits (what needs and wants the product meets) and values (what the customer associates with the product). A brand is created when marketing adds value to a product and in the process differentiates it from other products with similar features and benefits (Kapferer, 1992).

The very basic function of a brand is to distinguish the good of one producer from that of another and to provide customers with a means of recognizing and specifying products/services for their freedom of choice. This function has remained unchanged since the earliest times of branding history (Murphy, 1998).

Table 3. 1. Brand's Definitions

Definition	Reference
"A name, term, sign, symbol, or design, or a combination of them, intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competition".	AMA (1960, as cited in Kotler, 1994, p.442)
A "mental box", the most valuable real estate in the world, a corner of the consumer's mind.	Aaker (1991, p.11)
"A synthesis of all the physical, aesthetic, rational and emotional elements of a product, including the product itself, its name, logo, "look" and all expressions of the look, that collectively over time build clearly enough in the mental framework of the customer's mind to establish a niche there".	Murphy (1998, p.3)
"An identifiable product, service, person or place, augmented in such a way that the buyer or user perceives relevant unique added values which match their needs closely".	De Chernatony and McDonald (1994, p.18)
"A brand is a symbolic embodiment of all the information connected to a company, product or service. A brand serves to create associations and expectations among products made by a producer".	Wikipedia (2006a)

Branding is a process that consists of the development and maintenance of sets of product attributes and values, which are coherent, appropriate, distinctive, protectable and appealing to consumers. Creating a brand may require the precise scientific tools of marketing research, accurate assessment of competition and market, and the creative talent of advertising agency copywriters and art directors. A successful brand is thus a product of art, science and strategic thinking (Kapferer, 1992; Keller, 2003).

3.1.2   Branding in E-Business Environment

The Internet is considered to be one of the major technological innovations of the 20th century with the potential to radically affect economic development as well as social, political and cultural relationships (Barwise *et al*, 2002). Despite the World Wide Web's relatively recent arrival on the marketplace, it has had a major impact on brands and brand building theory and practice (Aaker, 2002).

Some early researchers had visionary predictions that Internet technologies would reduce search costs and enable consumers to compare products and prices anywhere in the world easily, and as well that low setup and distribution costs associated with this new electronic capability would represent a major potential threat to brands and make brand strength weaker than ever before (Kalakota and Whinston, 1996).

Evidence indicates that these predictions have yet to approximate reality. In fact, trusted brands may be even more important in a busy "information overloaded and untrustworthy world", where consumers are money-rich/time-poor, and where product quality still cannot usually be reliably judged online (Barwise *et al*, 2002; Dayal *et at*, 2000; De Chernatony, 2001). Therefore, it is likely, that users will continue to gravitate towards brands as a way to simplify choices, reduce search costs and build trust, security and an expectation regarding product quality (Tan, 1999; Carpenter, 2001; Danaher *et al*, 2003). With more choices from many unknown providers, customers tend to choose a provider that represents a set of values or attributes that are meaningful, clear, and trusted (a brand).

In the Internet shopping environment, strong brands are thought to increase online buyers' trust in products that they can't see by helping them better understand and visualize what they are buying. An empirical study by Danaher *et al* (2003) of online shopping among more than 100 packaged brands versus traditional grocery stores, showed that a "strong" brand did better in an online environment compared with a "weak" brand[1].

With regard to the service sectors, Davis *et al* (2000) confirmed that service branding plays a more important role in the electronic environment than the physical environment. It does this through being the primary information mechanism, representing a promise of continued service levels by the electronic retailer, and reducing the perceived risk of the consumer in online retailing (Tan, 1999). In this regard, traditional retailers have a competitive advantage over new,

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[1] *"strong" and "weak" are synonymous with large and small market shares in offline retailing (a "winner-take-all" effect).*

electronic commerce services because they can advance their existing physical brand values and their physical brand-consumer relationship.

Therefore, creating awareness and favorable associations of the brand in the mind of consumers is one of the most important issues for online marketers. Simeon (2001, p.423) argues that "a strong Internet presence will be an essential component of future business strategies in both international and domestic markets". From an empirical study of customer preference for Websites in Singapore, Yang and his colleagues (2003) concluded that brands may actually matter more online than offline, giving established brands an edge in building the critical mass in e-commerce. The fundamentals that drive a consumer's needs and behavior in the offline world do not change simply because the consumer is seated at a PC (Kleindl, 2001). The power of brands is manifested in the recent efforts of many Internet companies to become strong "brands" such as Amazon.com, Yahoo!.com, Dell.com, etc. These examples confirm that e-branding is a reality (Uncle, 2001).

The Internet, as the massive global network of interconnected computers, provides marketing programs with some unique features that can be effective for branding. Among those features are two-way communication, personalization, community, real-time access to database for product information and customer information (Deighton and Barwise, 2000; Kania, 2001). These characteristics combine to create a very powerful medium. By allowing for direct, ubiquitous links to anyone, anywhere, the Internet lets individuals and companies build interactive relationships with customers and deliver new products and services at low cost. These defining characteristics have fuelled its explosive growth.

Although brand marketing is accomplished differently on the Internet than in other media, the basic brand-marketing principles are the same (Dayal *et al*, 2000; De Chernatony, 2001; Clauser, 2001; Kania, 2001; Keller, 2003). With online brands, marketers still need to establish *point of parity* (in terms of convenience, price and variety, etc.) and *point of difference* (in terms of customer service, credibility, and personality, etc.) (Keller, 2003). And Dayal *et al* (2001, p.42) notes that "What a brand is in the physical world – the sum of 3 P: Personality, Presence and

Performance of a given product or service – is also essential on the World Wide Web".

De Chernatony (2001) confirms the fact that a "brand" is a universal concept regardless of its environment. The fundamental rules of brand building have not changed, and what is different and more important here is the way the brand's essence is executed and enacted in the online world. Marketers have to explore their online applications carefully in relation to offline rules (Clauser, 2001; Na and Marshall, 2005). Furthermore, Simeon (1999, p.301) refers the "*Virtual branding as the ability of a Website to gain recognition and establish its presence in the minds of customers and the public at large*". The author also points out that branding potential is one of the two strategic outcomes of a websites' effectiveness.

But there are many challenges for offline brands that want to establish a Web presence. They have to break through the cluster in order to generate awareness and grab the attention of Net customers, who often do not have patience, who want security, ease and comfort and who want delivery at their level of expectation (Kania, 2001; Barwise *et al*, 2002).

3.1.3   Brand Equity and Web Branding

In order to arrive at Web branding conceptualization, we must first look at one of the most important concepts in brand management – brand equity. Brand equity is the added value with which a given brand endows a product (Farquhar, 1989). A review of literature on this topic shows that some agreement exists as to what is meant by brand equity. Several authors have provided various definitions of this concept (Table 3.2) and they are broadly consistent with the definition given by Farquhar, that equity is the added value by the brand to the product. Due to brand equity, the consumer has a preference for the brand over and above preference based on objectively measured product functionality benefits. This results in an increased choice probability or willingness to pay a price premium.

From the firm's perspective, brand equity has measurable financial value. However, there is still no agreement on the methodologies as well as measurements to evaluate and quantify the value of brands (Keller, 2003). And it is also out of the

scope of this study. In this research we are interested more in the elements that are essential in building a strong brand with the customer, especially in an EB environment. Some set of brand equity's components are listed in table 3.2, and among them, brand awareness and brand loyalty can be recorded as most the common and vital components to add value to the product.

Concerning the Internet environment, Simeon (1999, 2001) agued that virtual brand equity is driven by a combination of three components that are specific for the medium: overall attractiveness of a Website design; a high level of presentation; and a willingness to recommend the site to others.

Rooted in traditional brand equity literature, Page and Leplowska-White (2002, p. 231) conceptualized "Web equity as consumer familiarity and perception about a Website". Web equity for the dot com companies, as the authors describe based on Keller's framework (1993), consists of Web awareness and Web image. The researchers also include Web loyalty in their framework as a consequence of Web equity. But these factors are a product of this literature alone and need to be subjected to empirical examination.

Table 3.2. Brand Equity's Definitions and Components

Definition	Components	Reference
The "added value" with which a brand endows a product	- positive brand evaluation - accessible brand attitude - consistent brand image	Farquhar (1989), p.24
"A set of assets and liability linked to brand, its name and symbol, that add to or subtract from the value provided by the product or service to a firm and/or to that firm's customers."	- brand awareness - brand loyalty - perceived quality - brand association	Aaker (1991), p.15-16
"The differential effect of brand knowledge on consumer response to the marketing of the brand"	- brand awareness - brand image	Keller (1993), p.2
"The reputation or goodwill represented by the brand rather than the brand name itself"	- brand awareness - brand attitude - brand purchase - intention	Rossiter and Percy (1998), p.131.

In an attempt to empirically determine the factors that drive traffic and brand equity in the Internet space for a broad spectrum of Internet companies (search engines, retail sites, B2B sites), Ilfeld and Winer (2002) found out that the Website brand equity were determined by the site awareness, site quality, site loyalty and public information on the stock market. In another study, Christodoulides *et al* (2004) developed a new concept in the online retailing context "e-tail brand equity" as the equity of retailers who capitalize on the unique capabilities of the Internet to trade online.

Meanwhile, Na and Marshall (2005) defined the "cyber brand equity" in terms of satisfaction and site visit intention. Based on the traditional framework of brand equity, the authors tried to measure the brand power for the portal search engine sites, both international as well as Korean and Singaporean sites.

Considering branding potential as one of the two crucial strategic outcomes of Websites (Simeon, 1999, 2001), as well as the fact that most of the Vietnamese Websites are informational in nature (Luc, 2005), we suggest that concept web branding is more appropriate for commercial usage among brick-and-mortar companies' sites at this moment as well as for the future in Vietnam. Thus, based on Simeon's definition of virtual branding (1999, 2001), we define here *Web brand as the ability of a firm's Website to gain recognition, to establish its presence in the minds of customers and to repeatedly attract potential customers to the Website.*

Borrowing from branding literature and the recent studies on brand equity in the online environment, we arrive at the suggestion that Web branding consists of Web awareness and Web loyalty.

3.2   Web Branding Components

3.2.1 Web Awareness

Given the current status of overcrowded Internet business, a key question that motivates the present study is "How can a Website best draw the attention and patronage of online customers?" Similar to brand awareness as well as developed from definitions of online visibility and site awareness (table 3.3), we conceptualize

Web awareness as the customers' ability to remember or identify the Website across a reference in his/her online and offline environment.

In the traditional marketing context, brand awareness was confirmed by Percy and Rossiter (1992) as a necessary predictor to brand purchase and market share. The reason is simple - for a customer to buy a brand they must first be made aware of it. Brand awareness plays a crucial role in determining the customers' buying behavior, because it reflects the prominence of the brand in the customers' minds, which will strongly affect the probability of the brand being considered for purchase (Aaker, 1991; Percy and Rossiter, 1992; Keller, 1993).

In the digital environment, every successful online business needs a highly visible Website. In the same way that brand awareness is a predictor to purchase, Web awareness can be viewed as a predictor to Website traffic (Drèze and Zufryden, 2004). In line with this opinion, Ilfield and Winer (2002) concluded from their research on consumer Website choice that high brand awareness is essential for an Internet firm's survival.

Table 3.3. Definition of Awareness for Brand and Website

Construct	Definition	Reference
Brand Awareness	Customer's ability to recognize or recall that a product/service is a member of a certain product/service category	Aaker (1991)
Brand Awareness	The ability of the customer to remember and identify a brand within a product category, which will strongly affect the probability of the brand being considered for purchase	Percy and Rossiter (1992)
Brand Awareness	The strength of the brand node or trace in memory, as reflected by consumers' ability to identify the brand under different conditions, which is related to the likelihood that a brand name will come to mind and the ease with which it does so	Keller (1993)
Online Visibility	The extent to which a user is likely to come across a reference to a company's Website in his/her online or offline environment	Drèze and Zyfryzen (2004)
Site Awareness	Customer's ability to recognize or recall that a site is a member of a certain service category	Park and Kim, (2003)

3.2.2   Web Loyalty

Attracting visitors to a company's Website is a big challenge, but creating a favorable attitude towards the Website and generating repeat visits is much more difficult than the first task. In order to understand the concept of Web loyalty, we will first take a short review about loyalty in the traditional context of marketing.

For a long time, researchers have realized that customer loyalty is the key to long-term profitability, both in retail and in business-to-business commerce (Kotler, 1994; Rossiter and Percy, 1998). Kapferer (1992) confirmed the universal truth that profitability is a function of how long customers stay and how much they spend with the company. The author argued that loyalty is the total experience of the brand and the result of the total relationship between company and customers.

Customer loyalty provides value in the form of reduced marketing costs, greater trade leverage and enhanced ability to attract new customers, and affords the firm more time to respond to competitive threats (Aaker, 1991; Oliver, 1999). The loyalty concept was first researched and linked with the brand, as a key determinant of brand choice and brand equity. Consumers become loyal to a brand when they are convinced of the appropriateness of that brand for their needs and consequently develop a favorable attitude toward the brand.

Several definitions of brand loyalty are presented in table 3.4. It has long been argued and agreement reached (Day, 1969; Jacoby and Kener, 1973; Dick and Basu, 1994) that brand loyalty is a concept that should be understood in both behavioral and attitudinal terms, which can be expressed in terms of both favorable attitude toward brand as well as repeat buying purchases. Loyalty is best defined as a psychological state of mind, a set of attitudes, beliefs, desires, etc. which will lead to positive buying behavior despite the situational influences (Oliver, 1999).

The loyalty concept applied in the online environment leads to the e-loyalty definition (Srinivasan *et al*, 2002) as the favorable attitude toward an electronic business resulting in repeat buying behavior. Reichheld and Schefter (2000) argued

Table 3.4. Definition of Loyalty in Different Perspectives

Construct	Definition	Reference
Brand Loyalty	"A biased behavioral response expressed over time by some decision-making unit with respect to one or more brands out of a set of such brands, and is a function of psychological processes"	Jacoby and Kyner, (1973)
Brand Loyalty	"The favorable beliefs and attitudes for the brand that are manifested in repeat buying behavior"	Keller, (1993), p.8
Brand Loyalty	"A relationship between the consumer's relative attitude toward a brand and repeat purchase"	Dick and Basu (1994)
Customer Loyalty	"A deeply held commitment to re-purchase or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite circumstantial influences and marketing efforts having the potential to cause switching behavior"	Oliver (1999)
Customer Loyalty	"A behavior, built on positive experiences and value. This behavior is buying products, even when that may not appear to be the most rational decision".	Kincaid (2003)
E-loyalty	Favorable attitude toward an electronic business resulting in repeat buying behavior	Srinivasan *et al* (2002)

that the same rule holds on the Internet, and that online businesses should base their marketing strategy on the pursuit of loyal, profitable customers.

Relating to our context of Web presence in Vietnamese manufacturing enterprises, which are mostly built not for a transactional objective but communication purpose, we define the *Web loyalty as the customers' favorable attitude toward a Website and their intention to revisit and recommend the site*.

3.2.3   Factors that Influence Web Branding

With the introduction of the Web and the emergence of e-commerce, marketing managers are experiencing enormous innovation. Despite the large business potential presented by the Web, companies connected through the Internet are seeing only limited success (Diorio, 2002). Many researches have given much

attention to examining the impact of various factors on Website performance and success in the context of e-business.

Yet there is still no standard within the industry for measuring and evaluating the effectiveness of a Website and its branding potential. Also there were different terminologies used in different research scenarios (Table 3.5). Among these studies, Simeon research (1999, 2001) seems the most applicable to Vietnamese manufacturers' Websites. His research also focuses on established companies that use the Internet to promote their existing brand power online. Another recent study (Na and Marshall, 2005) was also concerned with brand building on the Internet. This was called "Cyber Brand Power", and emphasized global and local Internet portals, but it is out of our study scope.

The remaining studies (Chirstodoubides *et al*, 2004; Wolfinbarger and Gilly, 2003; Parasuraman *et al*, 2005) focused on online retailing websites in developed countries which in relation to far future for Vietnam e-business context. Although the E-tail brand equity, E-tail Q and E-S-Qual models are not applicable for developing the framework of Web brands in Vietnam's manufacturing sector, the results and methodologies of these studies are useful for current research in terms of the development of measurements and sampling plan discussed in the chapter four.

The study by Simeon is original in its application of virtual branding. The author has proposed an integrated formulation in assessing Web strategy, which is called the **AIPD** model. The term AIPD is used because it reflects the four factors which combine to develop or boost the strategic potential of commercial Websites. An analysis of numerous Websites and Internet related literature has shown that successful Websites are capable of fulfilling some or all of the following strategic functions: **A**ttracting, **I**nforming, **P**ositioning, and **D**elivering. This model was examined by the author in the banking and software sectors (Simeon, 1999; 2001) using a benchmark method to compare the effectiveness of Websites in the USA and Japan. The AIPD model was also empirically tested based on consumer preference's perspective among online books stores Website in Singapore (Yang *et al*, 2003).

Table 3.5. Factors Influencing Effectiveness of Website and its Branding Potential

Construct	Influencing Factors	Domains Tested	Reference
Cyber Brand Power (17 items)	information comprehensiveness; familiarity; strategic alliance with other sources; overall design and layout: organization of site; globalization; Web interface; Website character; user friendliness; convenience; enjoyment; sociability; privacy protection; ease of navigation; richness of information; interactivity; and availability.	Portal search engine sites (global, Korean, and Singaporean sites)	Na and Marshall (2005)
Web Equity (4 factors in 22 items)	- Market and non-market communication - Web design features - Vendor characteristics - Product/service characteristics	Not empirically tested yet	Page and Leplowska-White (2002)
Virtual Branding (4 factors in 32 items)	- Attract - Inform - Position - Deliver	Websites in banking and software sectors in USA and Japan	Simeon (1999, 2001)
Website Effectiveness (4 factors in 19 items)	- Attract - Inform - Position - Deliver	Online book stores in Singapore	Yang *et al* (2003)
E-tail Brand Equity (3 factors in 8 items)	- emotional connection - online experience - responsive service	Online retailers in UK	Chirstodoubides *et al* (2004)
E-tailQ (4 factors in 14 items)	- fulfillment/reliability - Website design - privacy/security - customer service	Online retailers in USA	Wolfinbarger and Gilly (2003)
E-S-QUAL (4 factors in 22 items)	- efficiency - fulfillment - system availability - privacy	Online retailers in USA	Parasuraman *et al* (2005)

This research will apply Simeon's AIPD model in studying the potential of Web branding in Vietnamese manufacturing enterprises, but with the added component of "Building Relationships" (Figure 3.1). It will use a different process and methodology which could contribute positively the development of the Internet in a Vietnamese context. With a greater focus on Web branding components, this dissertation will examine how each factor in the **AIPDB** model impacts Web awareness and Web loyalty from a customer perspective.

The AIPD model provided the conceptual foundation for the research. But this dissertation is different from Simeon's studies in several areas, such as:

− Simeon's objectives in his two studies (1999, 2001) were to examine and compare the Internet strategies of banking and software sectors in two countries, USA and Japan. Meanwhile, the purpose of this thesis is to identify how the Website and Vietnamese manufacturing firms can do their best to attract visitors and keep them coming back.

Figure 3.1. Combining Factors to Influence Web Branding Potential
(Source: Developed and modified from Simeon, 1999, 2001)
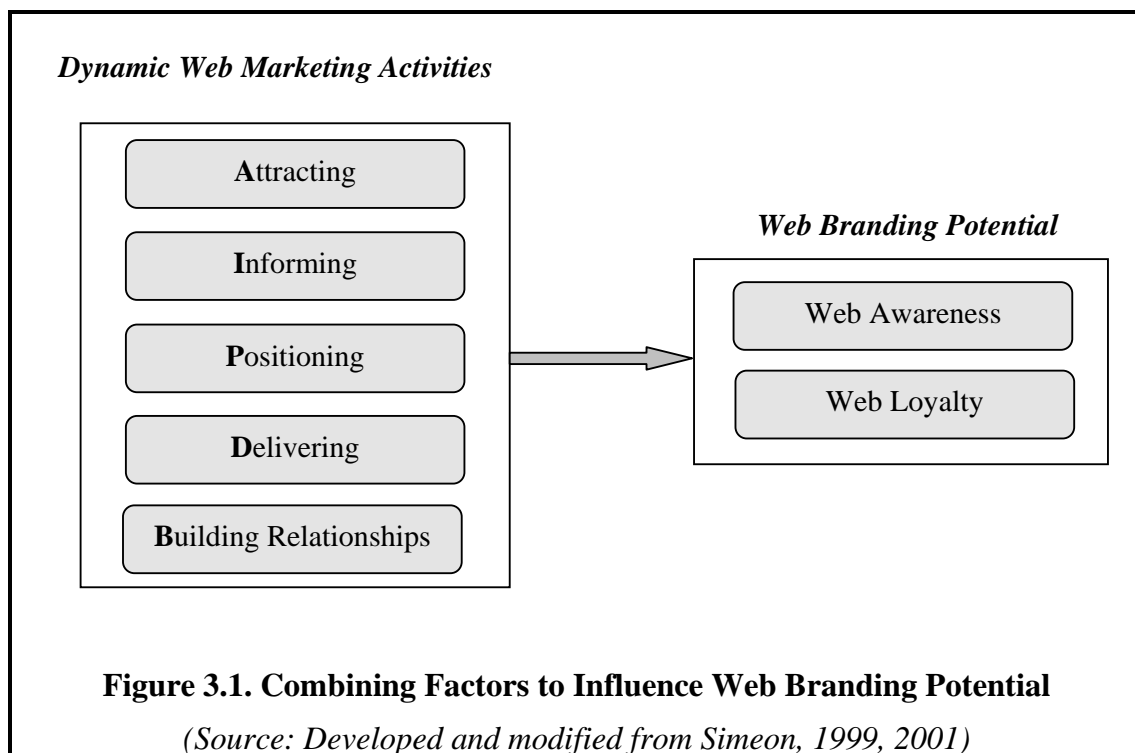
- Although Simeon proposed the framework with 4 factors impacting virtual branding equity, his study did not include the attracting function as he argued that it can involve a wider range of non-Internet strategies, which are difficult to define without internal company data. Given the importance of Website awareness to Web branding potential, our thesis will investigate this dimension in a detailed manner.

- Simeon's methodological approach is content analysis with three independent evaluators to assess the major components of Website that contributed in virtual branding potential. This thesis used a quantitative approach to ask Internet visitors about their online experience with a Website in order to determine how strong Web brands were in the minds of Vietnamese Internet users. We must suppose, from the marketing perspective, that in order to determine what constitutes a successful site, we must be able to understand how users perceive and utilize it (Yoo and Donthu, 2001; Shchiglic and Barnes, 2004). Also a qualitative case study is used to illustrate how a Vietnamese company performs with its Web strategy in building Web branding potential.

3.2.4   Identified Variables in Past Literature

Simeon applied the content analysis method to record the presence or absence of Website elements. Hence, the list of parameters in his studies was long and included 32 items (Simeon, 1999; 2001). In this research, a survey method is applied to test the relationships between Web branding potential and Web marketing activities. Therefore the list of variables should be shorter, focussing on the most important features of a Website from the customer's perspective. A review from previous studies relating to Website performance provides some grounds for proper selection of variables to be included in the research.

Table 3.6 presents variables identified in previous studies, as they relate to Web awareness. All authors arrived at the conclusion that to create Website awareness and drive traffic to the site is a function of an integrated marketing communication strategy (Drèze and Zyfryzeb, 2004; Ilfeld and Winner, 2002; Huizingh; 2002). To

Table 3.6. Summary of Identified Variables in Web Awareness

Dependent Variables	Independent Variables	Reference
Online Visibility	Online advertising; Online search; Links from other Websites; Chat room; E-mails; Offline advertising; News reports	Drèze and Zyfryzeb (2004)
Site Awareness	Online and offline advertising; Word-of-mouth; non-Internet presence	Ilfeld and Winner (2002)
Number of Visitors	Website promotions	Huizingh (2002)

enhance Website visibility and presence on the Internet, both online and offline communication activities are needed.

Offline promotions include publicity through offline advertising in traditional media such as television, newspapers, billboards, etc. Commonly used online means of promoting the visibility of a Website include banner ads, links, search engine, and online directories, as well as discussion or newsgroups, e-mail, and online news reports (Goldsmith, 2002; Sweeney, 2005). Thus, we arrive at the suggestion that Web awareness is built on both online and offline communication activities.

Concerning the variables to determine Web loyalty, there is little commonality exists among the researchers in previous studies (Table 3.7). A variety of independent and dependent constructs have been employed to identify the drivers of Website success from a customer perspective. The dependent variables were labelled with different terms: **e-loyalty/ online loyalty** (Ribbink *et al*, 2004; Van Riel *et al*, 2004; Semeijn *et al*, 2005; Srinivasan, 2002; and Rodger *et al*, 2005); **e-satisfaction/ Web satisfaction** (Szymanski and Hise, 2000; Cheung and Lee, 2005; and Shchiglic and Barnes, 2004); or **Website effectiveness/ Website success** (Chakraborty *et al*, 2002; Liu and Arnett, 2000); or multiple construct which included loyalty, equity, attitude, intention, etc (Loiacono *et al*, 2002; Palmer, 2002; Yoo and Donthu, 2001; Wolfinbarger and Gilly, 2003).

Table 3.7: Summary of Identified Variables in Website Evaluation

Dependent Variables	Independent Variables	Reference
E-loyalty	Assurance; Ease of Use; E-scape; Accuracy; Responsiveness; Customization	Ribbink *et al*, (2004)
E-loyalty	*online satisfaction*: Usability; E-scape; Customization; Assurance; Responsiveness; *offline satisfaction*	Van Riel *et al* (2004)
E-loyalty	Assurance; Navigation; E-scape; Accuracy; Responsiveness; Customization.	Semeijn *et al*, (2005)
E-loyalty	Customization; Contact; Cultivation; Care; Community; Choice; Convenience; Character	Srinivasan *et al*, (2002)
Online Loyalty	Information quality; System quality; Service quality (with mediating effect from online satisfaction)	Rodger *et al* (2005)
Web Satisfaction	Information Quality; System Quality.	Cheung and Lee (2005)
Web Satisfaction	Web Information Quality; Service Interaction Quality; Site Design Quality (usability); Airline-Specific Quality.	Shchiglic and Barnes (2004)
E-satisfaction	Convenience; Product Information; Site Design; Financial Security.	Szymanski and Hise (2000)
Website Effectiveness	Personalization; Transaction-related Interactivity; Non-transaction-related Interactivity; Informational Content; Organization; Privacy/Security; Entertainment.	Chakraborty *et al* (2002)
Website Success	Info and service quality; System Use; Playfulness; System Design Quality	Liu and Arnett (2000)
Attitude towards Site	Entertainment; Informational Content; Organization	Chen and Wells (1999)
− Intention to Purchase − Intention to Revisit	*Ease of Use*: ease of understanding; intuitive operation; *Usefulness*: information quality; interactivity; trust; response time; *Entertainment*: visual appeal; emotional appeal; innovativeness; *Complementary Relationship*: consistent image; online completeness; tailored communications;	Loiacono *et al* (2002)

Table 3.7: Summary of Identified Variables in Website Evaluation (cont')

Dependent Variables	Independent Variables	Reference
− Satisfaction − Likelihood to Return − Frequency of Use	Download Delay; Navigation/Organization; Interactivity; Responsiveness; Information/Content	Palmer (2002)
− Overall Site Quality − Attitude toward Site − Purchase Intention − Site Loyalty − Site Equity	Ease of use; Design; Speed; Security;	Yoo and Donthu (2001)
− Satisfaction − Loyalty − Attitude towards Site − Overall Quality	Fulfillment/reliability; Website design; Privacy/security; Customer service	Wolfinbarger and Gilly (2003)
− E-satisfaction − Purchase Intention	Information needs; Service performance ; Convenience; Price benefits; Technological inclination; Safety	Kim *et al* (2006)
− Perceived Value − Loyalty Intention	Efficiency; Fulfillment; System availability; Privacy	Parasuraman *et al* (2005)

Therefore, there was also little consensus on what drivers online loyalty/ satisfaction/ quality. Some authors focus exclusively on the Website interface, while others attempt to measure the entire purchase experience. Researchers have developed attributes to predict the customer's intention to return to the Website (e.g.Van Riel *et al*, 2004), and satisfaction with a Website (e.g., Szymanski and Hise, 2000; Shchiglic and Barnes, 2004). Some researchers focus only on etailing sites (Kim *et al*, 2006; Parasuraman *et al*, 2005; Wolfinbarger and Gilly, 2003) while others include other types of sites (e.g., news and entertainment) and B2B (Liu and Arnett, 2000; Chakraborty et al, 2002). Thus the list of Website attributes found to be important is long and varied. Table 3.7 shows the types of variables that have been identified in previous studies.

This study specifically focuses on the loyalty of customers to the websites of manufacturing companies. Thus from the list of variables identified in previous

studies, we have selected the seven independent variables that are most common among researchers and appropriate to our research objectives. They are: Information Quality; Site Navigation; Site Appearance; Download Speed; Privacy/Security; Personalization and Community. We suppose that these factors will have a high impact on Web Loyalty.

Overall, based on previous studies and our own judgement, we found nine factors which could have significant relationships with Web Branding potential (Web awareness and Web loyalty). The next section will describe and justify in more detail the connection between Web Branding determinants and the basic AIPDB Website functions.

3.3   Determinants of Web Branding

The end purpose in marketing – including marketing on the Web – is to attract the right visitors for the lowest cost, turn visitors into customers, and build brand loyalty so that those same customers come back repeatedly (Carpenter, 2001; Barwise *et al*, 2002).

Although the basic brand-marketing principles are the same for both online and offline environments (Clauser, 2001; De Chernatorny, 2001; Aaker, 2002), the distinctive characteristics of the Internet create many opportunities and challenges for Web branding. The main challenge for marketers is to attract visitors to the site and generate significant repeat visits (Hoffman and Novak, 1996). Successful exploitation of the Web requires planning, discipline, resources and creativity (Rayport and Jaworski, 2001). In this section we will discuss how the factors in the AIPDB model will contribute to Web branding success.

3.3.1 Attracting Visitors

After establishing a presence on the Internet, one of the primary objectives of a new Website is to attract a variety of customers to visit the company's online presence (Simeon, 1999). Active promotion of the site is necessary since the "build and they will come" model is insufficient to generate traffic to the site (Aaker, 2002). The company must make sure that its target customers are aware of its Website. After

all, a prospective visitor can't try a site until he/she knows it exists. Both large corporations and Web start-ups see driving traffic to the site as one of the most important, as well as one of the most difficult, determinants of the site's success (Hoffman and Novak, 1996; Barwise *et al*, 2002)

Like building brand awareness, building Web awareness is argued to be a function of marketing communication both online and offline (Strauss and Frost, 2001; Belch and Belch, 2004). This can be done in numerous ways and instituted differently depending on whether the firm is established and well-known or is less well-known. Some of the most popular techniques include registration with a search engine, banners, gifts, games, affiliated programs, direct mail, free products and extensive offline advertising campaigns.

Based on the customers' primary methods of discovering new websites through search engines, random Web surfing, and friendly referrals, Diorio (2002) suggested that online brand investors should concentrate on the three techniques of search engine optimization, affiliated networks and viral marketing communication.

Carpenter (2001) recognized that having a website selected by Internet search engines is of obvious importance. Searching in computerized, user-friendly and convenient way on the Internet is rarely a random matter. Marketers need to understand how alternate search engines measure key word densities that are use for searches. Building a Website with proper key word can increase prospect Website contact.

Meanwhile, affiliated programs which originated from Amazon's introduction of partnerships - and commission-based marketing in mid 1996, are used widely in online retailing Websites as effective tools for customer acquisition (Hoffman and Novak, 2000). Viral marketing is the online equivalent of word of mouth and referred to as 'word-of-mouse' (Turban *et al*, 2004). It occurs when individuals forward e-mail to friends, co-workers, family, and others on their e-mail lists. In an empirical study, Ilfeld and Winer (2002) concluded that the most significant factor in building site awareness is the word-of-mouth generated from prolonged visits. The findings in Ennew *et al* (2005) also indicated that one potential method of

attracting customer visits was through links from other websites, which may be viewed as a referral from a trusted third party.

Silk *et al* (2001) explored the role of the Internet as an advertising medium in competition with other media. The authors concluded that the Internet is emerging as an adaptive, hybrid medium with respect to audience addressability, audience control, and contractual flexibility, and is a potential substitute, complimentary to all the major categories of existing media. Overall, Internet advertising is still a growth area within marketing communications, despite the justifiable reaction against earlier over-optimistic expectations. Marketers are still learning how to use it in terms of brand strategy, creative execution, and evaluation. The Internet is emerging as a significant advertising medium, although more slowly than the enthusiasts predicted

Many researches also found that traditional advertising methods, (print, direct mail, etc.) are very effective in generating both potential consumer leads and Website visitors; and that it would be a mistake for online businesses to rely completely on online advertising to create awareness and site visitation (Huizingh, 2002). Based on the above discussion, the following hypotheses can be developed:

H1a: There is a positive relationship between a company's offline communication activities and Web awareness;

H1b: There is a positive relationship between a company's online communication activities and Web awareness;

In addition to creating customer awareness, marketing communication may also create an initial impression, build positive attitude toward a Website and the company, remind customers about the Website and convince them to visit it again (Flavian *et al*, 2006). Marketing communications consisting of sales promotion, public relations, direct marketing, and advertising comprise an important component of e-commerce strategy. E-marketers use these tools to create brand awareness, preference, and selection (Strauss and Frost, 2001; Turban *et al*, 2004; Chiou and Shen, 2006).

Sales promotion on the Internet such as through coupons, contests and sweepstakes, can help Websites to draw traffic and keep users returning. Just as in the brick-and-mortar world, these sales promotion activities create excitement about brands and entice customers to stop by. If sweepstakes are changed regularly, users will return to the site to check out the latest chance to win products (Kim *et al*, 2006). Therefore, we have the next hypothesis:

H1c: There is a positive relationship between Web Awareness and Web loyalty;

3.3.2   Informing Function

Having the customers know where to "find" the company's Website is only the beginning. The quality of information offered in the Website is very important in encouraging visitors to stay longer within the site and come back when necessary. The primary reason people use the Internet is to hunt for and gather information (Bakos, 1997; Kania, 2001). And the most fundamental capability of a Website is the presentation of information about products, services, people, events or ideas.

Assuring the quality of information is both important and difficult. But achieving high-quality information is imperative to Website success. Creating and managing content is critical to Website success because content is what a visitor comes looking for at a Website, and content is what the Website owners use to sell the site, the product or service, and the company that stands behind the site. Informational content is one of the most effective ways for a Website to differentiate itself from its competitors, and content can create an identity that is consistent with its branding strategy (Turban *et al*, 2004)

From the beginning of the computer age, the issue of quality of data had to be addressed. According to Hongjiang and Koronios (2004), there are some generic dimensions that are the basis of any information quality initiative such as: accuracy; timelines; completeness; and consistency. Besides some of the universal fundamental dimensions, information quality in e-business is different from that of traditional information systems in some aspects. In the former systems, users passively received information that was distributed to them by the systems,

whereas, in an e-business environment, users can also actively input and change information into the system.

The Internet has the possibility of providing comprehensive and rich information to customers, and it is available 24 hours a day, 7 days a week. The Internet can provide a forum for people who want information, and even a solution, in real time. Thus, e-marketers are interested in developing products and services to meet the needs of this market and exploring the potential of the Internet to provide customers with information and services at the customers' convenience (Na and Marshall, 2005). Marketing practitioners and academic researchers contend that one of the primary purposes of a company's Website is to provide information to prospectors, customers, and other stakeholders (Chen and Well, 1999; Palmer, 2002; Kim *et al*, 2006).

Chen and Well (1999, 2002) found the perceived informational content of a Website to be the second most important factor in explaining variance in visitors' attitudes toward that Website. Loiacono *et al* (2002) found that the search for product information is the most important predictor of whether someone will make an online purchase. In an evaluation of Website quality in New Zealand's airline industry, Shchiglic and Barnes (2004) found out that information quality has a strong impact on customer satisfaction. Simeon (1999, 2001) found a strong relationship between the informing function of a Website and customer attraction and willingness to recommend the Website to others.

In an attempt to measure the brand equity of Internet portal Websites, Na and Marshall (2005) concluded that comprehensive and rich information is the key element of a cyber-brand and has strongly supported cyber-brand power. Chakraborty *et al* (2002) also found a direct relationship between informational content and Website effectiveness. Consequently, the ability of a Website to make a visitor feel that the Website has communicated something of value is viewed as one of the most important predictors of a Website's effectiveness. Therefore, we propose the following hypothesis:

H2: There is a positive relationship between information quality and Web loyalty;

3.3.3 Positioning Function

Positioning is considered to be one of the key elements and the most important decision in modern marketing. This concept is concerned with long-term survival and development and attempts to modify the tangible characteristics and intangible perceptions of a brand in relation to competition (Aaker and Shansby, 1982; Rossiter and Percy, 1998). According to Kotler (1994), "Positioning is the act of designing the company's offering and image so that they occupy a meaningful and distinct competitive position in the target customers' minds". In the offline world, a variety of positioning strategies are available to a brand. According to Aaker and Shansby (1982), a brand can be positioned by attributes; by price/quality; by competitor; by application; by product user or by product class.

Applying the basic foundations of positioning into the online world, Simeon (1999) suggests that this function of the Website relates to the ways a design interface can create an image in the mind of the visitors. The positioning capability of a site relates to the factors determining the company's e-commerce market positioning strategy (Simeon, 1999). In contrast with traditional situations, online customers typically do not interact with individuals. Instead, they interact with companies through a user interface that enables them to initiate the desired actions themselves. Previous research has already identified the user interface to be a key determinant of online service quality (Parasuraman *et al*, 2005). Two factors that are important in this respect are site aesthetics and navigation.

Navigation

Navigation is defined as the process of self-directed movement through the computer-mediated environment, involving nonlinear search and retrieval methods that permit greater freedom of choice (Hoffman and Novak, 1996). In the online context, navigation includes the process of "exploring" the interactive environment in alternative ways to seek out product-related information.

Some of the most common navigational tools in Website design are the *navigation bar*, *site map, navigation cues and search options*. The requirements for this function within a Website are numerous. Navigation should be logical, buttons and

links should function in the way the visitor expects them to, and the design of Web pages should not distract the visitor from the main objective of the page. At the same time, navigating the website should challenge visitors' skills. Each successive click should increase the level of curiosity and should give the satisfaction of a successful navigation. Website navigation should support a pleasurable and effective online experience (Taylor and England, 2006).

An easy-to-use Website must ensure that there are no difficulties in navigating on the Web, guarantee the information is accessible to all, and make sure the site is built on an intuitively systematic structure. Kania (2001) declared that Web designs need to be intuitive. This concept is strongly supported by Bauer *et al* (2002) and Parasuraman *et al* (2005). The findings in these studies show that customers can have optimistic attitudes toward a Website if the site can offer intuitive navigation to allow them to move freely around the site.

Today, most Website designers agree that having a lot of information on a site may be of little value unless visitors to the Website find the arrangement of information logical and easy to understand. The importance of Website navigation has been emphasized in several previous studies (Chen and Wells, 1999; Palmer, 2002; Shchiglik and Barnes, 2004). Zhang and Von Dran (2001) in an attempt to rank the quality factors in the six different Website domains found that navigation was ranked among the three most important clusters in all domains, from education to entertainment, through to e-commerce Websites.

Clearly, an efficiently executed Website design that enhances ease of use is an important factor in determining Website effectiveness (Chakraborty *et al,* 2002). Similarly, in a study based on B2B Website, navigability was found to improve commitment toward the site, (Bauer *et al*, 2002). Finally, Chen and Well (1999) found organization to be one of the significant factors in explaining the variance in visitors' attitudes towards a Website.

Ease of navigation is important to customers in evaluating a Website as it makes their site visit a more pleasurable and rewarding experience, making it easy to find exactly what they are looking for, or to do exactly what they want to do (De

Chernatony, 2001; Yang *et al*, 2003; Parasuraman *et al*, 2005, Taylor and England, 2006). Hence, the hypothesis can be proposed:

H3a: There is a positive relationship between Web navigation and Web loyalty;

Site Appearance

The goal of any Website is to deliver quality content to its intended audience and to do so with an elegant design. Besides being easy to use, the company's site should be pleasing to the eye. Site appearance is another important factor of positioning when visitors rapidly scan to decide whether to continue viewing a site. The style of writing, the "tone of voice", and initial color all give clues about a brand's character (De Chernatony, 2001).

Site appearance (Rayport and Jaworski, 2001) can be defined as the look-and-feel of a screen-to-face customer interface. The look-and-feel of a website can be categorized by both aesthetic and functional criteria. *A functional oriented site* focuses largely on the core offering – whether that is product, services, or information. *A more aesthetically oriented site* often has a distinct look-and-feel, sensually appealing, and surprising in its blend of text, graphics, color and photographs.

In the context of e-service Websites, the aesthetics and looks of a Website have been referred to as the "e-scape" (Van Riel *et al*, 2004). The e-scape is comparable to the traditional service scape and reflects how information is presented through the use of colors, layout, pictures, style and font size. And according to Yoo and Donthu (2001), aesthetic design is the creativity of a site with excellent multimedia and color graphics.

Ind and Riondino (2001) in their qualitative study in the two European countries, the UK and Italy, revealed that the right look and feel of a Website is very crucial in attracting a visitors' attention. A Website should be dynamic, up-to-date and continuously enriched with new content. It should embody a company's personality and display consistency in terms of both visual cues and content. It should orient

visitors and provide easy-to-use navigation to help move people from one page to another.

An attractive site appearance is found to be more effective in facilitating Website navigation, making a visitor's stay within the site longer, increasing their likelihood of a revisit and intention to purchase (Loiacono *et al*, 2002; Van Riel *et al*, 2004; Semeijn *et al*, 2005). Therefore, it is hypothesized that an attractive site appearance contributes to Website loyalty. Thus:

H3b: There is a positive relationship between Website appearance and Web loyalty;

3.3.4. Delivering Function

The delivery function emphasizes the way in which a Website provides for interactivity, security and speed, which helps to determine the branding potential of the site (Simeon, 1999, 2001). Interactivity is a strong antecedent in creating Web loyalty (Palmer, 2002), but this factor is much more related to the component of 'Building Relationships', therefore we move it to the following section in terms of personalization and community building.

Download speed:

In traditional marketing, speedy service is highly valued. People often try to make the most efficient use of time by saving and compressing it; in other words "time is money". Customers will respect a business only if it recognizes the value of their time (Zeithaml *et al*, 1996).

In the Web environment, the same goes for server speed and download time. Customers won't wait very long to access a slow Website on a sluggish server. A recent survey of Web surfers found that excessive download delays are the most irritating aspect of using the Internet (Koiso-Kanttila, 2005). Download speed is a phenomenon unique to the Internet experience. Across both marketing and management information system disciplines, download time has been identified as an important factor for online business success (Rose *et al*, 2005).

There are a number of factors that affect the download speed of a Web page. They can be the bandwidth on the client's or server's side, file sizes, and hardware, or

software configurations. However, the primary reason of excessive download delay is the visitors' modem based Internet connection (Rose and Straub, 2001), which is out of the control of the Web designer. Unfortunately, the only way a Website can control delay caused by narrow bandwidth on the client's side, is to reduce the file size which in turn, often reduces the attractiveness of the content and design of the page. Telecommunications infrastructure that might influence a user's speed of access is also beyond the designer's control, and will not be considered here. However, Website designers can choose not to include slow loading elements such as longer audio or video clips, reducing initial access time (Palmer, 2002).

There are some terms which can be used interchangeably regarding the concept of the download speed of a Website: download time (Rose *et al* 2005); response time (Loiacono *et al*, 2002) and processing speed (Yoo and Donthu, 2001). Download time refers to the length of time between when a user selects a Web page and when the Web page is fully loaded and ready for consumer use (Rose *et al*, 2005). Length of wait is important, as users are often unwilling to wait more than a handful of seconds for a response (Palmer, 2002).

Download delay can be measured both in terms of initial access to the site as well as to movement within the site. Based on the results of 3 independent studies, Palmer (2002) found that download delay has a strong impact on Website performance in terms of a user's satisfaction, likelihood to return and frequency of use. In addition, it has been shown that increases in download delay, negatively impact attitudes towards brands in an electronic commerce arena (Rose *et al*, 2002).

The study of Rose and Straub (2001) showed the evidence that download delay has a significant impact on the e-consumer's intention to abandon an e-retailer's Web page. Specifically, as download delay increases, the likelihood of abandonment of a page increases as well.

Similarly to the above-mentioned definition, 'response time', as referred to by Loiacono *et al* (2002) is the time it takes for a site user to get a response after a request or an interaction has been made within a Website. The authors found that a slow response time had a strong negative impact on a customer's intention to revisit

a Website and on his/her intention to purchase at that site. A poor response time could frustrate a user, and encourage him/her to go elsewhere (Loiacono *et al*, 2002; Kim and Stoel, 2004).

Meanwhile Yoo and Donthu (2001) defined the processing speed as the promptness of online processing and interactive responsiveness to a consumer's request. In an empirical study, they revealed that the processing speed was also an important factor, which has a significant relationship to site loyalty and equity.

In this study we use the term "download speed" and refer to it as the initial access speed to the Web page and the speed of display between pages. This concept is narrower than Yoo and Donthu's description (2001), as it doesn't cover the responsiveness of a Website to the customers' requests. It is because very few Vietnamese Websites offer interactive tools and thus do not respond to customers' questions.

We argue that among Website factors, downloading speed is considered one of the most important determinants that customers take into consideration when evaluating a Website (Page and Lepkowska-White, 2002; Yang *et al*, 2003; Koiso-Kanttila, 2005). A Website that is free from technical fault and is quick and easy for users to navigate will be preferred by customers, attracting more return visits and referrals, i.e.Web brand loyalty. Thus, the following hypothesis is stated as:

H4a: There is a positive relationship between downloading speed and Web loyalty;

Privacy and Security

Security and privacy in an online environment is a popular topic of discussion in e-commerce. The emphasis on this issue is motivated primarily by the sensitivity of financial security and information privacy that are quite easily violated in the digital environment.

In the normal social context, privacy is defined in terms of individual control over disclosure and subsequent uses of their personal information. In other words, privacy is protecting individuals from any overreaching control of others (Sheehan, 2002). Privacy has long been a legal, ethical and social issue in many countries.

In an offline environment, Phelps *et al* (2001) found that concern over privacy had a strong negative correlation to the purchase behavior and the purchase decision process in direct marketing (e.g. catalog shopping). Rossister and Percy (1998) commented that it is a negative side of database marketing, when there are increasing concerns about the invasion or loss of privacy when a company acquires and uses a customer's personal information.

In an online environment, there are mixed results concerning the privacy/security issue. On one hand, because of fears such as identity theft and spam, online consumers are particularly sensitive to privacy and security in ways that differ from how consumers develop trust in physical companies. Further, online shoppers are concerned about their information privacy because they do not have the ability to control the access others have to personal information (Hoffman *et al*, 1999, Parasuraman *et al*, 2005).

Internet users have great concerns over how Websites are collecting, using and sharing personally identifiable information. Consumers feel a growing lack of control over how their personal information is used by companies and find it unacceptable for marketers to sell information about them. The consequences of such concerns may vary from not purchasing at the Website, requesting to be taken off the mailing list, spreading negative word of the company, complaining to a third party such as an Internet Service Provider, to providing incomplete personal information when registering at the Website (Sheehan, 2002). Survey findings in Yang *et al* (2003) revealed that Singaporean consumers ranked security and privacy as the most valued attribute of a website.

Research of Szymanski and Hise (2000) adds to insights into the role of financial security in online shopping by documenting its relationship to e-satisfaction. They found that the perception of online security plays an important role in e-satisfaction. It has a strong impact and is one of the primary predictors of e-satisfaction among e-buyers.

Across regression analyses in Yoo and Donthu research (2001), security was consistently more significant than other dimensions of Website quality that

influence site loyalty and equity. This implies that security is one of the most important quality criteria of an internet shopping site that influences customer attitudes and behavior.

On the other hand, a study by Reibstein (2002) showed that the posted privacy policy is the second least important attribute (out of 10 features) in the customer's online store choice. Supporting this direction, the results inform an online survey conducted by Chakraborty *et al* (2002) showed that there was no direct relationship between privacy/security and Website effectiveness in the B2B sector.

Also in Wolfinbarger and Gilly's research (2003), the role of security/privacy is not significant in predicting the Website quality of online retailers, except among the most frequent buyers at the Website. It appears that, initially, consumers judge security/privacy based on other elements such as the professional look and feel of the Website, as well as on the functionality of a Website, and company reputation. Similarly, in a bricks-and-mortar context, consumer trust is affected by a seller's investment in a physical building and facilities.

In between these two streams, results from Sheehan's empirical study in the USA (2002) indicated that the vast majority of online users are pragmatic when it comes to privacy. The author suggested that regarding different levels of privacy concerns, online users could be segmented into 4 distinct groups as follows: *Unconcerned* (16% of total sample of 889 useable responses from a national e-mail survey), *Circumspect* (38%), *Wary* (43%) and *Alarmed* Internet users (3%). This four-part typology suggests that the vast majority of online users have concerns about privacy that vary depending on the situation which supports the contextual nature of privacy.

Regarding the Vietnamese context, where most Websites are not transactional in nature, financial security is not a real issue in this scenario. The privacy of information also gives us little concern here, since there are not many Websites with the interactive tools to get customers involved in dialogue and to collect individual information at the same time.

Generally, Websites operating in the Vietnamese market are not so concerned about offering a security/privacy policy on their home page. There are only 3 foreign-invested Websites offering this privacy policy[1] in comparison with non of the local companies (Luc, 2005). For many Vietnamese people, the Internet is still a novelty, and online users are learning how to behave online when faced with privacy concerns. As the Internet's potential for interactivity increases, online Vietnamese users will constantly be facing new situations to assess and respond to.

Anyway, we arrive at the conclusion that privacy/security is a necessary condition of designing a successful Website. From the customer's viewpoint, a company's Website needs to be safe enough for doing business, getting reliable customer information and services, and providing visitors with a comfortable online experience with the company. Based on the arguments above, it is hypothesized that:

H4b: There is a positive relationship between Web privacy/security and Web loyalty;

3.3.5 Building Relationships

Today, most marketers are seeking more than just a one-time exchange transaction with customers. The focus of market-driven companies is on developing and sustaining relationships with their customers. This has led to a new emphasis on relationship marketing, which involves creating, maintaining and enhancing long-term relationships with individual customers for mutual benefits (Grönroos, 1994; Stone and Woodcock, 1995; Belch and Belch, 2004).

Marketers have practiced relationship marketing for some time, however, it is not always efficient to maintain one-to-one relationships with customers as time spent developing the relationship can take away from time spent actually serving the customer (Stone and Woodcock, 1995; Payne *et al*, 1998). With the emergence of e-commerce, the Web offers great potential for building customer relationships at low costs of time and money.

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[1] *in a sample of 46 foreign invested and 46 local Websites*

Given the unique characteristics of the Internet that allow for a many-to-many communications model and unprecedented interactivity, two of the most common techniques – personalization and community building – are fundamental for fostering customer participation in creating Website brand loyalty (Schubert and Koch, 2002; Thorbjornsen *et al*, 2002). These are crucial because Internet users are actively involved and experienced with the Website and brands offered.

Personalization

Personalization is defined as the ability to tailor (match) a product, service or Web content to specific user preferences (Turban *et al*, 2004). The basic idea of personalization is to learn something about the customers and to use this information to tailor offers for services or information to the needs of the customer.

Personalization in the context of a Website involves treating each visitor as an individual, recognizing visitors when they revisit a site, and serving up information based on his/her explicit or implicit preferences. In general, personalization helps screen out unwanted information or product options, reduces user effort by eliminating the need to provide personal information or preferences, improves the accuracy of searches, and speeds up the completion of transactions. As far as the technological process is concerned, personalization can be considered a three-step process in which customer information (their preferences, behavior, and profile) is taken as input, business rules are evaluated, and customized content is generated as output (Schubert and Leimstoll, 2004).

Although there was considerable enthusiasm for using personalization tools to tighten customer relationships, we found few studies with empirical findings to support its co-relation to Website loyalty and Website effectiveness.

Schubert and Leimstoll (2004) concluded that SMEs in Switzerland are still skeptical toward e-commerce applications which use personalization, with only 11% of SMEs providing customers with the tool for personal registration and only 6% permitting customers to access a previous order. From the customer's side, Nures and Kambil (2001) revealed that 42% of Web users saw no benefits from

personalization. Only the study of Chakraborty and colleagues (2002) gave the evidence that personalization was a significant predictor of Website effectiveness.

In the Vietnamese e-commerce context, companies are still lagging behind in strategically taking advantage of the capabilities of Internet technology, particularly in managing customer relations. There were only10 out of 46 foreign-investment enterprises offering some simple personalization features like log-in registration and personalized e-mail accounts, while no local site had such tools (Luc, 2005). This fact was reflected in their thinking and perception that personalization and community tools were the least important features to contribute to Web loyalty. This may be due to the belief by companies that it is unwise to invest heavily in technology when users at large are not familiar with it.

Furthermore, adding new technologies is not merely a technical issue – it involves simultaneous changes and integration in the business process and structure which could result in management disorder. Thus, very few companies adopt other technologies as a means of communication as well as to enhance customer relations. Indeed, most Vietnamese companies put up their Websites for informational purposes only – displaying images and descriptions of products and contact details.

Nevertheless, we agree with the argument of Turban *et al* (2004) that one of the greatest benefits of e-commerce is its ability to match products and services with individual consumers. Therefore we hope to find the data to support the following hypothesis:

H5a: There is a positive relationship between the personalization level and Web loyalty;

Online community

Online communities are groups of individuals who share common interests and use of the Internet to foster their communities by accessing the same Websites for communication, commerce or support (Kleindl, 2001). Hagel and Armstrong (1997) suggested that by creating strong online communities, businesses would be able to build customer loyalty and generate strong economic returns. Schubert and

Leimstoll (2004) also argued that successful Web players are taking full advantage of the unique, interactive nature of the Web; that is, vendors in this electronic medium should make use of the advantages of a closer relationship to their customers by means of virtual communities.

Muniz and O'Guinn (2001) found the evidence that involvement in brand communities (e.g.Saab, Apple Machintosh, Ford Bronco) was prevalent, and that the Web provided much positive reinforcement; giving consumers a 'greater voice', providing an important source of information (from the brand and other members), and enabling social benefits.

By reducing the efforts needed to find and join a community, by supporting non-synchronized dialogue over time and space among community members and making it possible for discussion groups to form easily, and by freeing the community formation process from geographical restraints, the Internet is likely to boost the capability and utility of brand communities. Membership of an online brand community was shown to positively affect the components of brand equity (McWilliam, 2000).

Establishing a sense of community is valuable because it keeps visitors coming back to the site (Srivinasan *et al*, 2002). Given the Internet's ability to foster real-time, bilateral and multilateral communication and interaction, the online community engenders debate and gathers, at a rapid pace, people with similar interests. And people who discover in these cyberspaces those similar to themselves have much higher tendencies to return to the site that sponsors the meeting space (Farquahar and Rowley, 2006).

Based on the case study of Coloplast's web-enhanced community of health care professionals, Andersen (2005) arrived at the conclusion that Websites seem highly successful as a tool for enhancing brand image and brand recognition among an important group of key persons in the purchasing centers of the B2B market.

However, as Hagel and Amstrong (1997) emphasized, virtual communities are not easy to develop despite their significant economic reward. Many companies rushed to add a bulletin board or chat area to their Websites, proudly announcing the

formation of a new virtual community. These companies were disappointed when few came and even fewer stayed in their "community". They failed to acknowledge that virtual communities are a complex mixture of social and economic interactions that must be aggressively cultivated and managed. Consumer brand companies need new management skills, and brand managers must understand online behavior if they wish to develop strong, sustainable and beneficial online communities around their brands (McWilliam, 2000).

Further, online communities are not well suited for some markets and customers. The component of community in the grocery sectors of Australia and Switzerland was ranked of very low importance in the Web Assessment Method, (Kunie *et al*, 2005). The probable reason for this is that groceries are items needed everyday and with well-known attributes. Or it could be due to the fact that the respondents did not yet know the power of community building on the Internet and were thus not able to really judge its importance and benefits (Schubert and Leimstoll, 2004).

In an analysis of Websites among Vietnamese manufacturing enterprises, there were only two local and two foreign-investment companies which had attempted to build virtual communities for stronger customer relationships, (Luc, 2005). This could be due to low Internet penetration from the customer's side that is difficult to achieve a critical mass for community to success, and it may be due to insufficient communication skills from the company's side in managing and developing such a complex social phenomenon.

But due to the significant economic and non-economic benefits of online communities, we hope that in the near future, Vietnamese companies will soon apply this advanced technological and managerial tool for online success. And we also hope to get the reliable data to support the following hypothesis:

**H5b**: There is a positive relationship between an online community and Web loyalty;

In summary, there are ten hypotheses proposed to be tested in this study to explore the branding potential of Websites. The next section will visualize these relationships in the research model.

3.4   Research Model

The reviews of literature in section 3.2 and 3.3 give some judgments to support the positive relationships between AIPDB functions of a Website with Web awareness and Web loyalty. Based on these arguments, a research framework is proposed as illustrated in Figure 3.2. The research model shows ten relationships that were converted from ten hypotheses which have been stated through section 3.3.1 to section 3.3.5.

These hypotheses are proposed to be tested in this study. The previous supporting studies for these hypotheses are summarized in the table 3.8. The literature review indicates that there have been no previous studies on relationships between Web marketing activities and Web branding potential in Vietnam. This study is a first in the country, and in its transitional economy. This research therefore contributes to marketing theory by providing some evidences of relationships between Web marketing practices and potential for brand building on the Internet from Vietnam, a developing nation with a high economic growth rate and enthusiasm towards implementing Internet technologies into business.

**Figure 3.2: Research Model of Relationships
between a Company's Web Marketing Activities and Web Branding Potential**
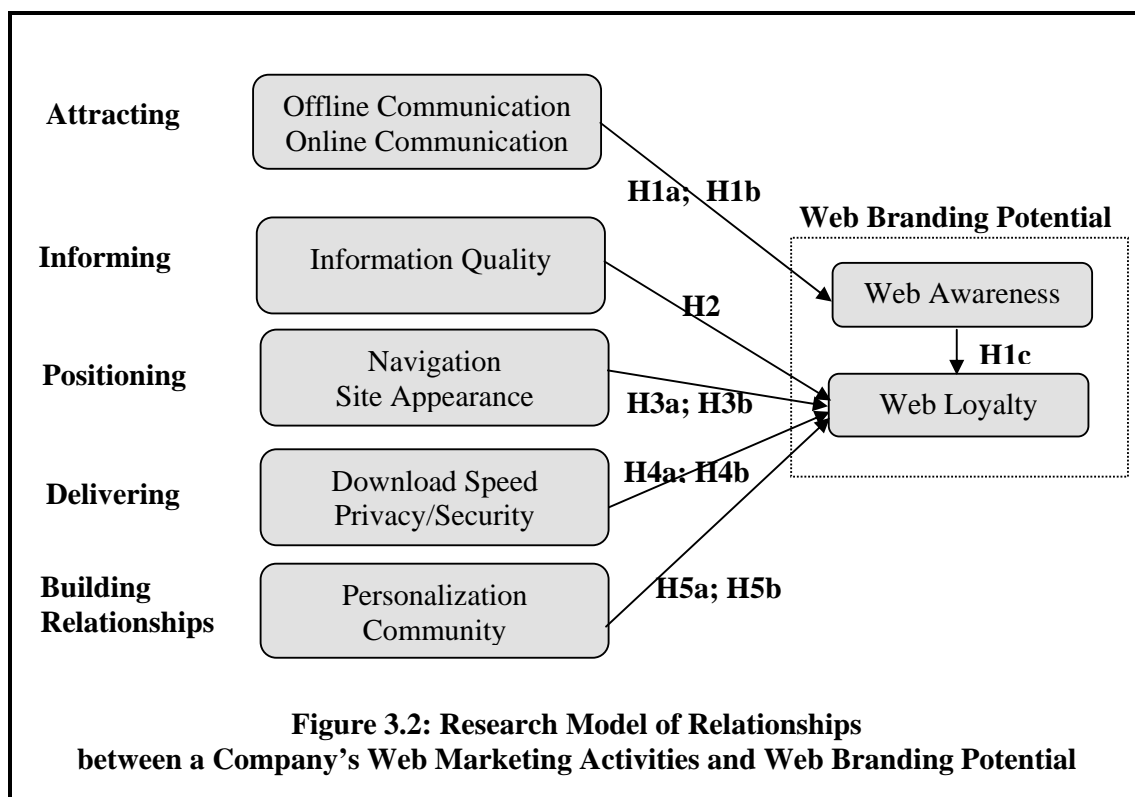
Table 3.8.   Research Summary Supporting Hypotheses

Relationship among Variables	Related Hypothesis	Supporting Studies
Online Comm.→ Web Awareness Offline Comm.→ Web Awareness	H1a H1b	Ilfeld and Winer (2002); Drèze and Zufryden (2004); Huizingh (2002); Ennew *et al* (2005);
Web Awareness → Web Loyalty	H1c	Flavian *et al* (2006); Kim *et al* (2006)
Information Quality → Web Loyalty	H2	Na and Marshall (2005); Palmer (2002); Shchiglik and Barnes (2004); Chakraborty *et al* (2003); Loiacono *et al* (2002); Chen and Wells (1999, 2002); Rodgers *et al* (2005); Kim *et al* (2006)
Navigation → Web Loyalty	H3a	Semeijn *et al*, (2005); Shchiglik and Barnes (2004); Na and Marshall (2005); Chakraborty *et al* (2002); Palmer (2002); Chen and Wells (1999); Parasuraman *et al* (2005); Taylor and England (2006)
Site Appearance → Web Loyalty	H3b	Loiacono *et al* (2002); Yoo and Donthu (2001); Na and Marshall (2005); Ribbink *et al* (2004); Semeijn *et al* (2005);
Download Speed → Web Loyalty	H4a	Rose *et al* (2005); Rose and Straub (2001); Loiacono *et al* (2002); Yoo and Donthu (2001); Palmer (2002); Kim and Stoel (2004);
Privacy/ Security → Web Loyalty	H4b	Parasuraman *et al* (2005); Yoo and Donthu (2001); Hoffman *et al* (1999); Szymanski and Hise (2000); Kim *et al* (2006);
Personalization → Web Loyalty Community → Web Loyalty	H5a H5b	Chakraborty *et al* (2002) Andersen (2005); Srivinasan *et al* (2002); Farquhar and Rowley (2006)

3.5   Summary

This chapter provided reviews of previous studies of relationships between Web marketing and Website functions with Web branding potential, focusing on five important areas of a Website: Attracting, Informing, Positioning, Delivering and Building Relationships. The theoretical model and its ten hypotheses derived from literature were developed for the research. The next chapter will explain the research methodology adopted to collect and analyse primary data to test the above-mentioned relationships.

4

RESEARCH METHODOLOGY

4.1   Overview of Research Methodologies Used in Past Literature

The aim of this study is to explore the key factors that explain the impact of Web marketing activities on Web branding potential in e-business Websites. This section describes the reviews of survey methods used in previous studies.

4.1.1   Research in ICT Developed Countries

A number of academic and practical studies have attempted to develop a useful and valid generic instrument for measuring Website quality from a customer's perspective. A summary of six of these instruments is given in Table 4.1. Perhaps, the most empirically grounded of the scales that focus specifically on the Website interface, is **WEBQUAL^{TM}** (Loiacono *et al*, 2002). Interviewing both consumers and Website designers and using undergraduates to rate e-commerce sites, the authors identify 12 dimensions of Website quality which they claim have sufficient discriminant validity. The composite WEBQUAL^{TM} significantly correlates with intention to purchase and intention to revisit the site.

In another customer-centric effort, Barners and Vidgen developed and refined a different scale to measure the Website quality over four versions (Barnes and Vidgen, 2002) which they also called **WebQual**. This scale provides an index of a site's quality and has five factors: usability, design, information, trust, and empathy. Data used in developing and testing the questionnaire was obtained from samples of university students and staff. The instrument has been developed and examined through application in various domains, including Internet bookstores, airlines, auctions and government sites (Barners and Vidgen, 2001, 2002; Shchiglic and Barnes, 2004).

Yoo and Donthu (2001) developed a nine-item **SITEQUAL** scale for measuring website interface. The authors found four dimensions: ease of use, aesthetic design, processing speed and security, which all have a strong relationship with overall site quality. As in the case of Barnes and Vidgen's (2002), data for developing and testing SITEQUAL, this data was gathered from convenience samples of students enrolled in marketing classes. As a fourth example, Wolfinbarger and Gilly (2003)

Table 4.1: Research Instruments Examining Website Quality (Customer Perspective)

Instrument	Dimensions	Description	Domain tested
WEBQUAL™ (Loiacono *et al*, 2002)	- Ease of understanding; - Intuitive operation; - Information quality; - Interactivity; - Trust; - Response time; - Visual appeal; - Emotional appeal; - Consistent image; - Online completeness; - Tailored communications; - Innovativeness;	- derived from the Theory of Reasoned Action (TRA), the Technology Acceptance Model (TAM) and other relevant MIS and marketing literature together - instrument was refined using 2 successive samples (510 and 336 Web users) - measurement validity was tested with confirmatory sample of 331 Web users - test correlations with purchase and revisit intention - 36-item scale in 12 dimensions	- 12 websites in 4 different areas (CDs, books, airline reservations, and hotel reservations) - USA context
WebQual (Barners and Vidgen, 2001, 2002)	- Usability - Design - Information - Trust - Empathy	- developed since 1998, based on quality function deployment (QFD), service quality scale (SERVQUAL), and IS SERVQUAL (applied for Information System) - 4 versions - 22-item scale in 5 dimensions	- 4 UK business school sites - 3 online bookshops - 3 auction websites; - 3 Dutch airline sites - online bookshops; e-government domain
SITEQUAL (Yoo and Donthu, 2001)	- Ease of use - Aesthetic design - Security - Processing speed	- Psychometrically designed instrumentation to capture the perceived quality of Internet shopping sites - test relationships with site quality - 9-item scale in 4 dimensions	Six USA Internet shopping sites: Gap, Best Buy, eBay, Amazon, Buy, and Wal-Mart,
eTailQ (Wolfinbarger and Gilly, 2003)	- Website design - Privacy/security - fulfillment/reliability - Customer service	- measured quality of Website interface and customer's entire online shopping experiences - 14-item scale in 4 dimensions	Online retailing Websites in USA

Table 4.1: Research Instruments Examining Website Quality (Customer Perspective) (cont')

Instrument	Dimensions	Description	Domain tested
EWAM (Schubert, 2002; Kurnia *et al*, 2005)	Transaction phases: - Information - Agreement - Settlement - After-sales - Community	- developed since 1997 in Switzerland, built on Web Assessment (WA) method (Selz and Schubert, 1997) - included elements of TAM, TRA and Internet marketing. - developed based on phases of a transaction augmented by a community phase - 26-item scale in 5 dimensions	Online grocery websites: - 4 in Switzerland - 6 in Australia
E-S-QUAL (Parasuraman *et al*, 2005)	- Efficiency - Fulfillment - System availability - Privacy	- Developed from SERVQUAL - Measured e-service quality both pre- and post-website service aspects - Contained all phases of a customer's interactions with a website - 22-item scale in 4 dimensions	Powerful brands of USA - amazon.com - walmart.com

developed a measurement for online retailing quality, which attempts to evaluate the entire customer online shopping experience. Thus, this instrument tries to capture the whole process, which includes four dimensions: Website design; privacy/security; fulfilment/reliability and customer service. The authors used offline focus groups and an online survey to develop a 14-item scale called **eTailQ**. Their goal was to create a scale to measure customer perceptions of e-tailing quality and their three-study approach is comprehensive.

A Swiss-based study, the **EWEM** tool (Extended Web Assessment Model) consists of transaction phases, not dimensions. These phases are: information, agreement, settlement, and after-sales, and are augmented by a community phase (Schubert, 2002). The instrument was tested with student samples in Switzerland and Australia to evaluate online grocery Websites (Schubert, 2002; Kurnia *et al*, 2005).

Another useful guide in evaluating online retailers' actual performances, **E-S-QUAL**, was developed and tested by Parasuraman, Zeithaml and Malhotra (2005). This 22-item scale of four dimensions (efficiency, fulfilment, system availability, and privacy) was refined through two stages of empirical data at the famous USA companies: www.amazon.com and www.walmart.com. The E-S-QUAL scale provides a useful framework to categorize comprehensive service quality attributes provided by online retailers.

Besides these six standardized instruments, there were many others researchers using survey methods to examine Website quality from a customer perspective. Table 4.2 gives a summary of a sampling plan reviewed from 20 quantitative surveys on this topic. From the Table we can see that many of the studies applied the online survey approach. Since it has a number of advantages in terms of speed and cost compared with other modes of research, the online survey can be applied in highly developed countries with western cultures (USA and European). But it often has a very low rate of response in other parts of the world because of the technical issues and respondents' reluctance to participate (Healey *et al*, 2005). In some Asian countries such as Singapore and Taiwan, offline surveys still dominated. In the Vietnamese context, offline surveys with personal contact are imperative, otherwise there will be no response at all (Speece *et al*, 1997).

With reference to sampling techniques, in 20 studies reviewed here, half of them implemented the non-probability method, and in particular, the most common technique was convenience sampling in combination with the snowball method. The reason might be that for the populations of Internet users and online shoppers there was difficulty in finding a sampling frame, which is a prerequisite for the probability sampling procedure (Baker, 2002a). Within the 4 studies that applied random sampling, there were already 3 works conducted by professional marketing research companies, which have their own commercial sampling list of Internet users and well-trained research staff. These were the research studies of Srinivansan *et al*, 2002; Wolfinbarger and Gilly, 2003; Dreze and Zyfryzen, 2004. Those outsourcing to professional hands also had the largest sample size (1211, 1013 and 5000 usable responses respectively). Another special feature of Website studies

Table 4.2: Sampling Plans in Previous Studies

Reference	Sampling Technique	Respondents	Size	Response Rate
Srinivasan *et al* (2002)	Online survey Random sampling	Online shoppers	1211	24%
Wolfinbarger and Gilly (2003)	Online survey Random sampling	Online shoppers of consumer goods	1013	-
Loiacono *et al* (2002)	Online survey Lab environment	Undergraduate students in imaginary online shopping situation	510; 336; 311	-
Rodger *et al* (2005)	Online survey	Students to evaluate USA universities' Websites	836	-
Chakraborty *et al* (2002)	Online survey Random sampling	Business customers of USA construction industry	557	19.2%
Barners and Vidgen (2002)	Online survey	Online shoppers of books and CDs; Students and university staff in UK	376	-
Van Riel *et al* (2004)	Online survey Non-probability sampling	Users of various European mobile telecom services; mostly students	118	-
Ribbink *et al* (2004)	Online survey, Convenience and snowball	Online shoppers of books and CDs; Students and university staff in Europe	184	-
Semeijin *et al* (2005)	Online survey Convenience and snowball	Online shoppers of books, CDs, software, electronics and air tickets	150	-
Cheung and Lee (2005)	Online survey Convenience sampling	Undergraduate students, Hong Kong	515	-
Chiou and Shen (2006)	Online survey Convenience sampling	Internet users in Taiwan	205	4.2%
Park and Kim (2003)	Online survey, Convenience sampling	Online shoppers of books and movie tickets, Korea	1278	-
Dreze and Zyfryzen (2004)	Offline survey Random sampling	Internet surfers, USA	5000	11.6%
Chen and Well (1999)	Offline survey Convenience sampling	Students with experience of Web usage, USA	360	-
Na and Marshall (2005)	Offline survey Convenience sampling	Undergraduate students in Korea and Singapore	179; 168	-

Table 4.2: Sampling Plans in Previous Studies (cont')

Reference	Sampling technique	Respondents	Size	Response rate
Kurnia *et al* (2005)	Offline survey Convenience sampling	Students in e-commerce classes	162	-
Luarn and Lin (2003)	Offline survey Convenience sampling	Participants in EC exhibition - conference in Taiwan	180	31.5%
Sypphenlen and Nysveen (2001)	Offline survey Convenience sampling	Passengers at Oslo airport, who visited SAS Website	198	-
Yang *et al* (2003)	Offline survey Random sampling	Internet users in Singapore	299	59.8%
Kim *et al* (2006)	Offline survey Convenience and quota	Hotel guests with online reservations in China	317	62.2%

is that students are the most commonly encountered respondents (in 8 out of 20 studies). The reason was given that students and university staff are among the most intensive Internet users and have experience of Website usage (Chen and Well, 1999: Ribbink *et al*, 2004).

Sample size varied greatly among these studies. Not including the data collected from the three outsourced research studies, the sample sizes still varied in ranges from more than 100 to more than 800 usable responses. Besides time and budget issues, this might also result from the types of Websites and populations used. Non-commercial Websites, particularly university Websites, have the greatest volume of responses (Table 4.2). There were 7 out of 20 studies which had sample sizes of less than 200 respondents.

The scales and sampling plans from prior works were very helpful in our consideration and modification of the survey design for this current research. Our research is focused on the branding dimension of websites in the Vietnamese manufacturing sector, which have no online transaction phase. Therefore, the methods, measurements and sampling techniques used in our research, need to be adjusted to fit the context of e-business development in our country.

4.1.2   Studies in Vietnamese Context

To the author's best knowledge, however, there has to date, been no empirical study of Website quality and Website evaluation from either the customer's, or the company's perspectives in the Vietnamese context. With future development of the Internet in Vietnam, this research is the first attempt to marketing activities to build their Web branding potential.

The main part of this research is to investigate customers' perceptions and evaluations of companies' effort to attract and retain them within the Websites. Before examining the online customers' perception and evaluation of Web branding, it is necessary to explore how the companies are doing with their own Web branding purpose and activities. The exploratory stage was done in an attempt to get a rough idea of Web brand concept and the level of the Internet's presence among Vietnamese manufacturing enterprises (Luc, 2005). With this objective in mind, we designed a small survey to find out the company's perspective as it relates to following issues:

  – general information concerning Website usage: objectives, drivers, barriers to e-commerce.
  – building Website awareness and loyalty: attracting, informing, positioning and delivering functions, as well as building relationships.
  – company's perception of Web branding imprortant factors and evaluation of their Website to meet the branding requirements.

Building upon previous work done in more developed countries, a survey was designed in order to record Web branding practice among local companies. The target population for this exploratory study was Vietnamese manufacturing enterprises located in Hanoi, who have integrated Internet into their business. A population frame was drawn from various local online Yellow Pages (e.g. www.yp.com.vn) and Vietnam Chamber of Commerce and Industry's Business Directory.

A questionnaire was developed with a final version containing 25 questions with a mixture of yes/no, multiple choice, 5-point Likert scale, and some open-ended ones.

The survey was conducted in Hanoi, the capital of Vietnam, in December 2004, beginning with the population of all manufacturing companies that had an online presence. These included enterprises with strong brands as well as firms with little awareness or presence.

The survey was conducted using a quota sampling method to draw a sample of local firms. It used a non-probability sampling procedure which ensures that various subgroups of a population will be represented in their pertinent characteristics, to the exact extent that the investigator desires (Zikmund, 1994). It is quite an appropriate method drawing samples from various forms of ownership which participating in various industrial sectors.

Personal interviews were conducted with web masters or marketing managers, who make direct contributions to the marketing performance of the enterprises and take part in their Website designing and maintenance. Finally, the sample included 46 usable responses. The result of this exploratory study provided an overview of how Vietnamese companies use Websites to build their brands (Luc, 2005). It is useful information for developing the main survey, a study from the customer's perspective. It also helps to validate and modify the theoretical hypotheses and survey instruments for the customer study. The detailed results of the company survey will be discussed in chapter 5, along with the main survey results from the customer's perspective.

4.2   Survey Method

4.2.1 Nature, Strengths and Weaknesses of Survey Method

Surveys are probably the best known and most widely used methods for primary data collection, not only in marketing but in the social sciences in general (Aaker and Day, 1983; Baker, 2002b). Based on various definitions of this kind of research method, Baker (2002b) attempted to define that surveys are concerned with fact finding by asking questions of persons representative of the population and of interest to the researcher in order to determine attitudes and opinions and to help understand and predict behaviour.

Zikmund (1994) explained that survey methods allow for research using a variety of mathematical techniques to investigate the relationships between the data in descriptions, correlations, significant differences or multivariate relationships. Surveys provide a quick, inexpensive, efficient, and accurate means of assessing information about populations. Hart (1987) confirms that the survey is the most usual form of primary research undertaken and attributes its popularity to the following factors:

 - The survey method provides researchers with the means of gathering factual, attitudinal and/or behavioural data, which are often the objectives of most studies;

 - One of the greatest advantages of survey research is its scope: a great deal of information can be collected from a large population economically;

 - Survey research conforms to the specifications of scientific research: it is logical, deterministic, general and specific;

Of course, surveys also have their disadvantages and Hart (1987) cites the following:

 - The unwillingness of respondents to provide the desired data;

 - The inability of respondents to provide data;

 - The influence of the questioning process on respondents;

Nevertheless, many researchers argue that response errors, accidental or deliberate, may be reduced significantly through careful design and execution of the survey sampling and data collection (Aaker and Day, 1983; Churchill, 1995; Chisnall, 1997).

4.2.2   Survey Design

It is a very important stage which involves strategies for developing measurements; constructing questionnaires; designing sample plans; and anticipating analysis techniques (Aaker and Day, 1983; Holbert and Speece, 1993). The following content is a brief summary of research theory for design elements of a typical quantitative survey project:

(a)   Developing Measurements

To solve the research problem, it is a requirement to choose an appropriate measuring system. The key variables (concepts) to be measured must be given an operational definition that specifies how they will be measured. In developing measurements, two important factors should be considered: validity and reliability. The validity of a scale refers to the extent to which it is free from both random and systematic error, and that it measures what it is supposed to measure. Meanwhile, reliability refers to the measuring instruments' ability to provide consistent results through repeated use (Zikmund, 1997; Chisnall, 1997). The detailed measurements for this research are presented in section 4.3.

(b)   Constructing Questionnaire

A structured questionnaire is the principle means used for collecting survey data from the designated population that the researcher is interested in. Good questionnaire design is a key in obtaining good survey results (Chisnall, 1997; Baker, 2003). Inevitably, there is a potential conflict between the information the researcher wishes to obtain and the respondent's willingness to supply this information. Aaker and Day (1983) stated that if a questionnaire is to be an efficient tool for collecting data then it must fulfil five functions:

- Maintaining the respondent's co-operation and involvement;
- Communicating to the respondent;
- Helping the respondent to work out his answers;
- Making the interviewer's task easy;
- Providing a basis for data processing;

All these guidelines were considered, when designing the questionnaire for this research from both perspectives: customer and company (see details in section 4.4 and appendices).

(c)   Sampling Plan

Sampling is a procedure using a small number of units of a given population as a basis for drawing conclusions about the whole population (Zikmund, 1997).

Properly taken, samples lead to accurate portrayals of the whole population. Determination of a sample involves several decisions, including specification of the target population, selection of a sampling frame, determination of a sampling technique, and sample size (Zikmund, 1997).

A sampling frame is the list of elements from which the sample is actually drawn (Zikmund, 1997, Churchill, 1995). In the absence of a sampling frame one cannot draw a probability based sample and so will have to resort to some judgemental or non-probabilistic method (Baker, 2002a).

Sampling techniques may be broadly classified as non-probability and probability. Probability sampling is based on chance selection procedures. Non-probability sampling relies on the personal judgment of the researcher rather than on chance to select sample elements. There are several non-probability techniques: convenience; quota and snowball.

Following the selection of the sampling technique, a sample size is determined. It is accepted that the larger the size of the sample, the greater the precision or reliability of the research, but there are resource constraints which researchers must acknowledge. (Zikmund,1997). There are two methods for determination of sample size: statistical and judgmental (Churchill, 1995). Alternatively, the sample size can be determined by referring to sample sizes used in previous studies (Zikmund, 1997). A detailed sampling procedure of this research is presented in section 4.5.

(d)   Anticipating Analysis Techniques

Data analysis is built around information needs, and the plan of analysis must be decided well before any data collection begins (Holbert and Speece, 1993). The data analysis often involves six steps (Aaker and Day, 1983). The first step is the editing and coding. The second step involves the identification and creation of constructs and their associated measures. In this phase, factor analysis is used routinely to help develop combinations of variables on the basis of their intercorrelations. The analysis then usually moves in one of three directions: association analysis; analysis of dependence and multidimensional scaling. The analysis of dependence is involved when one of the variables is identified as one to be predicted or explained

by the other variables. Usually, the data analysis focused upon model building. It is necessary to test the models and hypotheses that result from the various analyses. And the final step is development of final judgments and the presentation of those judgments and the supporting analysis. The specific data analysis techniques used in this research are discussed in section 4.6.

4.3   Scale Development

This section explains measures of variables that are presented in the research framework in chapter three. The dependent variables are Web awareness and Web loyalty. The independent variables are linked with the five factors AIPDB of Website functions. Scales from previous work were adapted to measure the constructs proposed in the model. Meanwhile, some items were newly created based on the literature related to both traditional branding and online Internet marketing.

4.3.1 Measures of Dependent Variables

(a)   Web Awareness

There were few studies examining awareness among Websites. To the best of the author's knowledge, there were 3 studies which had some items related to the Website's awareness (Table 4.3). The researchers used different terminologies and also applied different methods in their surveys. Dreze and Zyfryzen (2004) examined online visibility among 100 Websites across various advertising sources. And the survey was conducted by commercial market research through a national telephone survey and got the biggest sample size with 5000 usable responses. Website awareness in Ilfeld and Winner's study (2002) also had a data source from the third party – a USA consultancy firm (Landor Associates).

This situation leads the author to borrow some measurement items from traditional marketing literature – brand awareness, which have various studies with highly agreement on the issue. According to Percy and Rossiter (1992), Aaker (1996), and Keller (2003), brand awareness is measured according to the different levels in which consumers remember a brand, ranging from: *recognition* (have you been

Table 4.3: Measures of Web Awareness

Construct	Items	Scales	Domains Tested

Online Visibility (Drèze and Zyfryzen, 2004)	- Where have you seen reference to or mention of site X?
	 - From following sources:
	    o *Online*: advertising, search engine, other Websites, news reports, e-mail, discussions group
	    o *Offline*: advertising, news reports
		Binary index (0/1) was assigned to the question: where have you seen reference to or mention of site X?	- 100 Websites in 10 industries (auto; arts; entertainment; finance; health; Internet portals; news; sports; computer & electronics; travel)
			 - USA

Website Awareness (Ilfeld and Winer, 2002)	Ranking among most popular Websites from Internet users panel	Data source: Landor Associate, USA	- USA
Attention to Website (Huizingh and Hoekstra, 2003)	- Website caught my interest - Website is boring - Pay close attention to site	5-point semantic scale	- Sites freely chosen - Netherlands

exposed to this brand before?); *recall* (which brands of this product class can you recall?); to *"top of mind"* (the first brand recalled). Since one of the purposes of this research is to evaluate the perceived awareness of a Website, wording changes need to be made to Aaker's scales (1996). In addition, to emphasize the company's online presence, only the scale items that stress this aspect were adopted.

In this research, Website awareness is measured by two questions. The screen questions S3 and S4 show the two awareness levels: the "top-of-mind" level (if respondent can write down the Website's address immediately) and the recall level (if respondent could not remember the exact address but could recognize it in show cards). The question measures the respondent's familiarity with the Website by his/her agreement level using the following statements:

− *Site caught my interest*

− *Site is first address I recognized among those in similar product category*

− *I am very familiar with this site*

− *I can immediately recall the site if someone mentions their products*

(b)   Web Loyalty

Web loyalty caught the interest of many researchers in the field. Loyal customers are crucial to business survival, especially in an electronic commerce context (Reichheld and Schefter, 2000). Table 4.4 presents the measures of e-loyalty used in previous studies. We can see that most of these studies used multi-dimensional Likert scales to reflect both the attitudinal and behavioral aspects of loyalty in the online environment. The scale's items reflecting e-loyalty included: pleasure with Website visit; satisfaction with site's visit; preference above others; intention to revisit site; willingness to buy next time; willingness to recommend Website to others and regular revisit the Website.

For Web loyalty in this research, the perceptual measures developed by Van Riel *et al* (2004), Srinivasan *et al* (2003) were adopted with some modifications based on consultations with Vietnamese Web designers and marketing officials. The six scale items are:

- *I am pleased with my visit to this Website*
- *I am satisfied with my visit to this Website*
- *I prefer this Website above others in a similar category*
- *I have intention to revisit the site when the need arises*
- *I have intention to buy products from this company*
- *I am willing to recommend this Website to others (friends/ business concerns)*

4.3.2 Measures of Independent Variables

In this research, there are nine independent variables that explain Web branding potential. They come from five factors of Website design elements, AIPDB model:

(a)   Measures of Attracting Function

Measures of online and offline communication, the two variables in the attracting functions of a Website, were developed by the author for this research since there were no previous studies dealing with this issue. As determinants of Web awareness, the previous studies presented in Table 4.3 only have a list of sources

Table 4.4 : Measures of Web Loyalty

Construct	Items	Scales	Domains tested
Online Loyalty (Van Riel *et al*, 2004)	- I would take X again - I would recommend X to others - I prefer X to others - I intend to continue using X	7- points	- Online support of mobile telecom services - European sites
Online Loyalty (Rodger *et al*, 2005)	willingness to return and use services in next 3 /6/12 months	5- points	- Universities sites - USA
E-loyalty (Srinivasan *et al*, 2002)	- likelihood to switch to another - likelihood to make rebuy - favourite retail site - positive attitude towards the site - first choice when need arises - best choice for online retailing	5- points	- Retail sites - USA
E-loyalty (Ribbink *et al*, 2004)	- will recommend to others people - continue using - prefer above others	5- points	- Book and CDs - Finland
E-loyalty (Semeijn *et al*, 2005)	- prefer the company - use same Website again - recommend to others	5- points	- Books/CDs/ computers/ electronics/ air tickets - Netherlands
Customer Loyalty (Luarn and Liu, 2003	- willingness to buy next time - intention to keep purchasing	7- points	- online traveling services and video - Taiwan
Intention to Revisit Site (Supphelen and Nysveen, 2001)	- likelihood of revisit when need arises	7- points	- Scandinavian Airline System Website - Sweden
Attitude towards the Site (A_{ST}) (Chen and Wells, 1999, 2002)	- site X makes it easy to build relationship with this company - I would like to visit X again in future - I'm satisfied with service provided - feel comfortable in surfing X	5- points	- Sites were freely chosen with highest & lowest satisfaction - USA
Cyber Brand Power (Na and Marshall, 2005)	- satisfaction and (purchase) visit intention	-	- Portal sites - Global, Korean & Singaporean

Table 4.4 : Measures for Web Loyalty (cont')

Construct	Items	Scales	Domains tested
Loyalty Intention (Parasuraman *et al*, 2005)	- positive word of mouth - recommendation to others - encourage others to use - first choice for future - do more business in future	5-points	- retail sites: Amazon and Walmart - USA

from both environments. Further, in developed countries, offline communication about a company's online presence includes television advertising, printed advertising, posters and other public activities (Strauss and Frost, 2001). But in the Vietnamese e-commerce context, offline communication tools are limited to the forms of small-scale and static information which are included in a company's stationary (business cards, business letters, etc,) or in a small line in product print advertising and on product packaging. That's why there is only one scale item containing this aspect of a company's communication. And that's also why we combine the two constructs (online and offline communication) in only one question. In measuring the attracting function, the eight scale items are:

− *Yellow Pages is a useful way for me to discover this site*

− *Recommendation from friends/colleagues would persuade me to visit this site*

− *E-mail from the company would encourage me to visit this site*

− *The banner caught my attention and lead me to visit this Website*

− *Company's promotion of Website is attractive enough to pull attention and curiosity*

− *Web address printing on promotional material (packaging, calendar, business card,) raised my interest for a trial visit to this Website*

− *The company's various advertising tools remind me to come back when need arises*

− *I often return to this site to check for the company's latest sales promotion program*

(b)   Measure of Informing Function

The original scales of measuring information quality/informational content from various studies were shown in Table 4.5. In this research, scale items were adapted from Barnes and Vidgen (2002) as well as Shchiglic and Barner (2004) to encapsulate many aspects of informational value offered by a Website. These measures were developed in the fourth version of WebQual to examine a Website's interface among Internet Bookshops in the UK. The seven scale items are:

Table 4.5: Measures of Information Quality

Construct	Items	Scales	Reference
Information Quality	*Informativeness:* accurate; timely; up-to-date; complete information *Entertainment:* entertaining; enjoyable; pleasing; fun to use information	5-points	Rodgers *et al* (2005)
Information Quality	accurate; believable; timely; relevant; easy to understand; right level of detail; appropriate format	7-points	Barnes and Vidgen (2002); Shchiglic and Barnes (2004).
Informativeness	informative; intelligent; knowledgeable; resourceful; useful; helpful	5-points	Chen and Wells (1999, 2002)
Information/ Content	amount; variety; word count; content quality	5-points	Palmer (2002)
Informational fit-to-task	- adequate for carrying out my task - adequately meets my needs - information in site is effective	7-points	Loiacono *et al* (2002)
Information Phase	quantity; quality; structure of content	-2 to +2	Kurnia *et al* (2005)
Informativeness	- detailed technical info about products - application or trade specific usage info - general info about company - industry-related news/info	7-points	Chakraborty *et al* (2002)
-	- information comprehensiveness - information richness	-	Na and Marshall (2005)
Information Needs	appropriate; up-to-date; clarity of information, variety of choice	5-points	Kim *et al* (2006)

- *Site provides accurate information*

- *Site provides timely information*

- *Site provides complete information*

- *Site provides detailed information about products/services*

- *Site provides useful information*

- *Site provides easy to understand information*

- *In general, site offers high quality of information*

(c)   Measures of Positioning Function

In this research, the positioning function of a Website comprises of two variables: navigation and site appearance. Table 4.6 summarizes the measurements of navigation / organization of a Website from previous work. Seven items were developed to measure the Website's navigational features. Four items to reflect ease-of-use were adapted from Van Riel *et al* (2004) as well as from Cheung and Lee (2005). The other three items to reflect the content organization and presentation were modified from Simeijin *et al* (2005):

- *Site is easily accessed back and forth between pages*

- *Site provides a few clicks to locate information*

- *Search options give useful results*

- *Links are problem-free*

- *Site is well-organized*

- *Site is user-friendly*

- *In general, site is easy and convenient to navigate*

Unlike the measures of a Website's navigation which are consistently agreed upon among researchers, a Website's appearance is measured differently in various studies and there is little commonality about this construct (Table 4.7). In terms of web appearance, Yoo and Donthu (2001) only emphasized aesthetic criteria such as color and image presentation, while Loiacono *et al* (2002) defined it in terms of visual appeal. In this research, site appearance was measured by seven items to

Table 4.6: Measures of Navigation

Construct	Items	Scales	Reference
Usability (some items in dimension)	- navigation is easy - searching is easy - links are problem-free - site is user-friendly	7-points	Van Riel *et al* (2004)
Navigation	- easy access to all services - navigation is easy - searching is easy - website is user-friendly - pages download quickly	7-points	Semeijn *et al* (2005)
Organization	- messy - cumbersome - confusing - irritating	5-points	Chen and Wells (1999, 2002)
Organization	- the site is well organized - site is not cumbersome to navigate - site looks appealing	7-points	Chakraborty *et al* (2002)
	- ease of navigation - organization of site - convenience	-	Na and Marshall (2005)
Navigation/ Organization	- arrangement - sequence - links - layout	5-points	Palmer (2002)
Website Design (Some items in dimension)	- I can go to exactly what I want quickly - organization & layout facilitate searching for products - search function gives me useful results	7-points	Wolfinbarger and Gilly (2003)
Navigation	- easy to go back and forth - a few clicks to locate info	7-points	Cheung and Lee (2005
Efficiency (some items in dimension)	- easy to find what I need - easy to get anywhere on the site - simple to use - well-organized	5-points	Parasuraman *et al* (2005)

reflect both the aesthetic and functional criteria of a Website's interface. The scale items were selected and combined from several studies demonstrated in table 4.7.

Table 4.7: Measures of Site Appearance

Construct	Items	Scales	Reference
Aesthetic Design	- this site is colorful - this site is creative - shows good images	5-points	Yoo and Donthu (2001)
E-scape	- info attractively displayed - layout and colors appealing - satisfying design	7-points	Semeijn *et al* (2005)
E-scape	- page design is intuitive - info attractively displayed - info well displayed - layout and colors appealing - satisfying design	7-points	Van Riel *et al* (2004)
Website Design (Some items in dimension)	- appearance is professional - visually appealing	7-points	Wolfinbarger and Gilly (2003)
	- overall design and layout - web interface - user friendliness - enjoyment - sociability	-	Na and Marshall (2005)
Entertainment	- site is fun - site is exciting - site is entertaining	7-points	Chakraborty *et al* (2002)
Visual Appeal	- visually pleasing - visually pleasing design - visually appealing - innovative - creative	7-points	Loiacono *et al* (2002)

- *Site has creative visual appearance*

- *Site has professional look*

- *Site has good layout*

- *Site has color appeal*

- *Site is visually pleasing*

- *Information is attractively displayed in the site*

- *Site shows good images of products*

- *In general, site has an attractive appearance*

(d)   Measures of Delivering Function

Download speed and privacy/security are the two variables which were chosen to represent the delivery function of a Website. Internet surfers want to have quick access and reliable Websites. Here, table 4.8 summarizes the measures of a Website's download speed from various studies in the field. In this research, download speed is measured by four scale items adapted from the studies of Loiacono *et al* (2002), Wolfinbarger and Gilly (2003). The four items are:

  − *Site loads quickly*

  − *Site doesn't waste my time*

  − *I can go to what I want quickly*

  − *There is very little waiting time between my actions and the site's response*

  − *In general, site provides good access for my use*

Internet surfers also have privacy and security concerns when using a company's Website. A Website needs to be safe enough for doing business, ensuring proper use of personal information and providing a feeling of comfort throughout the visitors' online experience. There are many different measures of a Website's privacy/security function (Table 4.9). Some researchers have quite general questions concerning this aspect (Yoo and Donthu, 2002), whereas others focus only on the financial security issue (Szymanski and Hise, 2000). The measures developed by Wolfinbarger and Gilly (2003) are more comprehensive and balanced.

Table 4.8: Measures of Download Speed

Construct	Items	Scales	Reference
Processing Speed	- easy to access the results - this site has quick processing speed	5-points	Yoo and Donthu (2001)
Download Delay	- initial access speed - speed of display between pages	5-point s Actual time	Palmer (2002)
Website Design (Some items in dimension)	- site doesn't waste my time - I can go to what I want quickly	7-points	Wolfinbarger and Gilly (2003)
Response Time	- very little waiting time between my actions and site's response - site loads quickly - site takes a long time to load	7-points	Loiacono *et al* (2002)

Table 4.9: Measures of Privacy/Security

Construct	Items	Scales	Reference
Security	- this site ensures me it is secure - I am confident of security within this site	5-points	Yoo and Donthu (2001)
Service Interaction	- it feels safe to complete transactions - my personal information feels secure	7-points	Shchiglic and Barnes (2004)
Security/ Privacy	- site has adequate security features - I feel secure giving out credit card info at site - I feel safe in my transactions - I feel my privacy is protected - I trust this site will not misuse my personal info - I feel I can trust this site - The company behind the site is reputable	7-points	Wolfinbarger and Gilly (2003)
Privacy/ Security	- site has posted a privacy policy - site has third-party privacy/security seal - site emphasizes security of data	7-points	Chakraborty *et al* (2002)
Privacy Concerns	*Of giving out personal information:* - it bothers me when site asks me for personal info - it bothers me to give personal info to many sites - think twice before providing my personal info - collecting too much personal info about me - personal info given should only be used for the agreed purposes *Of unauthorized use:* - databases should be protected from unauthorized access - site should never sell personal info to others - site should prevent unauthorized access of personal info - site should protect their computers from unauthorized access	-	Chen and Rea (2004)
Financial Security	evaluate internet storefronts to traditional stores on dimension: financial security of transaction	7-point	Szymanski, and Hise, (2000).
Safety	- security of sensitive information - ease of canceling orders - ease of payment procedure	5-points	Kim *et al* (2006)
Privacy	- it protects info about my shopping behavior - it does not share my personal info with others - it protects info about my credit card	5-points	Parasuraman *et al* (2005)

We selected five scale items (out of seven) from these authors to measure the construct to fit with Vietnamese Websites, which often have less interactive features and no actual online transaction facilities. These scale items are:

- − *Site has adequate security features*
- − *I feel like my privacy is protected*
- − *I trust this site will not misuse my personal information*
- − *I feel I can trust this site*
- − *The company behind the site is reputable*
- − *In general, I am satisfied with the company's site privacy/security policy*

(e)   Measures of Building Relationship Function

Few researchers proposed measures for the personalization function of a Website from the customer's perspective (Table 4.10), since this function deals much more with the technical aspects of a Website's design. Combining the scale items from both the studies of Chakraborty *et al* (2002) and Rodgers *et al* (2005), we have the following measurement for this construct:

- − *Site encourages registration*
- − *Site recognizes return visitors*
- − *Site provides quick feedback*
- − *In general, site has a high level of personalization*

Table 4.10: Measures of Personalization

Construct	Items	Scales	Reference
Personalization	- site encourages registration - site recognizes return visitors	7-points	Chakraborty *et al* (2002)
Service Interaction (1 item)	- the site conveys a sense of personalization	7-points	Shchiglic and Barnes (2004).
Interactivity (1 item)	- provides quick feedback	5-points	Rodgers *et al* (2005)

The community component of a Website also receives little interest from empirical studies (Table 4.11). Five items were developed to measure this construct. They were adapted and modified from Kurnia and Schubert (2004).

− *Site provides good platform for community*

− *Site provides enjoyable discussion forum*

− *Site facilitates communication among visitors*

− *I can benefit from content available in community*

− *I like to participate in the site's discussion forum*

− *In general, site has good online community activities*

In summary, Table 4.12 gives a comprehensive overview of the measurements for the total eleven constructs, with two dependent and nine independent variables. For higher clarity, the table includes the definitions or descriptions of those constructs derived from chapter 3, the determinants of Web branding. The main sources of measures are also provided. See Appendix B for a final questionnaire from a customer perspective.

Table 4. 11: Measures of Community

Construct	Items	Scales	Reference
Service interaction (1 item in dimension)	- the site conveys a sense of community	7-points	Barnes and Vidgen (2002);
Community component	- access to virtual community - profit from relationships in community - benefiting from content in community - customer empowerment	-2 to +2	Kurnia and Schubert (2004)
Community	- share experiences with others - get benefits from community - share a common bond with others	5-points	Srivivasan *et al* (2002)

Table 4.12: Summary of Measurements for Key Constructs

Construct	Definition	Measures	Reference
Web Awareness	The customers' ability to remember or identify the Website across a reference in their online & offline environment.	- Site caught my interest - Site is the first address … - I am very familiar with this site - I can recall this site immediately if someone mentions its products	Newly developed for this study
Web Loyalty	The customers' favorable attitude toward the site and their intention to revisit & recommend the site	- pleasure with Website visit - satisfaction with Website visit - preference above others... - intention to revisit Website ... - willingness to recommend … - regularly revisit Website - intention to buy products ...	Van Riel *et al* (2004); Srinivasan *et al* (2003); Parasuraman *et al* (2005)
Online Communication	Communication activities in online environment: e-mail, banner, coupon, sweepstake, etc.	- Yellow Pages is a useful resource - word-of-mouth has strong impact - e-mail encourages visit - banner leads visit to the site - online promotion is attractive	Newly developed for this study
Offline Communication	Communication activities in offline environment: advertising, promotion, public relations, etc.	- Web address printing in promotional materials raises interest for site trial - Advertising remind to come back - Frequent return to check for latest promotions	Newly developed for this study
Information Quality	Ability of a site to provide a visitor with information of value in terms of quantity, quality & variety	- site provides accurate info - site provides timely info - site provides complete info - site provides detailed info - site provides useful info - site provides easy to understand... - generally, site offers high quality..	Barnes and Vidgen (2002); Kim *et al* (2006)
Navigation/ Organization	Ability of a site to arrange content & images in a manner that increases clarity of information and makes it easy to find needed info	- easy to go back and forth... - a few clicks to locate information - search options give me useful results - links are problem-free - site is well-organized - site is user-friendly - generally, site is easy to navigate	Semeijin *et al* (2005); Parasuraman *et al* (2005)

Table 4.12: Summary of Measurements for Key Constructs (cont')

Construct	Definition	Measurements	Reference
Download Speed	The initial access speed to the Web page and the speed of display between pages	- site loads quickly - site doesn't waste my time - there is very little waiting time ... - I can go to what I want quickly - general, site is providing good access	Wolfinbarger and Gilly (2003); Loiacono *et al* (2002)
Privacy/ Security	Ability of a site to protect personal, financial, and transaction-related information of a visitor	- site has adequate security… - I feel like my privacy is protected - I trust this site will not misuse of my personal info - I feel I can trust this site - The company behind the site is reputable - general, I am satisfied with privacy/security policy ...	Wolfinbarger and Gilly (2003); Parasuraman *et al* (2005)
Personalization	Ability of a site to match a product, service or Web content to specific user preferences.	- site encourage registration - site recognized return visitor - site provide quick feedback - general, site has high level of personalization	Chakraborty *et al* (2002); Rodgers *et al* (2005).
Community	Ability of a site to create platforms for visitors to share common interest and to foster the communication	- site provides good platform ... - site provides enjoyable forum - site facilitate communication... - I can benefit from content available in forum - I like to participate in the forum - general, site has good online community	Kurnia and Schubert (2004)

4.4   Questionnaire Construction

Many factors need to be considered when designing a questionnaire. This research followed an eight step sequence (Churchill, 1995) to create a valid survey instrument: (1) Specify research problem and questions; (2) Specify data needed; (3) Determine types of questions; (4) Decide on question content; (5) Decide on question wording; (6) Decide on sequence of questions; (7) Decide on physical characteristics of questionnaire; (8) Pre-test, revision and final draft. The first two steps were described in chapter 1 on research questions. Here we describe the issues related specifically to questionnaire development:

4.4.1 Types of Questions

This research decided to use closed-ended questions with a 5-point Likert scale to ask for the main contents of the survey. This research also included some multiple choice questions in the opening and at the end of the questionnaire with the goal of obtaining a wider range of replies from the respondents. The multiple-dimensional scales are employed for all measures in this study, since the single measure is not adequate to reflect the complex constructs of customers' attitudes such as awareness and loyalty (Aaker and Day, 1983) and the multiple indicators may provide more meaningful evaluation and higher accuracy (Zikmund, 1997).

Measures were phrased as questions on a five-point Likert scale, from 1 = strongly disagree to 5 = strongly agree. With the Likert scale[1], respondents indicate their attitudes by checking how strongly they agree or disagree with carefully constructed statements that range from very positive to very negative toward the attitudinal object. There is also an option "Not Applicable" in all measures to allow respondents to check whether they appear in the real situation of various Websites or not. Five-point scales were utilized because previous studies suggested that this scale is readily comprehensible to respondents and enables them to express their views (Chen and Well, 1999; Srinivasan *et al*, 2002; Rodger *et al*, 2005).

4.4.2 Question Content

The question content was developed built upon the measurements justified in section 4.3 and the guidelines listed in section 4.2.2. In order to have enough data to back-up our research framework, the major part of the original questionnaire included 10 questions (from Q.3 to Q.12), which contained 50 items. Each question related to distinct construct in Web Branding models.

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[1] *A type of verbal rating scale developed by Rensis Likert in 1932, which is now extremely popular for measuring attitudes because of its simple administration and good reliability (Chisnall, 1997). But a disadvantage of this measure is that it is difficult to know what a single summated score means (Zikmund, 1997).*

4.4.3 Question Wording

General rules applied in deciding upon the exact wording of the questions: keep questions as simple and straightforward as possible. This was a practical consideration due to the time constraints of the survey participants.

The researcher also considered the following rules in designing the wording of questions:

- avoid double-barrelled questions (questions that include two or more topics)
- avoid questions involving negatives, ambiguity, and confusion
- avoid asking questions that are beyond the respondents' perceived capabilities

These guidelines were considered in designing the question wordings so that the questionnaire would be an efficient tool for communicating with the respondents and in achieving the data collection objectives.

4.4.4 Sequence of Questions

Zikmund (1997) suggested that a long and illogically-ordered questionnaire may result in lower response rates. In this study, we intended to keep the questionnaire logical, short, and easy for participants. The aim was to improve response rates by using a respondent-friendly questionnaire and an easy-to-answer format. For this research, the questionnaire is organized into 3 parts with 25 questions. In the very first page there is a covering letter to explain the purpose of the study and to provide assurance of a respondent's confidentiality.

Part one is an opening section which includes six screening questions to ensure the right respondents are interviewed. The right respondents for this survey were Internet users above 18 years olds, who had had at least 1 year of online experience and had browsed the Websites of Vietnamese manufacturers. Part one also asks for the respondent's purpose in visiting such a Website and the sources the respondent used to find the site. The questions in part I are formatted as yes/no and multiple choices.

Part two is the main content of the questionnaire. It contains 12 questions relating to the respondents' opinion and evaluation of a Website. The questions are phrased on

a five-point Likert scale. The scale has a number of favorable statements relevant to attitude and requires a respondent to indicate a degree of agreement or disagreement with a variety of statements relating to attitude towards a Website.

Part three asks the respondent about his/her Internet usage and experience. The questions concern the amount of time and regularity, and the typical activities, locations and mode of connection used by a respondent when surfing the Internet. This part also explores the respondent's profile in terms of age, gender, education level and job. These personal questions are listed at the end of the questionnaire in order to avoid the respondent's reluctance to answer such sensitive issues. The questionnaire format is presented in Appendix A.

4.4.5   Pre-test, Revision and Final draft.

After a careful check of content, wording, sequence and layout of the English version, the questionnaire was translated into Vietnamese. The translation was done by two independent researchers, who are academic staff of the Vietnam University of Commerce and have MBA degrees from English speaking institutions. The final translation of the questionnaire into Vietnamese was agreed upon through discussion between the two translators and the author.

The questionnaire pre-test was taken with 12 respondents. Among these 12, were five persons who were students and staff of the VUC, and seven respondents who were clerical workers at the office building, located near to VUC. All aspects of the questionnaire was tested, including: question content; wording; misunderstanding; sequence; format; layout and time taken to complete the questionnaire.

After the questionnaires were completed, the researcher held some discussion with the respondents to ask for their comments. In this way, the researcher could determine what their feelings, confusions, and reactions were to the questioning process and to specific questions. The results of the pre-test were incorporated into the final draft of the questionnaire.

4.5   Population and Sampling Plan

The nature of this research requires the gathering of responses from a sample of Internet surfers who have visited and browsed any Vietnamese manufacturing Website (local or FDI company in Vietnam). Therefore, the target population consists of all Internet surfers whom have online experience with the Websites of manufacturing companies.

4.5.1 Respondents

To qualify for participation in the study, respondents were required to be at least 18 years of age, to have access to a computer at home/work, and to have Internet experience of at least one year. The sample was composed of 236 men and 241 women, ranging in age from18 to 56. There were 224 respondents from Hanoi (accounting for 47% of the sample) and 253 respondents from Hochiminh City.

To encourage their participation, respondents were guaranteed complete confidentiality and incentives were offered. Incentives were offered both in non-material and material ways: an executive summary of the survey results (which more than half of the sample were interested in) and a small gift (at a cost of about 2 US$) was handed to the respondents after the interview as a sincere thank for their cooperation.

4.5.2 Sampling Procedure

In Vietnam, about 14% of the population are Internet users (VNNIC, 2005). Most of them live in the big cities such as Hanoi and Hochiminh city. Most of them are young and their ages are often less than 40 years old. We do no have a list of Internet users in Vietnam. Moreover, we do not have a list of Internet users who have already visited the Websites of manufacturing firms. Without such a sampling frame, we cannot draw a probability based sample (Baker, 2002a).

Thus, the only feasible way of sampling is by the convenience method. We have to approach the locations which have a high concentration of Internet users, such as universities, offices, and IT parks. With some screening questions at the beginning

of the questionnaire, we can clarify who will qualify as a suitable respondent for the study.

The sampling procedure began with the lists of 50 locations in Hanoi and 75 locations in Hochiminh city. The lists were drawn from Vietnam Chamber of Commerce and Industry's Business Directory 2005. The field workers were sent to these locations to collect data. In order to avoid a response bias, the number of respondents should not exceed 5 persons at each location. Data collection was completed in cooperation with a local marketing company, Truong Doan Ltd[1]. The survey was carried out in a period of one month, from the middle of September to the middle of October of 2005, achieving 477 usable responses. A total of 133 Websites of Vietnamese manufacturers were visited and evaluated (see App. B).

4.5.3   Field Work

Personal interviews were used for this research. Six assistants were employed to personally deliver and collect the questionnaires. The assistants were Truong Doan's part-time employees. The assistants had at least one year of practical marketing experience. Having selected the assistants, brief training was provided to explain the objectives of the research, the content of the questionnaire, and the requirements of the data collection process. The success of the procedure depended on the quality of the original contacts and the assistants' ability to motivate respondents to participate in the survey. These points were emphasized during the execution of the training.

The assistants were further instructed to collect business cards or e-mail addresses that would be needed for a follow-up quality check. The assistants were assigned to different areas in the two cities. Each of the assistants was responsible for delivering and collecting the questionnaires from respondents located in a certain area. During the execution of the fieldwork, supervision of the fieldworkers was carried out by the researcher to make sure that they followed the procedures and techniques in which they were trained. The researcher kept in close touch with the progress of the survey. Daily contact was taken at the end of the working day to review progress of the data collection and response rates.

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[1] **Truong Doan Company** *can be verified online at www.truongdoan.com.vn*

4.5.4   Sample Size

Following the selection of the sampling technique, a sample size of 450-500 was expected. The sample size was determined by the judgment method because of time and budget constraints. Churchill (1995) argues that to achieve reliable estimates with maximum likelihood, the ratio between sample size and the number of parameters (scale items) estimated should be equal or more than five. In this study, the initial estimated parameters were fifty. A minimum sample size can be calculated $60 \times 5 = 300$.

However, the special issue of determining our sample size was that: not all the Websites have all the required features and not all of the respondents were interested in some of the features of the sites. Thus we anticipated much missing data on some features of Websites and determined the sample size of 450 to 500 responses, as half as many against the minimum size calculated above. This size determination was also consistent with the actual sample size in previous studies. Referring to Table 4.2, which shows that the size ranges from 118 to 836 usable responses (not including the surveys conducted by professional commercial companies). Thus the size of 450-500 is an average figure from previous works. It is a valid additional consideration in determining sample size (Zikmund, 1997).

Missing data occurs in this research in situations where the responses were not applicable to the Websites' design or the respondents were not interested in or had not used this feature of a Website. The three most commonly missing pieces of data were the three features of: Privacy/Security; Personalization and Community Building. Many Websites did not have such features and also there were many respondents who were not interested in those features of a Website.

Appendix C shows that the missing data of these Website features ranges from 20 to 40 % of the sample size. A simple remedy for missing data is to delete the offending cases. In many cases where a non-random pattern of missing data is present, this may be the most efficient solution (Hair *et al*, 1998). The results of data analysis of the complete data only (n=254 or 53% of the whole sample) shows a similar pattern for the whole sample.

4.6   Data Analysis

The association analysis and analysis of dependence are the main approaches involved for the data analysis in this research. Particularly, there are three different statistical techniques used. They are descriptive statistics, correlation analysis, and multiple regression analysis. All these analysis techniques are supported by the computer software SPSS 11.0.

Descriptive Statistics

After data is collected, the first step is to run the simple descriptive statistics in a standard SPSS program to examine the reliability and validity of data status in this research. Firstly, the researcher will interpret the frequency distribution of discreet variables (e.g., gender, education level, mode of Internet connection, Internet usage). Then, the mean and the frequency distributions of continuous variables (e.g. Web awareness, Web loyalty, information quality, etc,) will be calculated and analyzed.

Correlation Analysis

There are two purposes for doing correlation analysis in this study. Firstly, it can measure the relationships between continuous variables. Secondly, it can measure if two variables have a high correlation and coefficient. In order to enhance the validity of the research, this study will use correlation analysis to check the multicollinearity problem. This step can help to ensure that all the independent variables are actually independent from each other.

Multiple Regression Analysis

The multiple regression analysis (MRA) is used to assess the theoretical model. MRA provides researchers with a comprehensive and powerful tool for quantifying the relationships among variables. Further, MRA possesses the ability to integrate the relationship of intentions with two, three or more variables simultaneously (Aaker and Day, 1983). MRA, a form of general linear modeling, is a multivariate statistical technique used to examine the relationship between a single dependent variable and a set of independent variables. The objective of multiple regression

analysis is to use the independent variables whose values are known, to predict the single dependent value selected by the researcher. The following equations demonstrate the relationships derived from our research framework:

$$Y_1 = \alpha_1 + \beta_{11}X_1 + \beta_{12}X_2 + \varepsilon_1 \qquad \textbf{(1)}$$

$$Y_2 = \alpha_2 + \beta_{21}Y_1 + \varepsilon_2 \qquad \textbf{(2)}$$

$$Y_2 = \alpha_3 + \beta_{23}X_3 + \beta_{24}X_4 + \beta_{25}X_5 + \beta_{26}X_6 + \beta_{27}X_7 + \beta_{28}X_8 + \beta_{29}X_9 + \varepsilon_3 \qquad \textbf{(3)}$$

Where:
- Y_1 = Web Awareness (Dependent Variable 1)
- Y_2 = Web Loyalty (Dependent Variable 2)
- X_1 = Offline Communication (Independent Variable 1)
- X_2 = Online Communication (Independent Variable 2)
- X_3 = Information Quality (Independent Variable 3)
- X_4 = Navigation (Independent Variable 4)
- X_5 = Site Appearance (Independent Variable 5)
- X_6 = Download Speed (Independent Variable 6)
- X_7 = Privacy/Security (Independent Variable 7)
- X_8 = Personalization (Independent Variable 8)
- X_9 = Community (Independent Variable 9)

α : the intercept parameters in the multiple-regression equation

β: the coefficient of X in the regression equation

$\varepsilon_1, \varepsilon_2, \varepsilon_3$: error terms associated with the prediction of Y_1 and Y_2 when X_1 to X_9 are the predictor (independent) variables

Generally speaking, there are two reasons for using multiple regression analysis in this research. The first reason is that MRA can determine the effect of a set of dependent variables on the independent variables. The second reason is that the MRA can inform the researcher as to the unique effect of each independent variable on the dependent variable. In other words, it can help the researcher know which independent variable is more important and which independent variable is less important in this study.

4.7   Instrument Validations

Careful data examination is necessary step that leads to better prediction and more accurate model estimation (Hair *et al*, 1998). Prior to any analysis, the data of 477 responses was examined in terms of its unidimensionality, reliability and validity.

4.7.1   Factor Analysis and Unidimensionlity

In marketing, factor analysis historically has been employed to "purify" original sets of scale items by isolating and then eliminating those items that do not seem to belong with the rest of the items, as well as to name the dimensions captured by a measure. It also has been used to screen variables before performing a regression analysis to eliminate or at least reduce the problems of correlated predictors (Churchill, 1995).

Here, we use the factor analysis to assess the dimensionality of the Website determinants scales. According to Zikmund (1997) exploratory factor analysis (EFA) is a good technique for studying the dimensionality of a scale, either a (supposedly) unidimensinality of a scale or a multidimensional one. Principal components analysis[1] (PCA) was chosen as the most appropriate technique of factor analysis. A Varimax rotation method[2] was applied to better identify and understand the factors involved. As our survey measured 2 dependent and 9 independent variables as discussed in chapter 3, we constrained the number of factors to 11. The EFA of the origin data of 60 survey items (from Q3 to Q12) resulted in 12 factors, shown in Appendix D.

To improve unidimensionality and discriminant validity through EFA, the commonly employed decision rules were applied to identify the factors underlying Web branding determinants:

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[1] *The objective of a **principle components analysis** is to transform a set of interrelated variables into a set of unrelated linear combinations of these variables (Churchill, 1995).*

[2] ***Rotation** in factor analysis can be defined as the changing of the geometric axes which represent each factor to contemplate a new problem solution having fewer or more factors. **Varimax** is the popular rotation scheme, which attempts to "clean up" the factors in the factor-loading table (Hair et al, 1998).*

- Deleting items with insignificant factor loading (≤ 0.40 for our sample size, Hair *et al*, 1998, p.112). As a result, the two items (Q4h and Q12c) in the original questionnaire were deleted;

- Deleting items with significant factor loadings on two or more factors. Seven other items were also deleted because of this reason (Q5e; Q5f; Q8a; Q8b; Q9e; Q9d; Q11e);

- Excluding single item factors from the standpoint of parsimony (Q4b);

Out of the original 60 items, 50 survived this process, loading on 11 distinct factors, with the eigenvalue greater than one and the loyalty model captured 65.6% of the total variance (see Appendix E). The outcome of EFA suggested an 11-factor solution, in which the reliability coefficients were equal and above 0.68 respectively. The results are shown in Table 4.13. As can be seen, all items are loaded into intended factors, with factor loadings of the 50 items vary from 0.425 to 0.880 which are higher than the threshold of 0.30. For a sample size of 300 or larger, factor loading of 0.30 and greater are considered significant, indicating that the original item is highly correlated with its factor (Hair *et al*, 1998).

4.7.2   Reliability

Reliability refers to the degree to which measures are free from error and therefore yield consistent results (Zikmund, 1997; Chisnall, 1997). The subsequent factors were then subjected to reliability analysis to test for the internal consistency of the scale constructs. Internal consistency reliability is a statement about the stability of individual measurement items across replications from the same source of information. Cronbach's alpha coefficients was calculated to assess reliability of the multi-item measures (Straub, 1989). As reported in Table 4.13, nine of the 11 constructs show very good internal consistency with the alpha scores were well in excess of the commonly accepted threshold value of 0.70. The two remaining factors (Web Awareness and Online Communication) have acceptable alpha scores for exploratory analysis (0.69 and 0.68 respectively). The results indicate that the factors within each multi-item variable are inter-related, and all constructs have satisfactory reliability.

4.7.3 Construct Validity

Validity of a measurement scale is the extent to which the scale fully captures all aspects of the construct to be measured (Churchill, 1997). There are some aspects to deal with the validity: content, convergent and discriminant.

Content validity defines how representative and comprehensive the items were in presenting the hypothesis. Content validity is essentially a subjective agreement among concerned professionals. It is assessed by examining the process that was used in generating scale items (Churchill, 1997). In this current research, the content validity of the most scales is established by their origins from the previous studies of similar design (see section 4.3). The new items that are used for the first time have been developed through a careful review on the process of questionnaire construction and pilot results.

Convergent validity is the degree to which multiple attempts to measure the same concept are in agreement. Convergent validity was assessed by factor analysis using principal component extraction and Varimax rotation. Factor loadings in Table 4.13 show that all items comprising a scale loaded highly (>0.4) on the factor representing the underlying construct. That is the evidence of the convergent validity (Parasuraman, 1991; Straub, 1989)

Discriminant validity is the degree to which measures of different concepts are distinct. As shown in Appendices E and F, the 11-factor solution is consistent with 11 distinct scales. In Appendix E, there was no item load highly (0.4) on more than one factor. In Appendix F, it can be seen in the factor correlation matrix that there was no high correlation among constructs. As multiple measures of the same construct converged together and diverged with measures of other constructs, the measurement shows construct validity (Neuman, 2000). The results presented in Table 4.13 and in Appendices D, E, F support a justification of the unidimentionality, reliability and validity for the 11 constructs in this study and indicate that our measures of constructs are satisfactory.

Table 4.13: Results of Factor Analysis and Reliability Check (Survived Data)

Factors	Items	Loadings	Reliability
Web Awareness	This site caught my interest	0.448	0.6993
	I am very familiar with this site	0.606	
	I can recall immediately about WS if	0.665	
	This site is my first address I could recognize	0.762	
Web Loyalty	I am pleased with my visit to this site	0.541	0.8955
	I am satisfied with my visit to this site	0.425	
	I have intention to revisit the site when…	0.600	
	I have intention to buy products from …	0.625	
	I am willing to recommend the site to others	0.568	
Online Communication	Yellow page is useful way for me to discover	0.731	0.6811
	E-mails from company encourage me to visit	0.619	
	Banner caught my attention & lead me to …	0.643	
	Company promotion on WS is attractive…	0.728	
Offline Communication	Web address printing on promotional…	0.820	0.7134
	Company various advertising tools remind …	0.755	
Information Quality	WS provides accurate information	0.679	0.8869
	WS provides timely information	0.561	
	WS provides complete information	0.737	
	WS provides detailed information about …….	0.726	
	In general, WS offers high quality of …	0.664	
Site Navigation	WS is being easy to go back & forth ….	0.729	0.8637
	WS is providing a few clicks to locate…	0.740	
	Search options give me useful results	0.628	
	Links are problem-free	0.631	
	WS is well-organized	0.697	
	WS is user-friendly	0.724	
	In general, WS is easy & convenient to…	0.755	
Site Appearance	Site has color appeal	0.760	0.8954
	Site is visually pleasing	0.750	
	Information is attractively displayed in the…	0.711	
	Site shows goods pictures of products	0.589	
	In general, site has an attractive appearance	0.688	

Table 4.13: Results of Factor Analysis and Reliability Check (cont')

Factors	Items	Loadings	Reliability
Download Speed	Site loads quickly	0.649	0.8947
	Site doesn't waste my time	0.702	
	I can go to what I want quickly	0.706	
	There is very little waiting time between ….	0.722	
	In general, site is providing good access	0.756	
Privacy/ Security	Site has adequate security features	0.820	0.9012
	I feel like my privacy is protected	0.823	
	I trust this site will not misuse of ….	0.744	
	In general, I am satisfied with the site's ….	0.805	
Personalization	Site encourages registration	0.684	0.8594
	Site recognizes return visitor	0.582	
	Site provides quick feedback	0.639	
	In general, site has a high level of …	0.735	
Community Building	Site provides good platform for community	0.788	0.9392
	Site provides enjoyable discussion forum	0.858	
	Site facilitates communication among visitors	0.868	
	I can benefit from content in community	0.852	
	In general, site has good online community	0.880	

4.8   Summary

This chapter outlined the research methodology used to collect and analyse the survey data to test the ten hypotheses developed in chapter three. Measures of variables were justified, and the selection of the sample was explained. The data collection method, questionnaire design, pre-test and fieldwork were described. Correlation coefficient analysis and multiple regression analysis were depicted. Factor analysis and correlation analysis was conducted. Finally, reliability tests and assumptions of statistical analysis were examined. The next chapter will discuss the data analysis with its interpretation.

5

FINDINGS AND DISCUSSION

5.1   Sample Profile

Participants in this study are individual Internet users who have experience browsing the Websites of Vietnamese manufacturers. The total number of participants was 534. From the sample, we excluded 57 due to missing data and finally used 477 responses for our analysis. Among them, 224 people (47% of the sample) were from Hanoi, and 253 from Hochiminh City. A total of 133 Websites were visited during the survey, in which 287 visits were to 88 domestic manufacturers' Websites and 190 visits were to 45 foreign sites.

5.1.1   Socio-Demographic Profile

Table 5.1 provides a socio-demographic profile of the respondents who participated in the study. As shown in the Table, the distribution of respondents' gender is quite balanced but their age, education and occupation is somewhat skewed. The age of

Table 5.1: Socio-demographic Profile of Respondents

Measures	Items	Frequency	Percent
Gender	Male	236	49.5
	Female	241	50.5
Age	18-25 years	222	46.5
	26-30 years	104	21.8
	31-35 years	68	14.3
	36-40 years	41	8.6
	41 or older	42	8.8
Education	High school	71	14.9
	Vocational/technical	2	0.4
	Undergraduate	349	73.2
	Postgraduate	55	11.5
Job	Students	69	14.5
	Academic staff/ Researchers	45	9.4
	Business persons	29	6.1
	Clerical workers	221	46.3
	Senior officials/ Managers	42	8.8
	Skilled workers	13	2.7
	Unskilled workers	38	8.0
	Engineers	11	2.3
	Housewives	6	1.2
	Others	3	0.6

respondents varied from 18 to 50 years old, but the highest percentage of respondents were in the age group 18-25 (46.5%) The percentage of respondents in other age groups were as follows: 21.8% ranging from 26 to 30 years old, 14.3 % from 31 to 35, 8.6 % from 36 to 40, and 8.8% over 40 years.

Approximately 85 % of respondents had higher education, in which undergraduate level accounted for 73%, posgraduate-11.5%; and high school - 14.9%. Nearly half of the sample (46.3%) was clerical workers, whose job often requires permanent access to computers and the Internet. Together, students and academic staff accounted for 25% of the sample. The study results tend to agree with current research that well-educated and young people are most likely to use the Internet in our country (AcNielsel, 2005; MOT, 2006).

5.1.2   Respondents' Internet Usage

The profile of survey respondents indicated an active group of Internet users who were familiar with business Websites (Table 5.2). Respondents were experienced Internet users. Among them, 69.6 % had been online for more than 3 years and 30.4 % had used the Internet for 1 to 3 years. Internet experience was also indicated by 2 other scales: the frequency of Internet use per week and the amount of time spent on the Internet per week. More than one quarter of the sample (27%) can be considered as heavy Internet users, spending more than 15 hours per week on the Internet, and more than half of the sample (57.4%) can be classified as regular Internet users, connecting to the internet at least once per day. Among these regular Internet users, 37% of the sample can be referred to as Internet addicted users who claim to surf the Net several times per day.

When people connect to the Internet, the most typical activities they enjoy are: reading news, finding information to support their job/study, seeking information about goods/services and e-mailing friends, colleagues and relatives (Table 5.3 shows figures of 79.2, 74.4, 65.0, and 64.6 respectively for the cumulative percent of often and very often use). Thus, figures in Table 5.3 confirm the universal, well-known fact that the Internet is used primarily as an information tool.

Table 5.2: Internet Experience of Respondents

Measures	Items	Frequency	Percent
Years of	More than 3 years	332	69.6
Internet experience	From 1 to 3 years	145	30.4
	More than 15 h/week	129	27.0
Time spent	From 11-15 h/week	56	11.7
on Internet	From 5-10 h/week	155	32.5
per week	Less than 5 h/week	65	13.6
	It depends (no regular)	72	15.1
	Several times a day	180	37.7
	One or two times a day	94	19.7
Regularity	A few times a week	125	26.2
of Internet use	Once a week	19	4.0
	A few times a month	11	2.3
	No regular use	48	10.1

Figures in Table 5.3 also show that the second most frequent reason for using the Internet is recreation (cumulative percent of often and very often use for Entertainment - 55.6% and Chatting - 38.4%).

Buying products and service online is shown to be a much less frequent reason for using the Internet. Two thirds of the sample did not buy online at all. There are several reasons for very few Internet purchases in Vietnam. The first reason is to do with Vietnamese customer behavior. Local shoppers are only familiar with store shopping. Stores are everywhere and available at any time. Meanwhile, non-store shopping, such as printed catalogs or television shopping channels, which are quite popular in other countries, are not widely available in Vietnam (MOT, 2006). So, although the Internet and the online shopping environment has been introduced, Vietnamese customers are not ready for this advanced, non-store method of shopping. Most of the Internet users browsed the manufacturers' site in order to obtain information for future offline purchases. It is called "browsing convenience" which is different to "purchasing convenience".

Table 5.3: Typical Activities When Connected to Internet

%	Very often	Often	Cumulative of top two	Not used at all
a. Reading news	30.4	48.8	79.2	0.8
b. Supporting my job/study	22.4	42.0	74.4	0.6
c. Seeking information for goods	14.5	50.5	65.0	0.2
d. E-mails	26.4	38.2	64.6	3.6
e. Entertainments	14.9	40.7	55.6	3.6
f. Chatting with friends and others	13.2	25.2	38.4	10.1
g. Buying products online	0.8	2.5	3.3	62.7

(Scale: 1=not used at all; 2=rarely used; 3=sometimes; 4=often; 5=very often)

A few online shoppers claimed that they did shop online for recreational purpose (3.3% of the sample). These "recreational e-shoppers" are also likely to virtually "stroll" through online shopping sites for learning, social, or diversion-related purposes. They enjoy gathering online information and enjoy experimenting with the new shopping environment. The most frequent items to be bought online included books, second-hand portable computers and second-hand mobile phones (GIPI, 2004; MOT, 2005).

The second reason comes from low e-readiness of business environment. Major reasons cited for e-business underdevelopment include the lack of a legal framework, technical constraints, shortage of skilled human resources, low credit card use and high cost. Thus most Vietnamese companies set up a Website as an information tool only.

The data in Table 5.4 confirms the fact that the respondents are active Internet users, who have access to the Internet and work within an environment that encourages the use of the Internet. Users connect to the Internet whenever it is convenient for them. The Internet was accessed from the office by 66.7% of respondents. This was the most popular place for them to connect to the Net. Internet Café access is both a main and supplementary way to access to the Internet. Nearly half of the sample has used Internet Café access because it is so cheap and

Table 5.4: Internet Connection Modes and Places to Use the Internet

Places connected to Internet	Dial up		ADSL		Subtotal (n)	% of sample (N=477)
	frequency	%	frequency	%		
Home	118	62.8	70	37.2	188	39.4
Office	22	7.0	296	93	318	66.7
Internet Café	-	-	-	-	216	45.3
				Total	*722*	*151.4*

so easy to find. They are on every street corner in big cities. Nearly 40% of the respondents are connected to the Internet at home and more than half of the sample (51.4%) use the Internet at two or three different places (Home/Office/ Internet Café).

The most popular mode of Internet connection (93%) in local offices is broadband (ADSL). While only 37.2% of home Internet users reported to use such a high speed connection. Nearly two thirds of Home Internet users (62.8%) used dial-up modems which may result in quite a low level of satisfaction for the quality of the Internet connection (Table 5.5). Only 16% of Home Internet users were satisfied with their Internet connection in comparison with 49% of Office Internet users.

However, the satisfaction level with the quality of Internet connection is far behind the rate of ADSL connection. 37.2% of Home Internet users have a high-speed connection, but only 16% are satisfied. Similarly, the majority of office Internet is ADSL but only 49% are satisfied with it. This could be explained by the multidimensional concept of satisfaction. Speed could be the focus when someone is considering the level of satisfaction, but there are also other aspects to consider,

Table 5.5: Level of Satisfaction with Quality of Internet Connection (%)

Place connected to Internet	Very satisfied	Satisfied	Cumulative of top two (4+5)	Bottom two (1+2)
Home	3.6	12.4	16.0	26.1
Office	9.4	39.6	49.0	7.5

(Scale: 5=very satisfied; 4=satisfied; 3=normal; 2=not very satisfied; 1=not satisfied at all)

such as reliability, price and services, as these can also be important to Internet users. It should also be noted that the ADSL Internet options in Vietnam are not as speedy or reliable as expected. Downtime occurs quite frequently and the broad band Internet can easily become "narrow band" in peak periods (VIR, 2005). However, the ADSL price competition among the biggest ISPs (VDC, FPT, Viettel) delivers more alternatives with very reasonable prices for both home and office Internet users in Vietnam.

5.1.3   Description of Websites Visited

Respondents reported visiting 133 manufacturers' Websites (see Appendix B). The distribution of visit frequencies is somewhat skewed both by the type of company (local/ foreign-invested) and by the type of product. Out of 477 visits, 287 were to 88 local sites and 190 visits were to 45 foreign sites. However the top 44 Websites, which have the highest visiting frequency (VF ≥ 5), already account for more than two thirds of the total sample (Table 5.6). These are the Websites of very famous, global brand names (Samsung, Ford, Suzuki, Yamaha, Toyota, Eurowindows, etc.) and the most powerful domestic companies (Vinamilk, Trungnguyen, Kimdan, Bities, etc.). The results confirm the fact that Internet users tend to prefer visiting Websites they deem reliable and trustworthy, the sites of companies which already have an established reputation and brand image.

The top ten most visited Websites all featured high-involvement products[1], such as mobile phones, automobiles, electronics, and fashion clothing. The available product types of the Websites visited can be classified into 18 groups according to the Vietnam Goods Classification. They are: Agricultural products; Auto-motorbikes; Construction materials; Cosmetics - personal care; Electrics; Electronics; Food industry; Footwear; Furniture; Garment- fashion products; Garment- standardized products; Handicrafts; Household products; Industrial products; Jewellery; Mechanical products; Pharmacy and Stationary.

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[1] ***Involvement****: is a reflection of strong motivation in the form of high perceived personal relevance of a product or service in a particular context. High-involvement products are those product, which can attract the customers' time and efforts to discover and learn before purchase (Kotler, 1994). They may be the expensive, risky, high self-expressive or personal products.*

Table 5.6: Top 44 Websites with Highest Visit Frequency (VF≥ 5)

No	Website Addresses	Frequency	Product Category	Company	
1	www.samsungvina.com.vn	13	electronics	F	
2	www.ford.com.vn	12	auto	F	
3	www.suzuki.com.vn	11	auto - motorbike	F	
4	www.yamaha-motor.com.vn	10	auto - motorbikes	F	
5	www.vinamilk.com.vn	10	food industry		L
6	www.vietthy.com	10	garment - fashion		L
7	www.trungnguyen.com.vn	10	food industry		L
8	www.toyotavn.com.vn	10	auto	F	
9	www.sony.com.vn	10	electronics	F	
10	www.eurowindows.com.vn	10	construction materials	F	
11	www.kinhdofood.com	9	food industry		L
12	www.kimdan.com.vn	9	household products		L
13	www.viettien.com	8	garment - standardized		L
14	www.ladoda.com.vn	8	footwear and leather		L
15	www.honda.com.vn	8	auto - motorbikes	F	
16	www.bitis.com.vn	8	footwear		L
17	www.vtb.com.vn	7	electronics		L
18	www.traphaco.com.vn	7	pharmacy		L
19	www.thienlongvn.com	7	stationary		L
20	www.singpc.com.vn	7	electronics		L
21	www.opcpharma.com	7	pharmacy		L
22	www.lioa.com	7	electrics		L
23	www.khoaviettiep.com.vn	7	mechanical products		L
24	www.happycook.com.vn	7	household products	F	
25	www.sym.com.vn	6	auto - motorbikes	F	
26	www.sjc.com.vn	6	jewelry		L
27	www.myduc.com	6	construction materials	F	
28	www.mercedes-benz-vietnam.com.vn	6	auto	F	
29	www.lge.com.vn	6	electronics	F	
30	www.e-rossano.com	6	furniture	F	
31	www.elead.com.vn	6	computers		L
32	www.daidongtien.com.vn	6	household products		L
33	www.canon.com.vn	6	electronics	F	

Table 5.6: Top 44 Websites with Highest Visit Frequency (VF≥ 5) (cont')

No	Website Addresses	Frequency	Product Category	Company	
34	www.baotinminhchau.com	6	jewelry		L
35	www.tiendatvn.com	5	electronics		L
36	www.simply-vn.com	5	food industry	F	
37	www.saigoncosmetics.com	5	cosmetics		L
38	www.rohto.com.vn	5	cosmetics	F	
39	www.pnj.com.vn	5	jewelry		L
40	www.ninomax.com.vn	5	garment -fashion		L
41	www.kovapaint.com	5	construction materials		L
42	www.jvc.com.vn	5	electronics	F	
43	www.donglucsport.com	5	household products		L
44	www.blue-exchange.com.vn	5	garment - fashion		L
	Total	**322 (67.5% of sample size)**		**18**	**26**

Note: F = Foreign invested manufacturer; L = Local manufacturer

According to the average visits number per site in each product group we can add them up to 5 groups. Auto products can stand alone as an independent class. They are the most attractive to the Internet user, with an average of 8 visits per site, which is much higher than the general average visit frequency of 3.6 (Table 5.7).

The reasons for visiting the Website are presented in Table 5.8. The most frequent reason for people to visit the site is to know more about what the company is offering (94.3% of respondents reported). Nearly half of the sample visited the site to gather information because they intend to buy products. The frequency of visits for other reasons was much lower than for these first two primary reasons, and therefore these other reasons can be classified as secondary reasons: attractive promotion program of site (10% of sample went for this feature); discussion forum within site (4.6%) and investigating about competitors through Website (2.9%).

Respondents found out about the site from various sources, both online and offline (Table 5.9). Word-of-mouth was the most common way for them to find out about the site (46%). The second most frequent way for respondents to discover the site was through a search engine (40%). The companies' various advertising activities

Table 5.7: Websites Visited by Product Type

No	Product type	No of Websites	No of Visits	Visits per site
1	Auto-motorbikes	8	65	8.1
2	Footwear	3	17	5.7
3	Jewelry	3	17	5.7
4	Electronics	15	76	5.1
5	Cosmetics - personal care	2	10	5.0
6	Household products	6	29	4.8
7	Pharmacy	4	18	4.5
8	Stationary	2	9	4.5
9	Garment- fashion products	6	26	4.3
10	Electrics	3	12	4.0
11	Mechanical products	3	10	3.3
12	Construction materials	17	50	2.9
13	Food industry	27	77	2.9
14	Garment- standardized products	8	19	2.4
15	Furniture	8	16	2.0
16	Agricultural products	3	5	1.7
17	Handicrafts	3	5	1.7
18	Industrial products	12	16	1.3
	Total	**133**	**477**	**3.6**

were rated as the third most common source (38.6%). These figures suggest that marketing by Vietnamese companies' is quite effective in terms of attracting customers to their sites. The results are quite different from the US context, where top methods of discovering new Websites are: search engines (45.8%); word-of-mouth (20.3%); random surfing (19.9); magazines (4.4%); newspapers (1.4%); television (1.4%); e-mail (1.2%) and banner (1.0%) (Diorio, 2002). This may be explained by the unsaturated situation of the Web Branding environment in Vietnam business. And the progressive companies could easily attract active Internet users to their Websites as a symbol of technology-savvy enterprises.

Table 5.8: Purposes to Visit Websites

Purposes	Frequency	Percent
To know more about their products/services	450	94.3
Have intention to buy products	225	47.2
Website has attractive promotion program	51	10.1
Website has interesting discussion forum	22	4.6
To know our competitors	14	2.9
Others	20	4.2

Note: n=477

Table 5.9: Sources to Know about Websites

Sources	Frequency	Percent
From friends' recommendation	219	46.0
Global and local search engine	191	40.0
From company's advertising activities	184	38.6
Random surfing	96	20.0
Online local yellow pages	48	10.0
From companies' e-mails	31	6.5
Links from other sites	30	6.3
Others	6	1.2

Note: n = 477

5.2   Descriptive Analysis

5.2.1   Web Awareness and Web Loyalty

The mean scores for Web Awareness and Web Loyalty are quite low for Vietnamese manufacturers' Websites (Table 5.10). Web Awareness receives an overall mean of 3.46 with quite diverse rating scores among scale items. The highest mean score (M=3.80 for Q3c) went to "Website recall" if someone mention about the company's products. Also nearly 15% of respondents rated it as one of the top 5 and more than half of the sample agreed that it was in the top 4. "Website caught audience's attention and interest" received the next highest score (M=3.66 for Q3a). The lowest score (M=3.04 for Q3b) went to "Website familiarity" with only one fourth of the sample strongly disagreeing with this statement.

Table 5.10: Mean Results of Web Awareness and Web Loyalty

Scale Item	Mean	SD	Top 5 (%)	Top 4 (%)	Bottom 1&2 (%)
Q3a - This site caught my interest	3.66	0.70	8.80	52.60	3.40
Q3b - I am very familiar with site	3.04	0.82	3.80	22.90	25.60
Q3c - I can recall immediately ...	3.80	0.73	14.30	56.00	4.60
Q3d - This site is my first address...	3.33	0.79	6.10	34.40	13.80
Web Awareness: Overall mean = 3.46					
Q12a - I am pleased with my visit...	3.47	0.71	5.50	43.20	7.10
Q12b - I am satisfied with my visit...	3.75	0.72	13.20	51.60	3.40
Q12d - I have intention to revisit	3.79	0.70	12.40	57.90	3.80
Q12e - I have intention to buy …	3.69	0.72	10.50	53.00	4.60
Q12f - I am willing to recommend ...	3.61	0.87	14.50	43.60	10.90
Web Loyalty: Overall mean = 3.66					

Note: Scale values range from 1 (strongly disagree) to 5 (strongly agree)

The results suggest that Website as a brand was failed to create high awareness and recognition among target audience. Although the sites could build the Internet users first impression and interest but they could only create the sites' recognition about the company online presence through their offline products. The reasons for moderate awareness among Vietnamese manufacturers' Websites are easy to understand as there are few advertising efforts to drive traffic to the sites (VET, 2006b). Online advertising is limited to yellow pages registration, email and banners. The offline options are limited in the format of domain address at the end of company/product advertising and packaging. According to Strauss and Frost (2001), television and magazines are the most effective tools for advertising branding. However, Vietnamese enterprises still do not use them. TV advertising is considered a very expensive option for Websites. Whereas, Web addresses are quite often seen on TV in the major cities of China (Maddox and Gong, 2005).

Table 5.11 presents the results from respondents' regarding Web Awareness created by various promotion tools. Interestingly, one of the most powerful factors creating Web Awareness among respondents is word-of-mouth, which is the one factor outside of the company's control. The mean score for 'word of mouth' iss 3.56,

Table 5.11: Promotion Tools in Creating Web Awareness

Scale Item	Mean	SD	Top 5 (%)	Top 4 (%)	Bottom 1&2 (%)
Q4b - Recommendation from friends…	3.56	0.98	14.50	45.50	14.90
Q4g - Company' offline advertising tools remind…	3.57	0.86	12.40	44.00	11.90
Q4f - Web address printing…	3.55	0.93	14.00	42.60	14.30
Q4a - Yellow pages is useful way to discover…	3.16	1.01	10.30	26.60	27.90
Q4e - Company promotion on WS is attractive…	3.09	0.95	6.70	26.60	27.60
Q4h - I often return to check for the promotion	3.00	0.98	5.00	27.00	31.20
Q4d - Banner caught my attention …	3.19	0.90	4.60	35.40	24.10
Q4c - E-mails from company encourage me to visit	2.78	0.95	2.90	21.80	43.80

Note: Scale values range from 1 (strongly disagree) to 5 (strongly agree)

with quite high rating scores in top 5 and top 4 in value range. The offline advertising tools (Q4g and Q4f) also received similar mean values and top 5 and 4 percentages. The online communication tools (such as the yellow pages, promotion on the Website, banner, email,..) recieved much lower rating scores. The email option seems particularly ineffective (M=2.78 and nearly half of the sample rated at bottom 1 and 2 values) . Thus, from a customer's perspective, offline communication tools seem more effective than online communication tools in creating site awareness. Because of its intrusiveness, advertising in offline media is an important vehicle for generating initial awareness of a Website (Strauss and Frost, 2001).

Finally, the study showed that the use of both traditional promotion techniques and Internet marketing tools increases Web traffic, builds more credibility for the brands, and also creates curiosity about the Website.

Web Loyalty has a slightly higher mean score (M=3.66) than Web Awareness (Table 5.10). The ratings among scale items also fluctuate less. Web Loyalty was measured in 5 different ways: pleased with site visit; satisfaction of site visit; intention to revisit the site; intention to buy company's products; and willingness to recommend the site to others.

Although Web Awareness was not very high in customers' evaluation, however after the first visit, the sites have an opportunity to get them come backs. The sites' content, appearance, download speed, personalization as well as sites' awareness are all factors which could secure Internet surfers' loyalty.

5.2.2 Website Evaluation

Table 5.12 presents the respondents' evaluation of Websites visited. The mean scores of nine Website features are shown in this table. Among these features, Information Quality has the highest score (M=3.85) and Community the lowest score (M=2.85). The features are ranked in the following order: Information Quality; Download Speed; Navigation; Site Appearance; Offline Communication; Privacy/Security; Personalization; Online Communication and Community. Ultimately, it is the content that forges a relationship with the visitor and encourages return visits. However data was missing in three out of the nine factors (Privacy/Security; Personalization and Community) as many Websites did not have such features in their design and there are also many respondents that were not interested in such features.

Table 5.12: Evaluation of Websites' Features

	N	Mean	SD	Overall Mean
Q4f - Web address printing on …	477	3.55	0.93	**3.56** (offline communication)
Q4g - Companies' offline advertising …	477	3.57	0.86	
Q4a - The Yellow pages is a useful way…...	477	3.16	1.01	**3.05** (online communication)
Q4c - E-mails from company encourage me …	477	2.78	0.95	
Q4d - Banner caught my attention …	477	3.19	0.90	
Q4e - Company promotion on WS is attractive	477	3.09	0.95	
Q5a - Site provides accurate information	477	3.94	0.70	**3.85** (information quality)
Q5b - Site provides timely information	477	3.66	0.79	
Q5c - Site provides complete information	477	3.78	0.82	
Q5d - Site provides detailed information about..	477	3.91	0.82	
Q5e - Site provides applicable information	477	3.91	0.75	
Q5f - Site provides easy to understand info	477	3.93	0.73	
Q5g - In general, site offers high quality…	477	3.85	0.77	

Table 5.12: Evaluation of Websites' Features (cont')

	N	Mean	SD	Overall Mean
Q6a - Site is easy to go back and forth...	477	3.93	0.65	
Q6b - Site requires only a few clicks to locate..	477	3.90	0.73	
Q6c - Search options give me useful results	454	3.74	0.71	
Q6d - Links are problem-free	477	3.68	0.78	**3.76**
Q6e – Site is well-organized	477	3.67	0.70	(navigation)
Q6f - Site is user-friendly	477	3.69	0.77	
Q6g - In general, site is easy to navigate	477	3.73	0.66	
Q7a - Site is creative	477	3.43	0.77	
Q7b - Site looks professional	477	3.59	0.89	
Q7c - Site uses appealing colors	477	3.75	0.76	
Q7d - Site is visually pleasing	477	3.71	0.76	**3.70**
Q7e - Information is attractively displayed	477	3.75	0.76	(site appearance)
Q7f - Site shows goods pictures of products	477	3.92	0.71	
Q7g - In general, site has an attractive…	477	3.76	0.73	
Q8a - Site loads quickly	477	3.78	0.77	
Q8b - Site doesn't waste my time	477	3.81	0.84	
Q8c - I can go to what I want quickly	477	3.90	0.74	**3.82**
Q8d - There is very little waiting time...	477	3.78	0.78	(download speed)
Q8e - In general, site is providing good access	477	3.82	0.74	
Q9a - Site has adequate security features	329	3.17	0.79	
Q9b - I feel like my privacy is protected…	340	3.29	0.80	
Q9c - I trust this site will not misuse …	351	3.51	0.79	**3.43**
Q9d - I feel I can trust this site	365	3.70	0.71	(privacy/security)
Q9f - In general, I am satisfied with the site's ...	352	3.48	0.74	
Q10a - Site encourages registration	320	3.48	0.82	
Q10b - Site recognizes return visitors	319	3.23	0.87	**3.39**
Q10c - Site provides quick feedback	319	3.41	0.88	(personalization)
Q10d - In general, site has a high level of …	320	3.42	0.79	
Q11a - Site provides good platform for …	290	2.98	0.93	
Q11b - Site provides enjoyable discussions	290	2.77	1.00	
Q11c - Site facilitates communication …	290	2.86	0.98	**2.85**
Q11d - I can benefit from content in …	290	2.83	1.02	(community)
Q11e - I like to participate in the discussion..	290	2.82	1.01	
Q11f - In general, site has good community...	290	2.83	0.90	

5.2.3   Comparison between Local and Foreign Sites

Figure 5.1 shows the gap between Local and Foreign Sites using the overall mean score rating for Web Awareness and Web Loyalty. Foreign Sites received higher scores in all scale items of these two important constructs. The biggest gap was in Web Loyalty. The foreign sites gained much higher visitors' loyalty both in terms of attitudinal and behavioural aspects. The visitors were more satisfied with their visits to foreign sites and they had more intention to buy products from those companies. They were also more willing to recommend the sites to other people. These findings are easily explainable - most foreign sites belong to very famous global brands (such as Sony, Samsung, Ford, Toyota, et.) and these manufacturing giants have both money and expertise in both the online and offline marketing world. Their sites are much richer in content, more attractive in appearance and more highly responsive to visitors' requests.

Figure 5.2 compares the specific features of local and foreign companies' site in more detailed manner. It shows that the biggest variation was in the most important factors influencing Web Loyalty - Information Quality; Site Appearance; Download Speed; and Personalization. Factors creating Web Awareness, online and offline communication, show a small difference between local and foreign firms. Foreign sites scored a little more highly in the attractive function of Websites. Clearly, foreign products are more aggressively advertised in the physical world than their domestic partners in Vietnam markets.

5.2.4   Comparison between Companies' and Customers' Perspectives

In this section we will examine the different perceptions of companies and customers in terms of importance rating of Website features and the actual evaluations. Figure 5.3 shows the respondents' ranking of Website features' importance and their performance.

The three most important Website features are: Information Quality; Download Speed and Site Appearance (mean scores are 4.45; 4.24 and 4.16 respectively). The next most important feature was offline and online communication. The least important features were Privacy/Security, Community and Personalization.

	Q3A	Q3B	Q3C	Q3D	Q12A	Q12B	Q12D	Q12E	Q12F
FOREIGN	3.77	3.17	3.90	3.33	3.85	4.14	4.17	3.97	4.16
LOCAL	3.60	2.96	3.74	3.32	3.22	3.49	3.55	3.52	3.26

N=477
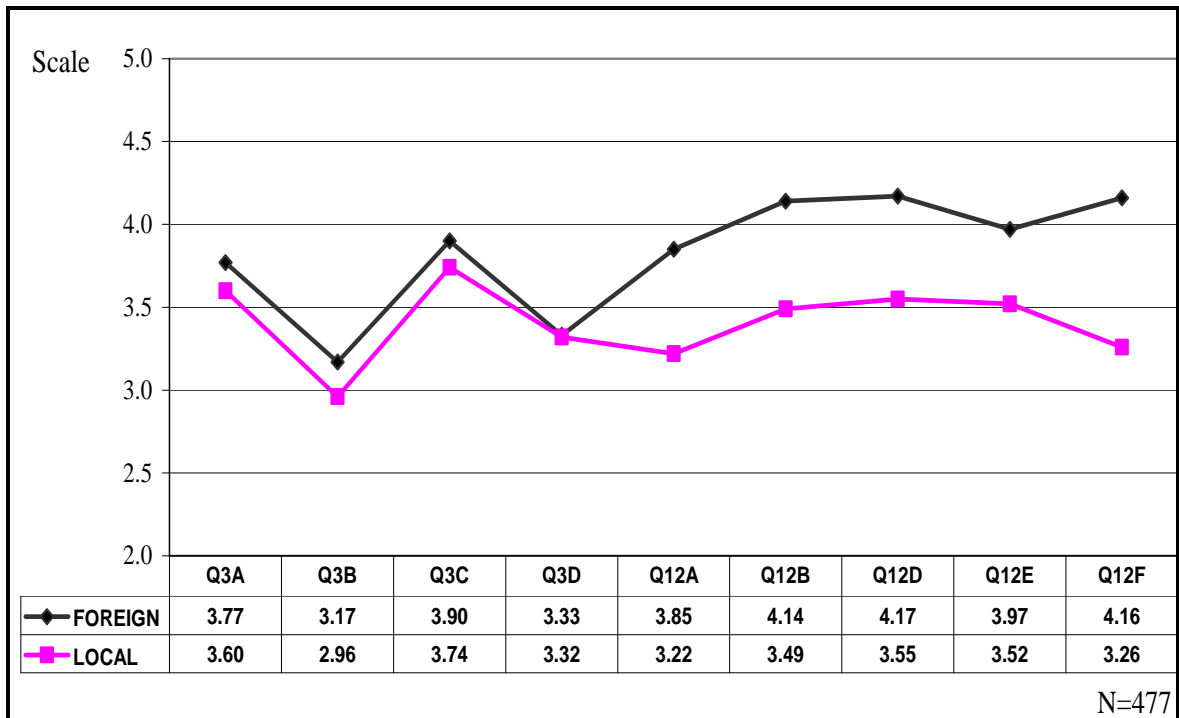
Figure 5.1: Web Awareness and Loyalty, Comparison between Foreign and Local Sites

	OFFCOMM	ONCOMM	INFOQUAL	NAVI	APP	SPEED	PRIV	PERS	COMM
FOREIGN	3.71	3.12	4.26	3.91	4.13	4.06	3.76	3.68	2.97
LOCAL	3.47	3.02	3.59	3.67	3.62	3.47	3.51	3.15	2.76

N=477
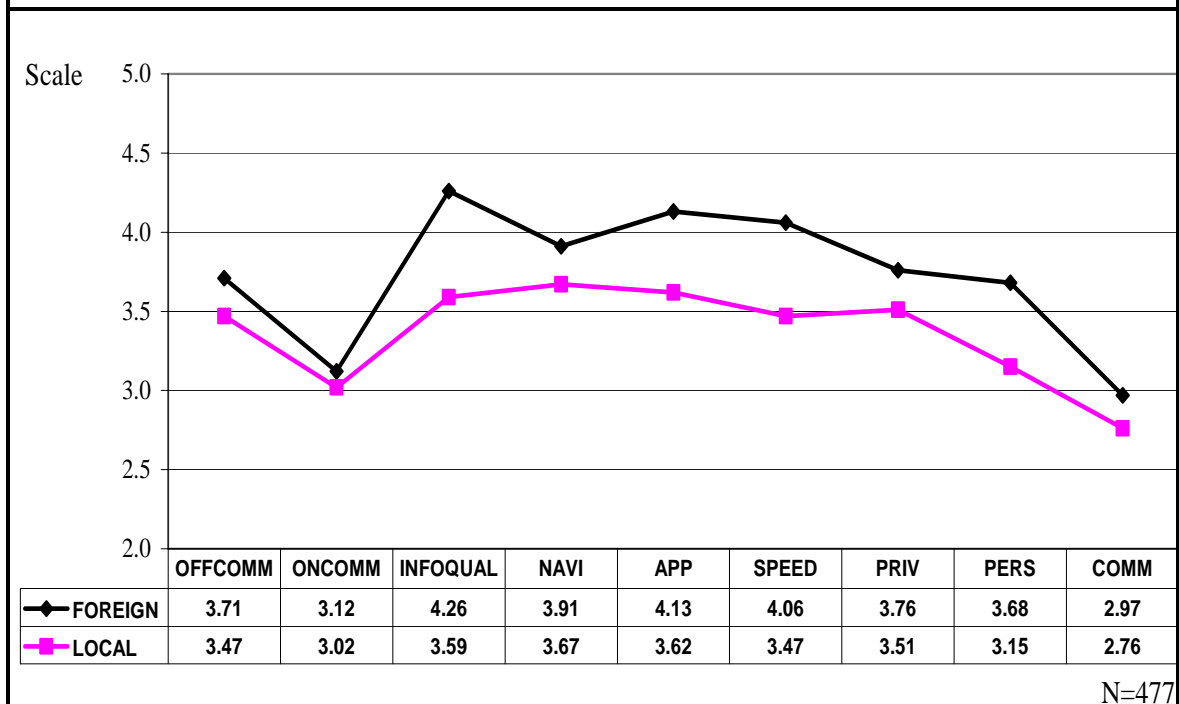
Figure 5.2: Websites' Features, Comparison between Foreign and Local Sites

Note: Scale values range from 1 (strongly disagree) to 5 (strongly agree)

From the customer's perspective, all Website functions failed to achieve their importance ranking. Again, the biggest variations were in the most important features (Information Quality, Download Speed and Site Appearance). There was also a large variation between importance ranking and site evaluation in online and offline communication. These reasons explain the moderate score for Web Loyalty and Web Awareness.

Figure 5.4, from the company's perspective, shows the same pattern (Luc, 2005). Business managers also think that the three most important characteristics of Websites are Information Quality, Site Appearance and Download Speed (mean scores are 4.87; 4.67 and 4.37 respectively). However, companies emphasize online tools for driving traffic to the Web, whereas the offline media seemed more effective to get people to know about the site.

The companies were not satisfied with themselves. Figure 5.5 illustrated clearly the gap between what they considered important and what they were actually achieving in their sites. All the evaluation scores failed to meet the importance requirements. The biggest differences were in Site Appearance, Information Quality and Download Speed, the most important features for Web Branding.

The results show more or less the same scores from a customers' and companies' perspective regarding Website features' importance and evaluation. It seems that the companies know their online customers quite well and are also well aware of their Websites' weaknesses. The important question now is how will companies update and improve their sites to meet their target customers' requirements and achieve their own e-business strategies.

5.3   Hypothesis Testing

In order to test the hypothesis, regression techniques were employed to examine the relationship between Web branding determinants and Web branding potential. The calculated factor scores of each factor were used as predictor variables in regression analysis with the dependent factors.

	OFFCOM	ONCOM	INFOQUAL	NAVI	APP	SPEED	PRIV	PERS	COMM
IMPOR	3.84	3.82	4.45	3.94	4.16	4.24	3.63	3.46	3.51
EVAL	3.35	3.30	3.96	3.71	3.74	3.81	3.42	3.26	2.99

N=477, Survey of Customer Perspective
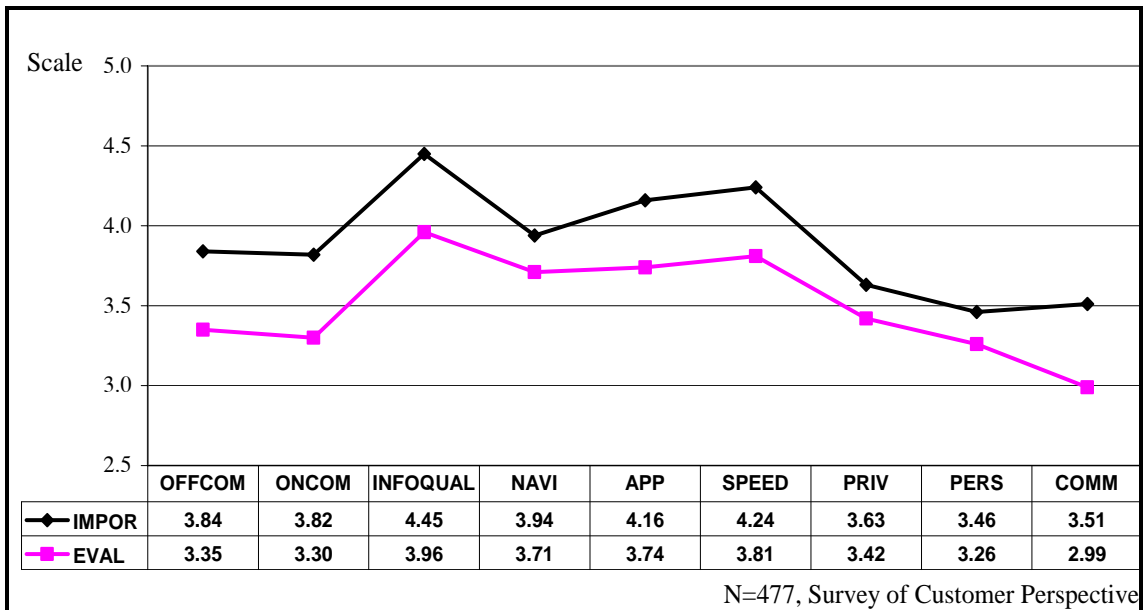
**Figure 5.3: Importance and Evaluation of Websites' Features
(Customer Perpective)**

	OFFCOM	ONCOM	INFOQUAL	NAVI	APP	SPEED	PRIV	PERS	COMM
IMPOR	3.74	4.09	4.87	4.02	4.67	4.37	3.93	3.09	2.64
EVAL	2.89	3.09	3.8	3.83	3.43	3.43	3.8	1.96	1.57

N=46, Survey of Company Perpective
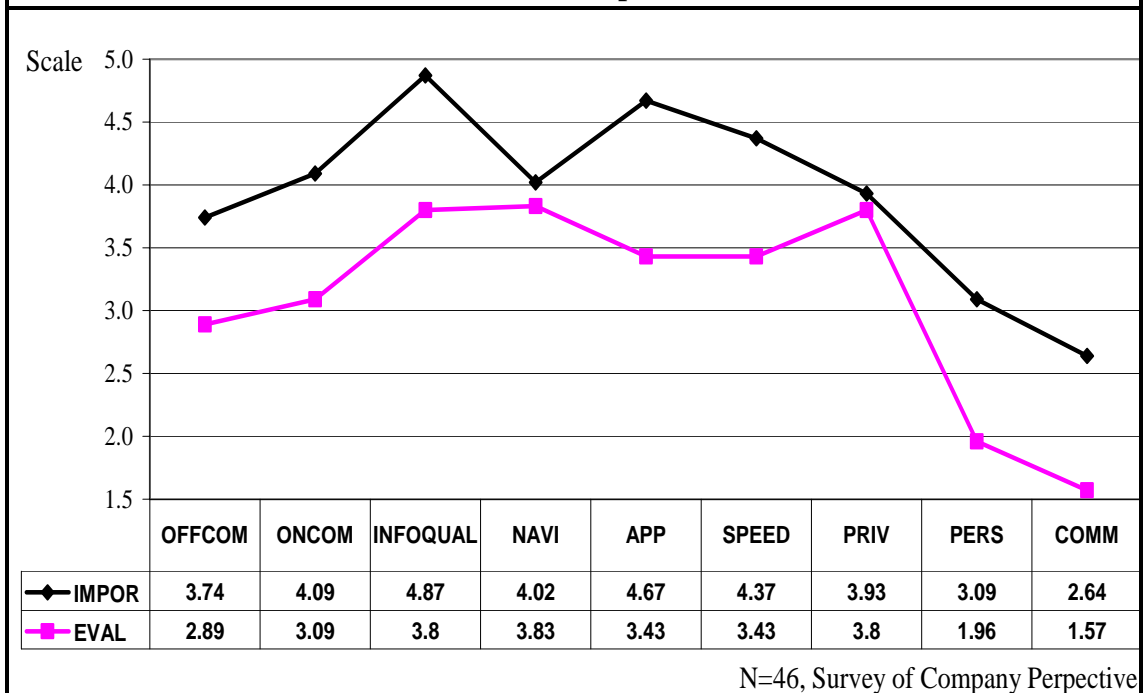
**Figure 5.4 : Importance and Evaluation of Websites' Features
(Company Perspective)**

*Note: Scale values range from 1 to 5
(for Importance: 1=not important at al; 5=very important;
for Evaluation: 1=very poor; 5=very good)*

5.3.1   Multiple Regression Analysis

Before we conducted the regression analysis, the assumptions underlying multiple regression analysis were examined. The assumption of a linear relationship between dependent variables and independent variables is an important assumption which must be clarified. Scattergrams were created to examine the assumption of linearity and the results indicate that relationships between Web Branding determinants and Web Awareness as well as Web Loyalty are linear. Therefore, multiple linear regression analysis could be used to identify relationships proposed in the research model.

Next, the multicollinearity among variables were tested. The simplest and most obvious means of identifying collinearity is an examination of the correlation matrix for the independent variables. All of the correlations which appear in Appendix F were less than 0.771. This is the first indication that there is no substantial collinearity (Hair *et al*, 1998).

There are two additional measures for assessing both pairwise and multiple variable collinearity, the tolerance value and its inverse - the variance inflation factor (VIF). These measures tell us the degree to which each independent variable is explained by the other independent variables.

For each of the independent variables in the regression models, the variable inflation factor (VIF) was calculated. VIF of independent variables in all regression models ranged from 1.169 to 2.425 (see Appendix F). As a rule of thumb, a VIF value for a variable of less than 10 is deemed acceptable (Neuman, 2000; Hair *et al*, 1998). Thus, the figures in this Appendix indicate there is a lack of multicollinearity problem in our survey data.

After checking linearity assumption and multicollinearity problem satisfactorily, the multiple regression analysis of research models was run to test the expected relationships for predicting Web branding determinants and Web branding potential. We tested our hypotheses using a multiple regression model with Web Awareness and Web Loyalty as the dependent variables and the nine antecedents as the independent variables (refer to Figure 3.2). We ran the regression model by

simultaneously forcing all the independent variables in the model. The overall results from the regressions are reported in Table 5.13. The overall regression model is statistically significant (*p*-value for the ANOVA F statistic is less than 0.001). The independent variables together explained 65.6 of the variance in Web Loyalty.

In this table, the standardized coefficients (the betas), *t*-value for the significance test and significance value are reported. The absolute value of beta reflects the relative importance of a variable, thus the characteristic with the highest absolute beta is the most important variable in explaining the variance of the dependent variable. The findings indicate that seven out of the ten hypotheses are found statistically significant and explains 65.6% of the loyalty model (F-value = 70.057, p=0.000).

Table 5.13: Results of Multiple Regression Model

Relationship Paths	Standardized Coefficients	*t*-values	*p*-value
Communications→Web Awareness(Adjusted R^2 =0 .163)→Web Loyalty(Adjusted R^2=0 .194)			
Attracting Function			
H1a: Offline communication → Web awareness	0.306	7.050	0.000
H1b: Online communication → Web awareness	0.201	4.622	0.000
H1c: Web Awareness → Web Loyalty	0.443	10.765	0.000
Websites' Features → Web Loyalty (Adjusted R^2=0.656)			
Informing Function			
H2: Information quality → Web loyalty	0.315	5.822	0.000
Positioning Function			
H3a: Navigation → Web loyalty	0.031	0.666	0.506
H3b: Site appearance → Web loyalty	0.280	5.271	0.000
Delivering Function			
H4a: Download speed → Web loyalty	0.163	3.033	0.003
H4b: Security/privacy → Web loyalty	0.011	0.238	0.812
Building Relationships			
H5a: Personalization → Web loyalty	0.171	3.234	0.001
H5b: Community → Web loyalty	0.032	0.737	0.450

In the relationship with Web Awareness, there were two variables that expected to be related to this dimension. Both variables were found to have a significant impact on Websites' Awareness (Offline Communication: $\beta_{11}=0.306$, p<0.001, H1a and Online Communication: $\beta_{12}=0.201$, p<0.001, H1b). These variables have an indirect impact on Web Loyalty through Web Awareness ($\beta_{21}=0.443$, p<0.001, H1c).

Among the seven variables that were expected to be related to Web Loyalty, only four were found to be significantly related to this dependent variable: Information Quality ($\beta_{23}=0.315$, p<0.001; H2), Site Appearance ($\beta_{25}=0.280$, p<0.001; H3b), Download Speed ($\beta_{26}=0.163$, p<0.01; H4a) and Personalization ($\beta_{28}=0.171$, p<0.01; H5a).

Therefore, higher Information Quality, more attractive Site Appearance, quicker Download Speed and a higher level of Personalization lead to a higher level of Web Loyalty. To summarise - seven out of ten hypotheses were strongly supported.

Figure 5.5: Results of the Multiple Regression Model of Web Branding Potential
(Note: ** p<0.01 and *** p<0.001)
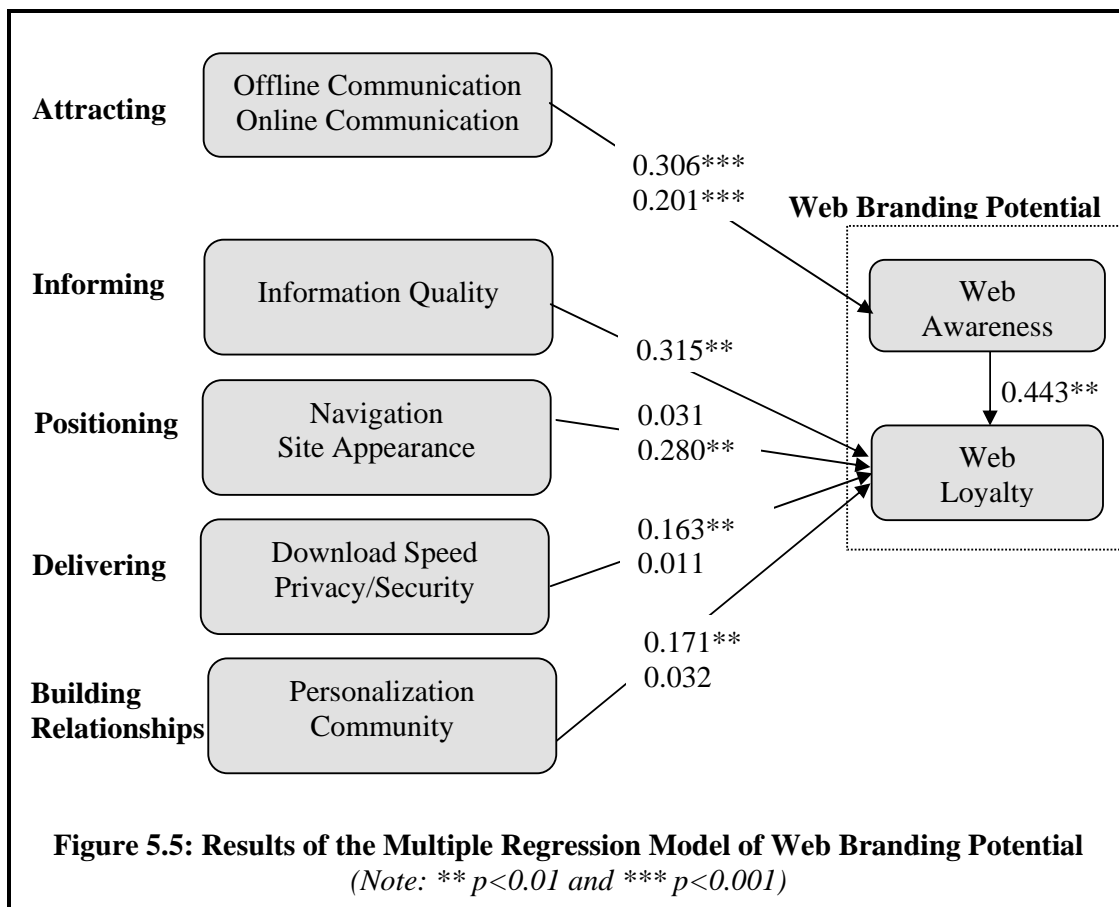
The coefficients for the ten paths in Figure 5.5 represent the proposed relations between the constructs. These results clearly indicate that the model explains overall relations among the constructs reliably. Therefore, it was deemed appropriate to proceed to test the set of paths hypothesized by the model using the multiple regression analysis.

5.3.2   Discussion of Hypothesis Testing

The purpose of this study was to develop measurement scales for factors that influence customers' perceptions of the effectiveness of Vietnamese manufacturing Websites and to empirically test the significance of these factors. Based on our review of literature, we identified nine factors that might influence Web Branding, which include Web Awareness and Web Loyalty. Using a four-phase scale development procedure, we developed valid and reliable scales for measuring each of these eleven factors. We then tested (simultaneously) the significance of these factors in explaining Web Branding Potential. The relative importance of the significant factors in explaining the variability of Website loyalty, as captured by the correlation coefficients, indicates that in the context of this study Information Quality is the most important factor. This is followed by Site Appearance, Personalization and Download Speed. No direct relationship could be found between the other factors (Navigation, Privacy/Security and Community) and Web Loyalty.

This study represents the first effort, in academic literature, to determine the factors that contribute to the Web Branding potential of Vietnamese manufacturing Websites. To the best of our knowledge, no published empirical study has attempted to test the significance of all of these factors simultaneously in a Vietnamese e-commerce environment. Thus, this study contributes to advancing our knowledge about what factors influence Web Branding.

Determinants of Web Awareness

Both variables (online and offline communication) had significant effects on Web Awareness. Thus hypotheses H1a and H1b were supported. When the two kinds of marketing communication were compared it was found that offline activity had the

bigger impact on Web Awareness (H1a: $\beta_{11} = 0.306$ and H1b: $\beta_{12} = 0.201$). The model with Web Awareness as the dependent variable had an adjusted R-square of 0.163. This result confirms the findings from Ennew *et al* (2005) and Dreze and Zufryden (2004), who found that the integrated media mix of online and offline tools was an effective way to drive traffic to Internet sites.

Marketing communication (online and offline) have indirect effects (influence/impact) on Web Loyalty through Web Awareness. Therefore the hypothesis H1c was strongly supported with coefficient positive standardized Beta weight. The score was 0.443 at the 0.001 level of significance. The model with mediating effect of Web Awareness and with Web Loyalty as the dependent variable had an adjusted R-square of 0.194. This empirical data has enabled us to state that site familiarity does influence site loyalty. It is consistent with findings from Flavian *et al* (2006) as well as from Kim *et al* (2006) who indicated that new Internet customers depended on the influence of reputation and branding to enter the site and stick to it if they were satisfied with their trial.

A famous corporate image and brand name can increase the likelihood of online customers perceiving a Website favourably, because a well-established brand name helps guarantee that a company is legitimate. The study results show that brand reputation is positively related to customer loyalty. The more name brand recognition that a Website can establish, the greater consumer loyalty will be built (Flavian *et al*, 2006).

As Vietnam is in the first stage of e-commerce, the marketing communication activities, especially online and offline advertising, seem quite effective in terms of creating Website traffic and increasing customer awareness as well as loyalty. This advertising helps ensure that brands are easily recalled. Easily recalled brands will have a competitive advantage over those brands that are not easily recalled. In our study, the well-known offline brands help to attract customers to their brand Web sites. Manufacturers also hope that their online presence will help to strengthen the offline brand image and reputation.

However, the adjusted R-square of 0.163 appears to be a quite small explanation portion for the Web Awareness creation job of marketing communication. Consequently, researchers should be aware of the fact that, while marketing communication is often regarded as the major force for brand awareness, in Vietnam the online context is only able to explain a relatively small proportion of the variance in Web Awareness. It therefore appears that a much wider range of factors influence Web Awareness. Many of these are out of companies' control, such as word-of-mouth, random surfing, and the use of search engines.

It might also result from little online and offline advertising efforts for the companies online presence. Findings from our company survey[1] reveal that the tools used for building Web Awareness among Hanoi manufacturers were very limited in variety and frequency (Luc, 2005). The most popular online tools were registering with the local online yellow pages directory (2/3 of sample) and e-mails to existing customers inviting them for a trial visit (1/2 sample). Web links and banners were used in much lower frequencies with respective figures of 34.8% and 15.2%. Besides these tools, the most widespread offline tool to be used was the simple inclusion of their Web address (URL) in their stationary and promotional materials. This was also used by two third of the sample. Another offline tool was advertising in newspapers and magazine (65.2% of the firms). These adverts were in the format of a small line of text showing the Web address included in the product or company printing ad.

This situation might be rooted from managers' doubts about the future of e-commerce in Vietnam's markets. Most of the Websites were set up to supplement offline marketing. These websites receive little enthusiasm from top managers in this experimental stage of the Internet era (MOT, 2006).

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[1] *A survey was conducted to investigate the perception of manufacturers' in building and promoting their Web brand. Data collection was carried out at the end of 2004 with a sample size of 46 enterprises located in Hanoi.*

Determinants of Web Loyalty

Four out of seven hypotheses regarding the determinants of Web Loyalty (H2, H3b, H4a, and H5a) were supported. The Website attributes, which had a significant relationship with the Web Loyalty, are: Information Quality; Site Appearance; Download Speed and Personalization. The other hypotheses (H3a, H4b and H5b) were not supported. They correspond with Website features such as Navigation, Privacy/Security and Community Building. The model with Web Loyalty as the dependent variable had an adjusted R-square of 0.656.

Overall, research results suggest that Web Loyalty had a strong positive correlation to Website features (functions). The regression results support the inference of Website features and customer loyalty relationship. The findings underline the importance of Website design to increase consumer loyalty. Among major Websites' features investigated in the research, Information Quality was the most important determinant of Web Loyalty ($\beta_{23} = 0.315$). The second most important factor was Site Appearance -- the more visually attractive the more customer loyalty ($\beta_{25} = 0.280$). The third most important factor was Personalization ($\beta_{28} = 0.171$). The Download Speed attribute had the smallest effect among these antecedents ($\beta_{26} = 0.163$).

While the other three hypotheses were not supported, they need to be viewed in the context of the full regression model. That is given the significant independent variables in the model, the other independent variables (Navigation, Privacy/Security and Community) do not significantly add to the predictive power of the model. Among the Web Branding determinants, the most persuasive factor was information quality, and the least persuasive factor was download speed. The individual results are discussed below:

Informing Function

Providing information is the basic goal of a Website. The statistical results show Information Quality had a positive Beta weight of 0.315 and *p*=0.000. The findings of the study indicated that providing clear, up-to-date, accurate, sufficient, and

easily accessible product information on the sites is one way to convince customers to be loyal toward the sites over time. The research results are in line with the previous studies of Chakraborty *et al*, 2003; Loiacono *et al*, 2002 and Rodgers *et al*, 2005.

Before customers buy a product, they need to collect a certain amount of information so they can feel comfortable to purchase. The Internet is an accessible place for customers to gather information. Customers can easily collect information without going out to different stores. By assisting customers to access sufficient information, companies can keep their customers satisfied and establish good relationships. On the other hand, if customers feel dissatisfied, they will leave the site and never return.

Positioning Function

One of the two hypotheses regarding the positioning function of Websites (H3b) was supported. The statistical results show Site Appearance had a positive Beta weight of 0.280 and *p*=0.000. It suggests that a pleasant visual appeal can encourage shoppers to stay and revisit the sites. The goal is to give customers a pleasant experience while navigating the Website. Our results confirm the findings of Loicono *et al* (2002), Na and Marshall (2005), who found that the aesthetic appeal of a Website was strongly linked with the intention to revisit and cyber brand power.

Previous studies revealed that Site Appearance (presentation style) should stimulate reading (listening and viewing) and facilitate the interpretation of the information. The presentation style includes the layout, colours, font style and size, mix of text and graphical information, and sort, shape, size, and placement of links.

To assess the ease of navigation through the Website we used a 5-point Likert scale, reflecting the extent to which a Website contains a logical structure. On average, the structure of foreign Websites (M=3.91) is perceived to be somewhat better that domestic sites (M=3.67), but this difference is not significant.

Navigation did not appear to have a significant effect on Web Loyalty. Therefore H3a was not supported by the data. It is contradictory to the findings of Chakraborty *et al* (2003) which revealed that organization is the most important factor in a B2B Website. It is also not consistent with other studies by Shchiglik and Barnes (2004), Na and Marshall (2005), and Palmer (2002), which found that site navigation positively influenced Web Loyalty. Their findings showed that customers can have optimistic attitudes toward a Website if the site can offer intuitive navigation to allow them to move freely around the site. Web designers should design a site's structure from the consumers' perspective, not purely form companies' structure. With such a design, customers can feel that they are using the technology, not being used by the technology.

Meanwhile, the findings of this study suggest that site navigation may not be an important determinant of Web Loyalty. Perhaps Vietnamese Internet surfers were not familiar with the complex structure of the large Websites of foreign manufacturers. Although they are satisfied with the information offered by these sites, they feel uncomfortable in navigating such complex sites.

Our findings could be explained by Huizingh's arguments (2000), who found that the size of the Website was negatively correlated with the perceived quality of the navigation structure. He declared that the larger Websites had a more complex navigation structure and it was often less sober and less uniform in its presentation style. Meanwhile, the majority of domestic Websites have quite a simple structure and small size (Luc, 2005). Most of the Websites have a tree structure with a back to home page button and the average site length of 18 pages (SD=11). The foreign sites had an average length of 32 pages (SD=32), which had more complex sites and thus this might lead to the users' confusion.

Delivering Function

Under the proposed framework we hypothesized that Download Speed should be a significant predictor of Web Loyalty (H4a). Again, this hypothesis is confirmed as indicated by the significant positive relationship between these two measures. Download Speed had a positive relationship with Web Loyalty at *p*-value equal

0.003 and Beta weight of 0.163. There is now evidence to support the notion that response time is an important construct for the success of commercial Websites. Simply put, customers tend to be relatively impatient with Websites that take a long time to download, and this may be reflected in their evaluation (Rose *et al*, 2005).

However, the link between Privacy/Security and Web Loyalty was not supported by the data. This aspect of the delivering function had *p*-value bigger than 0.05 (*p*=0.812). Thus the hypothesis H4b was rejected. This contradicts some recent studies that found privacy/security as the main concern of online shoppers (Parasuraman *et al*, 2005; Kim *et al*, 2006). Nevertheless, it was support by findings in Wolfinbarger and Gilly's research (2003) in predicting the Website quality of online retailers as well as in Chakraborty *et al* (2002) in Website effectiveness in B2B sector. These studies found that customers really did not know how to judge privacy with confidence and that even with these cues, they felt unsure of the privacy/security of a site.

In our research context, all the Vietnamese manufacturers' sites are non-transactional in nature and personalization tools are limited (MOT, 2006). That may be the reasons that Vietnam's Internet users are not very concerned about the financial security nor personal privacy of web sites.

Building Relationships

Personalization had a positive standardized Beta weight, which was 0.171 at the 0.01 level of significance. Based on this score, personalization was the third persuasive predictor in a Web Branding model. This finding was in agreement with Chakraborty *et al* (2002) who suggest that Websites should offer personalized solutions to build specific relationship with customers. Although there are still limited options of personalization in Vietnamese Websites, Internet surfers show interest in such a feature.

However, the study results show that Community was not statistically significant since p= 0.450, larger than the threshold of 0.05. The hypothesis H5b was not supported by the data. It shows different result from the studies of Farquhar and Rowley (2006) and Andersen (2005), who confirmed that the sense of community is
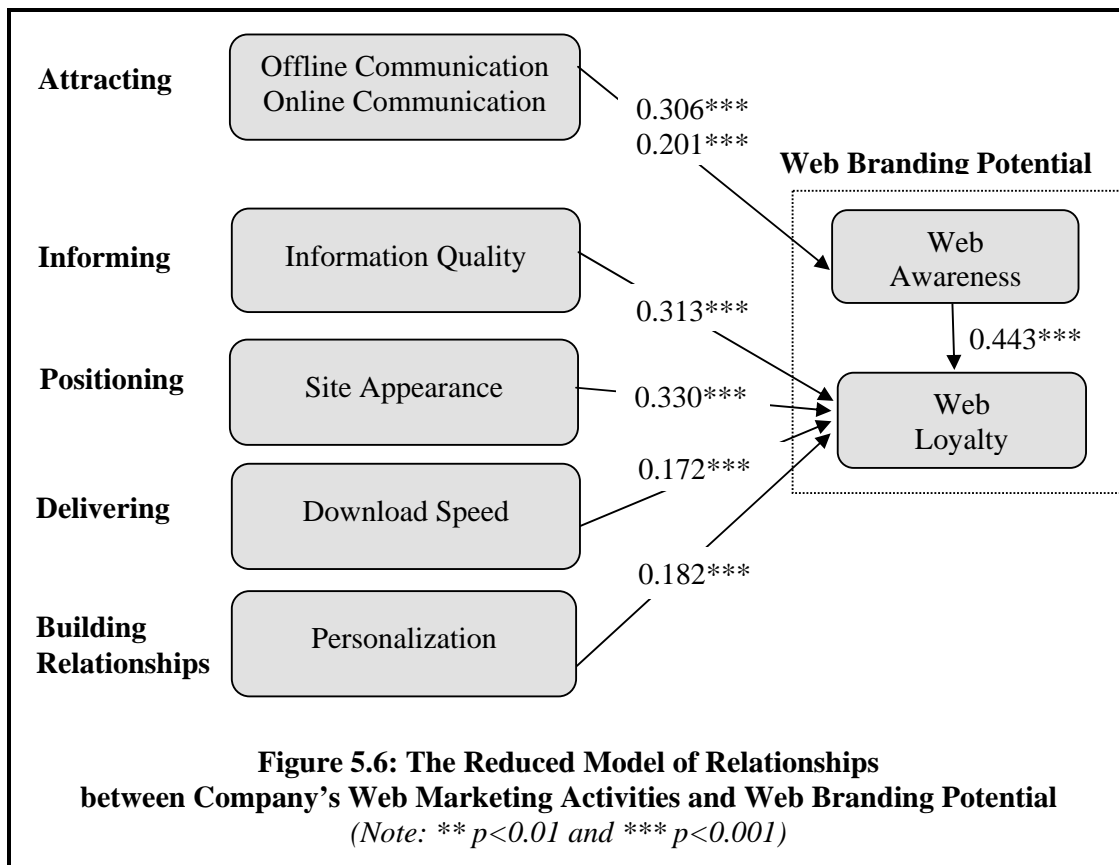
valuable because it keeps visitors coming back to the site. By encouraging customers to share their suggestions and experiences with the company and among themselves, Websites can help customers feel that they belong to a group and therefore make them more willing to develop long-term relationships with the sites (Andersen, 2005).

However it is important to note that this doesn't mean that Community is not important in a Web Branding model. The data only implies that Community features of Websites in Vietnam did not influence customer loyalty as much as other features. It is also need to be analysed in the reality that community feature of Vietnamese Websites are poorly demonstrated. Very few interesting topics were in the forums or discussions (MOT, 2006). Moreover, as some authors emphasized (e.g., Hagel and Amstrong, 1997), virtual communities are not easy to develop and virtual communities are a complex mixture of social and economic interactions that must be aggressively cultivated and managed. The companies need new management skills and must understand online behavior if they wish to develop strong and beneficial communities around their brands (McWilliam, 2000).

5.3.3   The Reduced Model

As the hypotheses related to Navigation, Privacy/Security and Community were not supported, these variables were deleted from the model to reduce the complexity. The reduced model was tested again for fitness and path significance. The results are presented in Figure 5.6.

The reduced model fits the data well. The adjusted R-square has improve significantly. In the reduced model, the adjusted R-square reached 73.4% in comparison of 65.61% in the original loyalty model. Variables that were significant in the original model retained their significances. In comparison with the full model in figure 5.5, the magnitude of the path coefficients did not appear to change significantly except that the effect of Site Appearance to Web Loyalty increased greatly from 0.280 to 0.330. Only the effect of Information Quality is reduced slightly while other variables retained the same influence (Online and Offline communication) or increased slightly (Download Speed and Personalization).

**Figure 5.6: The Reduced Model of Relationships
between Company's Web Marketing Activities and Web Branding Potential**
*(Note: ** p<0.01 and *** p<0.001)*

The research result strongly support seven out of the ten hypotheses, the exceptions being hypotheses H3a, H4b, H5b. Table 5.14 presents the hypothesized relationships and summarizes the results. However, the statistical significance is not the ultimate objective of academic research. They are just the means to an end, which is to better understand the subject under investigation and discover new relationships. The results from this research can be used not only by academicians in further investigation and the testing of relationships in the context of Web branding from the customer perspective, but also by practitioners when they design and upgrade their Web branding strategy.

5.4   Summary

This chapter reported, analysed and discussed the findings of data collected in chapter four. It provided the regression test of the ten hypotheses proposed in chapter three. Demographics of the sample and the respondents' Internet usage were described. The descriptive analysis of Web branding practice among Vietnamese

Table 5.14: Hypothesized Relationships and Summary of the Results

Hypotheses	Relationships	Effect	Status
H1a	Offline Communication → Web Awareness	Positive	Supported
H1b	Online Communication → Web Awareness	Positive	Supported
H1c	Web Awareness → Web Loyalty	Positive	Supported
H2	Information Quality → Web Loyalty	Positive	Supported
H3a	Navigation → Web Loyalty	Positive	Not supported
H3b	Site Appearance → Web Loyalty	Positive	Supported
H4a	Downloading Speed → Web Loyalty	Positive	Supported
H4b	Privacy/Security → Web Loyalty	Positive	Not supported
H5a	Personalization → Web Loyalty	Positive	Supported
H5b	Community → Web Loyalty	Positive	Not supported

manufacturing enterprises was highlighted. Finally, the results of multiple linear regression analysis and hypotheses tests were discussed.

Overall, the results indicated that the Website's functions (Attracting, Informing, Positioning, Delivering and Building relationships) have positive correlations with Web Branding potential. The next chapter will provide an illustration of this through a case study of Web branding practice at the local Pharmaceutical company, the Traphaco.

6

FRAMEWORK
FOR WEB BRANDING DEVELOPMENT

6.1   Web Branding Development Framework

A Website is the primary way any firm doing business on the Internet advertises its products and attracts customers. The types, shapes, and sizes of websites are many-fold. The degree, to which a Website succeeds, as well as the format it takes, depends on the firm's type of industry, goals, marketing strategy, and target market. According to Turban *et al* (2004), as well as Evans and King (1999), successful site development and implementation comprises four major steps, which can be presented in figure 6.1.

The first is Web planning, which includes determining whether and to what degree, a Website makes sense for a given firm, and its setting of proper objectives. This step drives everything that follows. Secondly, site components are designed and placed on the Web. Thirdly, the firm decides how it wants to gain Web entry. Fourthly, the site is evaluated, maintained and updated for improvement.

6.1.1   Web Planning

This stage begins with recognition that the Web complements traditional strategic marketing tools and is another weapon in a firm's hands. The fundamentals of the planning stage are objectives, target markets and competitive analysis.

o **Set objectives**: Before starting to create the Website, it's essential for a company to clearly define the online objectives so that it can convey to the Web developer what it wants the Website to achieve. A list of primary and secondary objectives should be listed, ensuring that the Website ties in with the corporate objectives. Some of the most common objectives include: customer acquisition and retention; dissemination of information; online sales, channel support; product advertising; customer service; creating and establishing company identity or brand awareness.

o **Define target market**: the Website must be designed for target markets. Thus, the company needs to determine: who are they and to what extent can they be reached via the Web. For each segment of the markets, the company needs to

know their needs and wants, their expectations and motivations for looking into the company's sites, etc.

o **Competitive analysis**: the company also needs to know to what degree the other companies in the industry use Web marketing and what their sites look like. There are a number of ways the firm can identify competition online: by conducting searches with the appropriate keywords, and through industry-specific Web portals and directories, etc.

```
┌─────────────────────────────────┐
│         Web Planning            │
├─────────────────────────────────┤
│  o  Objectives                  │
│  o  Target Audience             │
│  o  Competitive Analysis        │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│       Building the Website      │
├─────────────────────────────────┤
│  o  Hosting and Registering     │
│  o  Site Designing              │
│  o  Content Creating and Managing│
│  o  Site Construction and Testing│
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│      Promoting the Website      │
├─────────────────────────────────┤
│  o  Attracting Visitors         │
│  o  Visitors' Retention Programs │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│     Evaluating the Website      │
├─────────────────────────────────┤
│  o  Criteria for Evaluation     │
│  o  Feedback Mechanism          │
│  o  Adjustments and Improvements │
└─────────────────────────────────┘
```

Figure 6.1: Web Branding Development Framework
(Source: Developed from Turban *et al*, 2004; Evans and King, 1999)

6.1.2 Building Website

Design is critical. In most cases, a user makes a proactive decision to go to a given site. Thus, if it is not compelling, there may be a quick exit with little hope of return. The process of building a Website is as follows:

- o **Register a domain name**: a domain name is a name-based address that identifies an Internet-connected server. The name should be short, easy to spell and memorable while continuing to make sense. It should be registered with the corresponding office.

- o **Select a Web host**: where the Website will be located on the Internet. The decisions about whether to own (self-host) or rent, where to host the Website, and the site's domain name are some of the first important decisions an online business owner has to make. There are four options: store builder service; ISP hosting service; Web hosting service; and self-hosting. The Web owner has to identify an ISP which is best able to meet both the Web hosting and Internet service provision requirements.

- o **Design the Website**: this is the critical creative part of the process that determines what the site will look like (e.g., color schemes, graphics, typography) and how visitors will use it (e.g., information architecture, navigation design). The fundamental design criteria are its navigation, consistency, speed, appearance, and quality assurance.

- o **Create and manage content**: content is the text, images, sound, and video that make up a Web page. Creating and managing content is critical to Website success because content is what a visitor comes looking for at a Website. The content is what the Website owners use to sell the site, the products, and the company that stands behind the site. Content can come from a variety of sources, but getting the right content in place, making it easy to find, delivering it effectively, and managing the content so it remains accurate and up-to-date are crucial to the success of the online business.

o **Construct the Website and test**: Website construction consists of the initial content creating, programming, and installing phase of a Website's development. Businesses must also decide whether to design and construct their Website internally, contract the work out to a Web design firm, or use some proportion of both. When the business owners are satisfied with the Website, it is transferred to the Website host. At this point, the Website is open for business, but final testing is required to ensure that all links work and processes function as expected. Website maintenance begins when construction ends. This phase consists of the ongoing process of keeping the site open for business, managing the content, fixing problems and making incremental additions to the site.

6.1.3 Promoting Website

Building a Website, however, is just the first step. Every successful online business needs a highly visible Website. A site should achieve the most fundamental goals: attracting visitors to the site, encouraging them to buy products/services, and making them want to come back for more. There are many ways to promote a Website, using both internal and external tools to attract visitors and to keep them coming back:

o **Internal Website promotion** begins by including content that establishes the site as a useful site for customers to remember so that they return. To do this, the Website should become an indispensable resource with compelling content, useful links to other sites, and features that will make customers want to come back.

Search engine optimization[1] is another internal cost-effective way to get noticed and to attract customers. To make the site search engine friendly, the Web designer must determine the keywords that the customer is using to find out

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[1] *Search engine optimization is the application of marketing strategies intended to improve the volume traffic to a Website from search engines, usually in "natural" search results (Wikipedia, 2006d).*

about what a company is offering. The designer must assign those keywords to specific pages throughout the site and in appropriate places to get a high ranking within the search engines.

o **External Website promotion** uses many varied tools and methods, and could be approached through both online and offline communication strategies. Banners are the most popular online advertising method. Other frequently used methods are pop-up, interstitials, e-mail, affiliated marketing, viral marketing, and online events and promotions (eg, give-aways, contests, quizzes, entertainment, coupons, and so on). Site promotion continues with a marketing plan that includes the URL on every product, business card, letterhead, package, and e-mail message that leaves the business.

6.1.4 Evaluating Website and Adjusting

It is becoming imperative that companies track the effectiveness of the elements in their Websites and make adjustments over time. Site usage must be tracked to measure success, to get feedback, to improve the site and to justify its existence.

o **Criteria of evaluation**: From a marketing perspective, companies want to measure and improve their advertising effectiveness, click-throughs, cost of customer acquisitions, etc. The simplest way to measure Web performance is by the number of "hits" a site generates. However, there are accuracy problems with this[1]. Besides, companies can evaluate their sites by conducting consumer surveys, reviewing e-mail correspondence, and compiling expert ratings[2].

For a firm with an online ordering function at its site, sales can also be used to indicate performance. Some key metrics the company's site may want to measure include: conversion ratio; sales per visitors; net profit per sale; return on investment.

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[1] *When a user accesses a page from a Web server, that counts as one hit. If the user reads a page with ten graphics, each graphic is counted as a separate item. Therefore, the total hits do not reflect the number of visits, but grossly inflate them (Evans and King, 1999).*

[2] *The experts review the size of a firm's Website, by how the site was advertised, and by the site's functionalities (e.g. customer support, customer's ability to order, and so forth).*

o **Feedback mechanism**: Firms must respond quickly to users who send e-mail, complete forms, and participate on their website in other interactive ways. One of the easiest ways to negatively affect the firm's brand image online is by not responding to Web mail promptly. Some companies commit to responding to all mail inquiries within 24 hours. Others require their Web mail correspondents to send an initial response within 24 hours of receipt of an enquiry and provide an estimated date when their customer can expect to have their question answered in full.

o **Adjustments**: Site content must be reviewed and updated regularly to meet the customer's expectations and their evolving requirements. Interest in the site will be maintained if the site is continually developed. The extensive and regularly updated content of a Website is of great importance in attracting return visitors and their loyalty to its brand.

6.2 Web Branding Practice at Traphaco

6.2.1 Case Study Design

A case study is an empirical inquiry that investigates a contemporary, dynamic phenomenon within its real-life context (Perry, 1998). The author conducted a case-study to examine Web branding practice at a local company. This helped to illustrate the framework for web branding development and the AIPDB model, as well as to compare the company's perspective with the customers' evaluation, as in the previous chapter.

We limited our study to pharmaceutical companies with an online presence which are located in Hanoi. The pharmaceutical industry was chosen because its products are highly standardized, making them well-suited for sales promotion over the Internet. Also the nature of its products, which relate to human healthcare, attracts customers to seek out the information they need. This then creates opportunity for these companies to offer potential customers more detailed information and value added services. This field was also chosen because of the vibrant and growing market for global e-healthcare. Many pharmaceutical companies in developed

countries are articulating a commitment to the Internet as an important component of their marketing strategy (Lerer, 2001).

Among 464 pharmaceutical enterprises nationwide, the Traphaco company was selected for the case analysis in this research for a number of reasons:

− Firstly, Traphaco carries Vietnam's biggest brand name in traditional medicine and is one of the top-ten pharmaceutical manufacturers in the country, (VNPCA[1], 2006). Its assortment of products focuses on the idea of the strength of Vietnamese medicine and uses a slogan well-known in Vietnam: "Vietnamese medicine for Vietnamese people"[2].

− Secondly, Traphaco has a reputation for being one of the most innovative and progressive pharmaceutical companies in the north of Vietnam that recognizes the importance of branding. Also, its Website was one of the best among 46 of the local manufacturing sites that the author reviewed in early 2005 (Luc, 2005). Traphaco's products were awarded the title "Vietnamese High Quality Product" for 7 continuous years and the company was included in the list of the 44 top pharmaceutical enterprises in 2006 (see Appendix G).

− Thirdly, because of the author's personal contact with the company which can help in accessing its internal reports and in approaching the managers to conduct interviews.

Research Questions:

The very nature of pharmaceutical product promotion is information intensive and calls for providing information related to products used to treat illnesses. As such the Internet provides a suitable platform for this type of information provision. While a growing number of companies are interested in developing an Internet presence, there is still uncertainty about the promotional benefits to be exploited

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[1] *Vietnam Pharmaceutical Companies Association (VNPCA), http://www.vnpca.org.vn/*

[2] *That slogan was strongly advocated by the founder of Vietnamese traditional medicine Tue Tinh, a famous Vietnamese physician of the17th century. Now it has resulted in a unique strategy that encourages rural populations to become self-sufficient in the herbal treatment of their most common illnesses (Loi and Dung, 1991; Dung and Bodeker, 2001).*

through this medium. This part of the research tries to examine the specific case study of the local company, Traphaco, in its Web branding practice. The most important questions for the case study are:

− How does the Traphaco perceive the role of a Website in its marketing activities?

− How does it manipulate the potential of the Internet to communicate and keep in touch with its target customers?

− What are the important factors that Traphaco emphasizes in its design and management of the site?

− What marketing activities are applied to the promotion of Traphaco's website ?

− How does it evaluate the site's performance in terms of Web awareness and loyalty?

Data Sources:

According to Yin (1994) data for case studies can be collected via six different sources: documentation, archival records, interviews, direct observation, participant-observation, and through physical artifacts. Yin states that "a major strength of case study data collection is the opportunity to use many different sources of evidence". Further, this use of multiple sources of evidence means that the researcher has the opportunity to obtain multiple measures of the same phenomenon, which in turn adds to the validity of any scientific study. In this case, we used the following data sources: internal documentation, direct observation and interviews.

These sources can be classified further as secondary and primary data. Secondary data is gathered from documentation (annual business reports, company brochures, and other company internal records). Primary data is obtained through content analysis after visiting and observing the Website on several occasions, especially before and after interviews. This will serve as a source to obtain a deeper knowledge of the case. The nature of the content analysis was to record for the presence or absence of their main contents and tools used in Websites (Simeon, 1999; Cox and Dale, 2002).

Primary data is mainly obtained through interviews because it makes it possible to target specific individuals within the field of our research problem. Among the three forms of interviews (open-ended; focused and structured[1]), the focused interview is used and conducted within boundaries of an interview guide that contains the main issues.

Data Collection Tools and Procedure:

The secondary data was collected first to gain an overview of the company and of the pharmaceutical market in general. Some of the company's internal documentation was obtained and analyzed. Then an analysis of the content of the company's website was taken and recorded, along with the checklist presented in Appendix H . The design of this checklist was based on the AIPDB model (refer to chapter 3) with the function of 'attracting' being left out for the interview task.

After that, the interviews were conducted to gain in-depth information about Traphaco's branding practice in general and its Web branding activities in particular. Finally, the Traphaco.com.vn was reassessed using both the information gathered during the initial observation process and that taken from the interviews.

The interviews were conducted during the last week of May 2006 by visiting the company in Hanoi where the respondents work. The duration of each interview was between forty minutes and one hour. Four key persons were contacted and the discussions were tape recorded for further analysis. The interviewees were Mr. Tran Tuc Ma (Deputy Director of Business); Ms. Nguyen Van Anh (Manager of the Business and Planning Department); Ms. Nguyen Thi Vinh Hue (Marketing Manager); and Mr. Nguyen Huy Van (Deputy Director of R&D, Webmaster). The interviews were conducted with the draft prepared guides in Appendix I and Appendix J. The interview guides were drafted based on the Web branding development framework presented in figure 6.2 . The next section will describe and

[1] *According to Yin (1994), there are three forms of interview: Open-ended interview (the respondent is not framed to any structure of questions); Focused interviews (the respondent is interviewed for a short period of time and kept within boundaries of a certain topic); Structured interview: takes the form of a survey, which gives more structured questions.*

discuss the data collected from the case study of Traphaco's website. The Web branding development framework and elements of the AIPDB model are used as guidelines for the analysis.

6.2.2   Company Profile

Established in 1972 as a small medicinal manufacturing factory of the Ministry of Transport, Traphaco is now Vietnam's biggest Oriental medicine[1] brand and among its top-ten pharmaceutical manufacturers (VDA, 2006). Traphaco is widely known among Vietnamese consumers due to its herbal medicines. Traphaco products are manufactured with state-of-the-art technology, yet maintain a traditional type of identity. The sign of Yin and Yang[2] in the company's logo confirms its brand positioning strategy in the area of oriental medicine. A short company profile is presented in Table 6.1.

At present, TRAPHACO has 170 products made and sold nationwide. Among them, the 60 products in the herbal line account for 70% of its revenue. The company has built its firm position in the domestic market. Its products are exported to Russia and the Ukraine, and will be exported to other markets in Asia, Europe and Africa in the near future.

The company's products belong to many pharmacology groups such as antihistamines, antivirals, drugs acting upon the cardiovascular and hematopoietic system, immunization stimulating agents, antirheumatics, antifungals, vitamins and minerals, cerebral activators, liver tonics, etc. Traphaco focuses on the non-

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[1] *Oriental medicine (Dong Y) is traditional Vietnamese medicine, which refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination, to treat, diagnose and prevent illnesses or maintain well-being (VHO, 2003). Oriental medicine successfully treated acute illnesses at the grass root level and was found to have been more effective than the Western medicine in the treatment of chronic diseases (Vu, 1990).*

[2] *Yin and Yang is probably the oldest and the most significant theory in oriental medicine (other theories are: 5 Elements, 12 Organs, 14 Regular meridians).The Yin and Yang theory describes the existence of and importance for balance between opposite states (e.g. cold vs. hot; interior vs. exterior; deficiency vs. excess). Invariably, chronic deficiencies in one organ/element typically lead to an excess or deficiency in another organ/element. It is believed that some organs have more Yin while others possess more Yang, but all organs have a Yin and a Yang counterpart (Dung and Bodeker, 2001).*

Table 6.1: Traphaco Snapshot

Full name: Traphaco Pharmaceutical JS Co. **Headquarters:** Hanoi **Year founded:** 1972 **CEO:** Vu Thi Thuan	
Business Vision:	"All for the sake of human health"
Major products:	170 products, 70% revenue comes from 60 herbal medicines
Major domestic markets:	Nationwide, non-prescription market
Major foreign markets:	Russia and Ukraine
Initial investors:	Ministry of Transport
Primary competitors:	OPC, Centerpharco, Domesco, Bao Long, Phuc Hung, Fidopharm
Major milestones:	– 1972: established as small medicine factory – 1999: restructured into joint-stock company – 2006: listed in Vietnam stock market
Financial summary: (2006)	Revenue: 371 billion VND ($\approx$ 23.2 million USD *at Dec 2006*) Net profit: 21.7 ($\approx$ 1.35 million USD)
Employees:	797 people, 60 % are female

Source: Self-developed from Traphaco Internal Records (2005, 2006)

prescription[1] market, strongly promoting their products to the retailing drugstores and to the end users. According to Ms.Hue, the marketing manager, Traphaco also penetrates the prescription market (in hospitals) through the health care insurance system.

For the past five years, Traphaco has gained notable achievements (Table 6.2). Its annual growth rate is 35-40% with a 2006 turnover of VND 371 billion. The company's labour force annually increases by 10-20%. Currently, 60% of the work force are female (Traphaco, 2005). Every year, the company spends more than 5%

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[1] *The market is divided into specialty drugs (e.g. prescription drugs) and over-the-counter drugs, (e.g.non- prescription drugs). Specialty drugs (vitamins and anti-infectants, including antibiotics, analgesics and antipyretics) account for about 75% of total sales. OTC drugs account for the 25% of remaining units sold in the Vietnamese market. The specialty drugs are dominated by international brands from the leading companies such as Novartis, Pfizer & GlaxoSmithKline. Although stipulations on prescriptions do exist, nearly all drugs can be bought through the local pharmacists without any prescription from doctors. Hence, most drugs are, in practice, OTC products (VDA, 2006).*

Table 6.2: Traphaco's Business Performance in the Years 2000 - 2006

Year	Human Resource		Revenue		Export	
	Total (persons)	Growth to previous year (%)	Total (billion VND)	Growth to previous year (%)	Sales (billion VND)	Percent of total revenue (%)
2000	344	-	56.0	-	-	-
2001	410	19	76.9	37.3	3.3	4.3
2002	465	13	106.9	39.0	2.4	2.2
2003	515	11	146.0	36.6	1.5	1.0
2004	627	22	196.6	34.7	2.0	1.0
2005	703	16	266.5	35.5	3.0	1.1
2006	797	13	371.0	39.2	4.5	1.2

Source: Synthesized from Traphaco's Business Reports (2005,2006)

of its turnover on Research and Development, and with 8% of its 703 staff working in the R&D department, Traphaco continues to make progress in the research and manufacturing fields. The company's herbal line benefits from a 1000 years of traditional methods and expertise.

As for new product development, Traphaco is now investing in functional foods (nutraceutics)[1]. The market for nutraceutics is growing quickly worldwide and it is this global marketing scope that particularly attracts the company. The company provides high quality, good packaging and reasonably priced products, which for years have been recognised as a "Vietnamese Product of High Quality". Traphaco products are manufactured from fresh herbal ingredients under GMP[2] standards since 2001. Thus the company brings to the market a carefully defined range of products which have proven safe and of the highest quality.

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[1] *Nutraceutics (functional food) is any food or food ingredient considered to provide medical or health benefits, including the prevention and treatment of diseases.*

[2] *GMP: The "Good Manufacturing Practice" standard, which was introduced in 1998 in Vietnam. Regulators of the pharmaceutical industry indicated that domestic makers would be shut down if their pharmaceutical products did not meet the ASEAN GMP standard. Traphaco reached GMP standard in 2001.*

6.2.3 Branding Practice at Traphaco

Vietnam's market for pharmaceuticals is growing at an impressive rate, and will continue to grow as the country and government seek to improve healthcare facilities and services for the people. Until 2005, local pharmaceutical enterprises had reached a total number of 464 units. In general, local companies are poor product innovators and have limited penetration outside of their respective areas. They dominate the low-end market and are aggressively expanding into the mid-price market (VDA[1] , 2006). Over half of the pharmaceutical market is supplied by imports as imported medicines are usually better in both quality and packaging than the locally made ones. Thus the Vietnamese are willing to pay a premium price for foreign drugs because of their perceived effectiveness. American, European and Japanese drugs remain the most trusted in the market.

Statistics show that the need for reliable drugs and herbal medicines is very great. Vietnam now has 257 manufacturers of traditional medicines, including 82 state-owned, and 175 private ones. Local products are supplied to 145 traditional medical hospitals, 242 traditional medical departments and 30,000 medical practitioners (MOH, 2006). The direct competitors of Traphaco are the other most effectively operating manufacturers in this field: OPC, Centerpharco, Domesco, Bao Long Ltd, and Thien Hung Ltd.

Among them, Traphaco considers OPC to be the most powerful competitor. This HCMC located company has an equally large sized and similar product assortment. Also its branding position "Nature and Life" competes most directly with Traphaco's herbal line products. The traditional medicine market is growing quickly as people are now more inclined to seek drugs made from natural materials. Traphaco's products, with their high safety and quality standards, are tailor-made for this market.

With the business mission "All for the sake of human health", Traphaco has been dedicated to many activities meeting healthcare needs. All its branding strategy and

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[1] *Vietnam Drug Administration, which can be verified at www.cimsi.org.vn/CucQuanLyDuoc.htm*

actions are consistent with this mission. Traphaco is one of the main sponsors for the national communication campaign "Healthy Life Everyday", which was promoted for use by domestic pharmacies from the beginning of the year 2005.

Traphaco is one of the few local companies which recognize the power of public relations. The company believes that advertising is a very good tool to create awareness for new products and brands, but the power of its public relations is laid on its higher credibility and trust of the information source, which is very important for pharmaceutical products.

Traphaco enhances its public image through its involvement in local health-related activities. This involvement takes many forms, including sponsorships for various TV programs or participation in community events such as Children's Day on the 1st June.

Advertising activities emphasize the promotion of new products and create brand awareness. The message "*Modern Technologies Combined with Traditional Experience*" is given widespread use to differentiate its products from others and to stress the combination of an Eastern approach with the user-friendly format of Western pharmacy. Television and printing are the main advertising media at Traphaco. It usually advertises in medical journals aimed at doctors and pharmacists, as well as in public health journals.

Traphaco focuses on building brands for individual products especially on the new ones, in order to boost sales. Three or four times annually, the company takes part in the big trade-exhibitions; those aimed at the general public as well as those for the health professionals. However, marketing activities to promote the whole company image are not consistent through the various communication media. Thus the company's 'personality' is not clear and sharp in the customer's mind. As with many other local companies, Traphaco does not have a consistent long-term branding strategy to position itself in the competitive market.

The company does not recognize the power of pharmaceutical representatives. Foreign companies intensively use these human resources to penetrate hospitals and the clinics of medical practitioners thus gaining a firm foothold in the prescription

market. Traphaco however, focuses more on promoting their products through mass media to retailing pharmacies and the consumers. Marketing strategy does consist of seminars to promote products to medical and pharmaceutical representatives. However, giving away samples as a promotion strategy is falling out of favour with Traphaco because such samples may be taxed and are often resold.

Traphaco relies on local marketing firms to create and design its advertising messages as well as to organize the marketing events. Some close partners are Hoang Gia Market Solution (www.hoanggia.com.vn) and Dolphin Media (www.dophinmedia.com.vn). The main reasons for relationship with local partners are due to reasonable costs and a mutual understanding. The company often devotes 5-6% of its annual revenue to advertising and promotion. This figure is far lower than the marketing budgets of foreign pharmaceutical companies, both in terms of proportion and the absolute sums invested (VDA, 2006).

Another weakness in Traphaco's branding practice is a lack of integrated marketing communication (IMC)[1] programmes. The company does not have a combined plan to coordinate the various promotion tools and techniques, to project a consistent, unified brand image and personality to the marketplace.

6.2.4   Web Branding Practice at Traphaco

While Traphaco is quite active in its offline marketing activities to promote the company image and products, its online presence does not receive such high attention and investment from the board of directors. As a static website, Traphaco.com.vn does little more than provide information about the business and its products. The company evaluates that its site scores only moderately in terms of 'awareness' and has a low 'loyalty' rating among its customers. A short profile of Traphaco's site is presented in Table 6.3.

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[1] *Integrated Marketing Communication (IMC) involves coordinating the various promotional elements and other marketing activities that communicate with a firm's customers and deliver the branding message effectively and efficiently (Belch and Belch, 2004).*

Web Planning Stage

Objectives: One of the primary reasons for Traphaco to go online was to seek brand reinforcement via the Internet. Many established Vietnamese companies often use the internet to reinforce customer awareness of and regard for their particular brand, instead of treating the internet as a new sales channel. In 2003, Traphaco decided to launch the site www.traphaco.com.vn. It wanted to promote its existing company name online. It has registered the domain name to protect its intellectual property.

Another primary objective for Traphaco to have a website is to provide corporate and product information to a particular target market. It simply wants to advertise but not directly sell the products online. The company considered a website as another communication channel that could help to generate the offline sales. There were also the secondary objectives of the site such as to encourage repeat traffic and customer loyalty as well as to propel the force of its sales.

Target Audience: The target audience of Traphaco.com.vn is Vietnamese people who are looking for pharmaceutical information and healthcare-related issues. Traphaco wants the target audience to think of the company's products when they want to buy medicine.

Table 6.3: Snapshot of Traphaco's Website

URL: http://www.traphaco.com.vn	
Year designed: 2003 May	**Latest update:** 2006 April
Objectives:	− Brand reinforcement via the Internet − Providing products and company information − Helping to generate offline sales
Audience defined:	General public
Design method:	Do-it-yourself approach
Initial investment:	30 million VND (≈ 2000 US$ *at 2003 exchange-rate*)
Interactivity level:	Static
Content pages:	Home; About us; News, Products; Customer Services; Site Map; Contact; Health Consultancy
Self-evaluation:	Moderate awareness, low loyalty

Source: Self-developed from interviews and site's content analysis

As the target audience defined is the general public, the pharmaceutical information offered on the website is basic and universal in nature. There is little in-depth information aimed at health professionals. Product information in terms of brand name, composition of the medicine and, the action and dosage needed, take up most of the content of the website.

Building a Website implies doing business on a global level. But the English version of the Traphaco.com.vn is yet to meet the requirements of an international audience. The Vietnamese version of the site has 75 pages, while the English version has less than half of this size and concentrates mainly on product information. Traphaco claims that the English version of the site is merely to meet the need for online verification of the company's offline name among its international business partners.

Competitive Analysis: With clearly defined online objectives, the company began to analyse the competitive environment. Traphaco was aiming to meet and beat the competition in terms of website design and content. The website team of three persons[1] spent time gathering a list of competing websites and analysing them element by element such as for visual appeal, content, ease of navigation, interactivity and website stickiness.

Before the year 2003, there were few pharmaceutical manufacturers with an online presence. The existing websites then had poor content and unattractive designs. Meanwhile other commercial companies in this area had a higher commitment to e-business and had more sophisticated sites.

Starting with the website of the first competing Vietnamese pharmaceutical company in oriental medicine, the website team built a list of site features and their requirements. Next, the team visualized and planned the website by integrating its own objectives and ideas with the findings from the analysis of their competitors' sites. This became the blueprint for construction of Traphaco's website.

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[1] *There is no IT department at Traphaco. The Website building task was assigned to the three IT enthusiasts in the R&D department. Mr.Nguyen Huy Van (the manager of R&D at that time, and the Deputy Director of R&D now) was the team leader and the Webmaster.*

The company had chosen a do-it-yourself approach with a very small initial investment of 2000 USD. The time frame for website building was 6 weeks with 3 persons using half of their working time during that period. The reasons for such an approach were not only to save on costs but also because of the simple nature of the task of designing a static site.

Building the Website

The Website design and construction was done internally and transferred to the web host. Traphaco chose FPT's hosting service because of its reputation of service reliability. Another reason was the company's previous contact with FPT for its Internet connection.

Content Design and Information Quality (informing function): The actual construction of the site was done by the team members within the time limit of six weeks. First of all, they developed the draft of the text for each page. This text was reviewed and edited by the marketing manager. The website team considered content to be of primary importance to the potential online customer. Thus a lot of company and product information was posted there. They did not however pay attention to the presentation and format of the content. The website is more or less the same as the company's printed brochure. It does not meet the text requirements for an online audience. This must be short, to the point and easily scanned (Sweeney, 2005). The text is lengthy and many pages require the scrolling act. The style of writing used in offline publications was transferred to the Web with very little change.

At the Website's home page, we observe that the table of contents contains the option "About us", where the general information about the company is provided. The company also provides visitors with a list of their major products and their trademark. There is, however, no information about company highlights such as clients or rewards, or investors' information. A customer service function is provided with the webmaster's e-mail address. Traphaco.com.vn does not have a special function that it makes it easier for visitors to bookmark the site or make it their starting page.

The site's content focuses on an introduction to the company and specific product information. The value-added content, from which visitors can get valuable information for free, is limited at traphaco.com.vn. The non-commercial column such as News or Health Consultancy, which is often attracts a health-conscious audience, has too little content. The section on Health Consultancy, is designed with a small collection of the published articles. An entertainment corner is included with some humorous stories about relationships between doctors and patients.

The format and writing style and the presentation of information is too serious throughout the site. It's not a pleasurable experience to surf the web content about pharmacy functions, diseases, and consultancy. Traphaco would do well to learn from the writing style of the "Friendly Doctor" column provided in the medicine content site www.ykhoanet.com. This presents information to the visitor in a more attractive way. This website deals with many difficult pharmacy and medicinal issues in easy and interesting ways that encourage people to return to the site.

Traphaco believes that it is of great importance to offer extensive, updated content on the website for return visitors loyal to their brand. The company also believes that interest in the website is maintained if the site is continually developed. But the Webmaster also admitted that the aspect of information quality on the Traphaco site still does not meet the needed requirements.

The content was met the timely criteria of the information quality only at the time designed and updated. From its launch in May 2003, the site was updated only twice since, in December 2004 and in April 2006. These limited improvements mean that some of the contents are now outdated. The newest version of the site has added information about new product offers, has new advertising messages and discusses new healthcare issues in the community. However, we have observed that the company does not show the latest revision date for the site.

Navigation and Appearance (positioning function): The next thing concern was with the graphic design. The graphic designer developed the look and feel for the site – navigation bar, color, background and other visual elements.

As the objective of the company's online presence is to reinforce it's identity and product brands, the graphic design was consistent with the look of the offline image. The colors were associated with the company's logo and reflected its core offerings. We observed that the colors used for the offline brand (brown, yellow, blue and lime green) are consistent within the site. The text is also mainly written in black except for the blue/brown color used for titles/subtitles. The contrast is very good with dark colors used on a light background.

We observed that logotype is provided at the top of each page within the site. It is in a reasonable size and is shaped like a super circle. The company also provides a table of contents at the left of each page making visitor navigation more easy. The site is focused with written content and product images. The site has only some moving objects that draw attention and create an interest in new product advertising. The company wants the Website to have a serious and reliable identity and they believe that moving objects could disturb the feeling of a reliable pharmaceutical company.

The graphics are very limited on the site because Traphaco.com.vn wants to deliver their brand in a user-friendly environment, not disturbed by heavy graphics. At the time of the site's launch (May 2003), most of the Internet connections in Vietnam were dial-up with an extremely slow speed. The graphics used on the site are mostly advertising aids.

Having decided on a static nature for the site, there is no interactive content as well as no sound and video elements at traphaco.com.vn. The company realizes that their visitors may consider the site's graphics and colors slightly boring. However, Traphaco does not have a plan to make a big change to its site neither in terms of its level of interactivity or its appearance, in the near future.

Traphaco believes that the structure of the information and ease of navigation at its site is important to the experience the visitors have of its brand. We found that the Traphaco site has quite a simple structure. It has a tree and logical structure, but does not supplement with a 'back to home page' button. The company provides

visitors with the simple search option within the site to minimize the number of clicks when searching for products.

The Webmaster argues that a simple and consistent layout is suitable to make the visitor feel secure and confident about the brand. The main table of contents is constantly at the left of the page and presents options such as Home, About Us, News, Products, Customer Service, Entertainment, Site Map and Healthcare Consultancy. The company believes that the table of contents will give visitors a good first impression of the Website, but they also want to give visitors an insight into traphaco.com.vn. They also provide users with navigational links.

Download Speed and Privacy/Security (delivering function): Traphaco aims to have a website at least as good as or better than their competitors. Their activities to accomplish this goal include taking into consideration the technical equipment of the visitor and trying to be as user-friendly as possible. We observed that traphaco.com.vn is a fast site, and they continually develop functions to increase the simplicity, flexibility, speed and quality for their visitors. Traphaco's site is very quick to download with an ADSL connection and has an acceptable speed with a dial-up connection.

The issues of customer privacy and security were considered as having little importance during the development of traphaco.com.vn. The site contains an ordering feature but does not offer the facility for online transactions. The site does not have any personalization tool and does not gather a customer's personal information. Therefore, the privacy and security issues got no attention in the process of the site's design. There is no privacy policy announced in the Home page. The only thing Traphaco was concerned with was to make the site secure enough to protect it from damage by virus and hackers.

Personalization and Community (Building Relationships): The company believes that the relationship with the customer is very important and creates trust in its healthcare-related products, but that this does not directly relate to having a website as a brand. Its objective for Web branding is to become memorable, the consumer connecting the brand name to the company and the business they are operating in.

To encourage the audience to return to the website, the company is trying to build relationship by giving the audience a pleasant and exciting user experience. The company is also building relationship by offering reliable, available and accurate product information. The relationship is also maintained through the customer service function, which is considered of high importance at traphaco.com.vn.

The site didn't have any application of personalization technique or a community platform. Traphaco, like many other local manufacturing firms, still had not recognized the potential of those powerful features of the Internet. It perceived the two common techniques of relationship building, personalization and virtual community, as the least important features contributing to Web branding.

Promoting the Website as brand

Traphaco believes that if it gains the awareness of its target audience traffic to their Website will increase. The reason for advertising in both online and offline media is that it is easier to create awareness and build brand. Traphaco wants to reach all people interested in healthcare and medicine. This is a long-term investment.

Offline communication: The company believes that advertising in offline media is an important vehicle for generating initial awareness of a Website. Advertising in traditional media, because of its intrusiveness, will make people aware of the company's online presence. Another reason for using offline advertising is to establish credibility and trust with customers.

The company uses their domain name as a brand in all their printed advertising efforts, basically to make the customer aware of the company and to emphasis that they exist on the Internet. To advertise the company's products they use commercials on two main nationwide channels VTV1 and VTV3. These channels have the largest audiences. However the company did not include its URL address on television commercials as they did not think that the wider public audience would be interested in its online presence. The Website address is advertised offline, mostly through printed marketing communication materials (business cards, letter-heads, office forms and others).

The company's reason for integrating online and offline promotion is thereby to extend the target audience but also to build brand. However, the company does not believe that the use of online and offline advertising directly leads to relationship building, trust or a brand personality.

The company considered the four steps of the communication model AIDA[1] in the integration strategy of online and offline media. They think that offline advertising is helping to create Attention, meanwhile online communication methods have a high level of effectiveness, from Interest, Desire and Action steps. The Internet strength is direct-response which leverages the Internet's unique opportunity for two-way communication with customers.

Online communication: Traphaco agrees that promotion is cheaper on the Internet than using traditional media. The company believes that offline advertising is good for brand building and brand image, which includes creating brand awareness and credibility. Offline advertising also has high reach and increases their knowledge but on the other hand it is very expensive and it takes time for the audience to actually visit the site. However, the company still believes that it is necessary with high frequency in offline tools to encourage people to visit the site.

The online advertising tools considered by the company to be most effective are also the ones they use. The banners the company use for advertising are designed especially for their target audience and the colours are supposed to attract attention (green, yellow, and red). The advertisement banners are placed at local healthcare-related sites (online versions of newspapers about pharmacy, medicine and health-related areas- http://health.vnn.vn; www.vnmedia.com.vn, www.ykhoa.net; www.suckhoedoisong.saigonnet.vn, etc.). Another online advertising tool that the company uses is full registration in online local business directories (www.trangvang.fpt.vn; www.yp.com.vn; …). However, the company does not buy and use keywords in the local and global search engines.

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[1] *AIDA refers to the communication model which is an approach to understand how advertising and selling supposedly work. AIDA is acronym for **A**ttention, **I**nterest, **D**esire and **A**ction (Belch and Belch, 2004).*

The company does not use solicited e-mail advertising due to reluctance towards that kind of advertising since people perceive it as spamming and this could create a bad brand image instead of creating awareness and attracting new visitors. However, in a more indirect way, the company uses their brand in e-mails when answering customer requests or other e-mail messages since their address is always at the end of each message.

Traphaco has not joined any kind of partnership or found any sponsorship. Yet, it is considering finding sponsorship within the next two years. It is very important to find the right partners to attract the target audience. It is also important to find partners who have solid brands that can be associated with traphaco.com.vn.

They do not use intestinal or pop-ups when advertising the brand, but they believe that this can be entertaining if done properly. However they do not consider this form of advertising to be effective since it is considered by many visitors to be annoying.

The use of other tools to increase Web loyalty, such as a newsletter, loyalty programs (collecting points, rebates, free gifts, contests,…) are not in the site's plan for the near future. The company does not offer a discussion group or online chat with other doctors and pharmacists. They do not plan to do this either but they believe that it could be effective. The company has not tried free samples either, however they believe that this too could be an effective tool if customers felt obliged to accomplish something before receiving the sample.

A downfall in Web brand communication is the lack of integration between offline and online marketing communication. They do not upload PR information and news to their site as competitors often do. They also do not inform customers of contest results online which could increase traffic to the site.

In fact, there is no official marketing program to promote Website as a brand. Thus there is no separate budget for its execution. Traphaco.com.vn did not receive enough attention from the director and marketing manager to be developed as a powerful, integrated tool in the whole branding strategy.

Evaluating the Website

The only measure the company applies to evaluate Web performance is to count the number of "hits" the site generates. This is the most common form of site assessment in Vietnam. However, this is not very accurate (Evans and King, 1999). The site has no other means of measuring the effectiveness of Web marketing in generating Website traffic and loyalty such as unique visitors, page views, and click-through rates. Thus it has missed out on the opportunity to know information about visitors which is important in order to satisfy existing and potential users.

The company receives some responses from visitors, both over telephone and e-mail. These comments are valuable to the company as it tries to build a positive brand image. Comments are gathered and analyzed and the company's Website team continuously uses them to improve the site. The site has been updated twice since its launch in May 2003 with some new products now offered and new corporate information. However the writing style and presentation format remains unchanged.

With limited investment, in terms of money, time and human resources, devoted to the online presence, the company's site is merely another channel to communicate with a small audience. What's Traphaco all need at that moment is an Internet presence as a minimum level of e-business development. As with many other local manufacturing businesses, Traphaco is satisfied with this informational "brochureware".

Traphaco seems to recognize the fact that incorporating interactivity is essential to building a successful Website. However, the company claimed that it will have higher commitment and investment for the company's online marketing activities in the next five years when Vietnam's e-business environment will be more favorable and conducive.

6.3   Summary

This chapter reviews the Web branding practice at Traphaco, a local progressive company that recognized the power of the Internet in business strategy and

operation. Nevertheless, the company still considered its Website as a separate entity to compliment the whole marketing program. Traphaco followed a planned process in Website building, but did not devote enough time and resources to it. The do-it-yourself approach in Web brand development appeared to have many limitations in terms of information presentation and site promotion. This static, information based Website is limited for product advertising without the health-care value added content to attract general public nor the professional pharmaceutical issues to encourage doctors and pharmacists to enter. Thus it's consistent with its Web branding results of moderate awareness and low loyalty among the target customers.

In order to have higher success of the Web program, traphaco.com.vn will need stronger support from top management and more coordination with non-Internet marketing activities. It also will require input and vision from the marketing department, and strong technical support from reliable professional services.

7

CONCLUSIONS

7.1.   Overview

The purpose of the current research is twofold. Firstly, it is aimed at identifying and examining the relationships between the Website's marketing functions and customer awareness and loyalty toward the site. Secondly, it investigates how a particular Vietnamese manufacturer practiced its Web brand design and promotion.

To achieve the purpose stated above, the following process was adopted. First, the literature related to branding in the traditional context and in the Internet environment was reviewed. Based on this review and the identification of gaps in the research, the theoretical model and hypotheses were developed. This dissertation has used the research of Simeon (1999, 2001) as the basic framework to develop an augmented model that considers all Web branding determinants. The AIPDB model with nine Website factors which might have impact on Web branding potential was identified. This extended model emphasized the unique characteristics of Websites of manufacturing enterprises in the Vietnamese e-business environment.

Then the methodology to test the model was formulated. In this methodology, a quantitative approach with a large sample survey was employed. The data was collected from 477 Internet users in Vietnam. The collected data was first used to assess and refine the measurement scales of all constructs under the study. This was done primarily by factor analysis. Then the data was subjected to multiple regression equation modeling to obtain statistics for testing and modifying the model. After that, a case study of Web brand design and development of a pharmaceutical company was conducted to illustrate the Web branding framework in the local context.

7.2   Summary of Findings

The current research represents one of the first large-scale empirical efforts to systematically investigate Web branding determinants. The research model was constructed to describe and visualize the ten relationships. Multiple regression analysis supported most, but not all, of the hypothesized relationships. Overall, the study shows that there is strong evidence to support our hypothesized model as

seven out of the ten relationships were supported. The findings indicated that the Website's functions (Attracting, Informing, Positioning, Delivering and Building relationships) have positive correlations with Web Branding potential.

The research specifically shows that both online and offline communication have significant effects on Web Awareness. Meanwhile, in explaining the variability of Website loyalty, Information Quality is the most important factor. This is followed by Site Appearance, Personalization and Download Speed. No direct relationship could be found between the other factors (Navigation, Privacy/Security and Community) and Web Loyalty in our research context of manufacturing sites in Vietnam e-business environment.

The illustrative case study of Web branding practice at the local pharmaceutical company, Traphaco, indicated that the company still considered its Website as a separate entity which compliments the whole marketing program. They followed a planned process and framework for Website building, but didn't devote enough time and resources to it. In order to have higher success of the Web program, www.traphaco.com.vn will need stronger support from top management and more coordination with non-Internet marketing activities. Further, to maximize the brand-building effect through the Internet, Traphaco should develop strategic alliances with other companies in the industry to draw traffic to their site.

In summary, there is evidence that the Internet has substantial potential to allow manufacturing enterprises to build long-term and short-term branding strategies. However, most Vietnamese companies do not currently maximize the capability of the Internet in brand building. Thus the issue of branding through the Internet requires a more aggressive approach.

The evidence revealed in the data of this study strongly supports the conclusions relative to the research objectives indicated in the very beginning of the thesis. Our findings provide a basis for the further study of Web branding through both theoretical and empirical methods.

7.3   Contributions and Implications

Findings from this research are relevant both for practitioners and for the wider academic community regarding their application and consideration in other scholarly settings.

7.3.1   Theoretical Contributions

The current research is among the attempts to link the branding perspective and e-business literature. It extends the understanding of traditional branding to the e-business environment in the developing world. It has made a contribution to Web-based marketing in conjunction with brand strategy in two ways.

First, it developed and empirically tested a model for examining the determinants of the customers' awareness and loyalty toward manufacturers' websites. It incorporated the concepts of AIPDB functions into the model and examined the effect on the formation of Web awareness and loyalty. This inclusion could improve the theoretical foundation of Web branding in an Internet-connected world. From a research perspective, our analysis provides an early conceptualization of the relevant determinants of Web branding. This study extends previous research on virtual brands and adds greater understanding to Simeon's AIPD model.

Secondly, through careful design and validation, the current research provides a set of measurement scales for the 11 constructs under investigation. Of these 11 scales, eight were adopted from previous studies after relevant adjustment, and three have been newly developed. The newly developed scales are those for Web awareness, online communication and offline communication. Through the processes of careful operationalization of constructs, these scales have been tested and refined to meet criteria of unidimensionality, reliability, content validity, convergent validity and discriminant validity. The creation and validation of these scales contribute to address on the research using large sample data in studying Websites. Thus, to the research community, it provides a validated and reliable instrument that can be used to test Website as a brand and provide the first comprehensive framework for the study of Web branding.

This study represents the first endeavor in academic literature to determine the factors that contribute to the Web Branding potential of Vietnamese manufacturing Websites. To the best of our knowledge, no published empirical study has attempted to test the significance of all of these factors simultaneously in a Vietnamese e-commerce environment. Thus, this study contributes to advancing our knowledge about factors which influence Web Branding in this emerging economy.

7.3.2   Managerial Implications

The managerial contributions of this study stem directly from the implications of our findings. Manufacturing enterprises will be helped by the study, in learning the significance of Web branding determinants and Web loyalty in their marketing strategies on the Web, at a time when concern about Website effectiveness is becoming a more serious issue.

The study serves as a framework for manufacturers to use to integrate Web branding factors in Website strategy. Using the AIPDB model as a guide, companies can now develop a more effective Web brand that meets customer needs and they can do so more quickly and with higher certainty that the site is of high quality and attractiveness.

The study suggests that manufacturing enterprises should capitalize on the power of their brand names. Brand familiarity should be used as an icon for the Internet surfer to use to visit the site. Thus, the Websites of domestic and foreign manufacturers who have offline brand awareness are more likely to be visited and more likely to increase purchase intention. The analysis implies that to increase customer satisfaction and loyalty in the online environment, the manufacturing companies need to improve their site's content, appearance, download speed and personalization options.

In addition, although the findings from this study do not show a significant effect of navigation, privacy/security and community features on Web loyalty, past research suggests that these three factors are influential in creating a favorable attitude and favorable behavior towards a site (Na and Marshall, 2005; Palmer, 2002; Yoo and Donthu, 2001; Andersen, 2005). As sites are competing to attract visitors' attention

and distinguish themselves to keep customers coming back, the easy navigation, interesting community platform and safety features can further attract customers and help create a pleasant online experience.

Companies will be helped too in learning the theoretical framework for Web branding development. This four-step process (planning, building, promoting and evaluating) developed from Turban *et al* (2004) as well as from Evans and King (1999) can be a useful guide to lead companies through the whole process of Web branding, to make the site unique, attract new visitors and keep them coming back. By implementing an effective Internet marketing strategy, the company can increase traffic and attract business to the site.

7.4   Limitations and Future Research

Limitations of our study provide the foundation for other research to improve the understanding of the factors leading to the Web Branding. The following limitations need to be considered when using the research findings:

− First of all, the research was conducted in the first stage of the country's e-business development. In such a context, the design and management of Vietnamese companies' Websites was still in relative infancy, and there was limited knowledge for both businesses and customers as to how to pursue electronic marketing activities on the Web. Since Websites and Web strategies can change quickly and periodically, it would be instructive to re-evaluate these firms at a later date for signs of improvement. Also, due to the dynamic nature of Internet media, similar studies at different times are likely to show different results. Nevertheless, the findings do represent a large sample of Internet consumers who provided detailed information about several features of their Internet use and attitudes that have not yet been studied, so we now have an initial view of these phenomena.

− Secondly, our model does not take into account the individual-level variables (such as customers' motivations and experiences in the Internet usage) that may also have an impact on Web branding. Also, the suitability of the Internet for Web brand depends to a large extent on the characteristics of the products being

marketed. This study does not control for such differences across the customers and products categories. Future researches can develop the more comprehensive models of Web brand that capture and explain these differences.

−   Thirdly, the sample has limitations. The data came from a convenient sample, thus the study sample may not be representative of the whole population of Internet users in Vietnam. Due to the nature of the sample, generalization of the findings is somewhat limited. Also, data was collected from a limited geographical area (Hanoi and Hochiminh city). Thus, it might be difficult to generalize and talk about the whole country of Vietnam from these results.

−   Fourthly, this study is based on customer perceptions of Websites in the manufacturing enterprises. Therefore, the findings from this study need to be interpreted with caution, as they may not be transferable to other areas. Replicating these findings in future research using Websites from other industries would be extremely important for increasing the generalization of these results.

Future studies should be expanded using representative samples and multiple measures. Additional variables should be measured. If possible, some of these issues should be addressed experimentally, so that causal relationships could be revealed. Comparing similar studies over time could provide a picture of the changing nature of these phenomena.

Finally, since all Vietnamese manufacturers' Websites are non-transaction sites, it would be interesting to investigate how and to what extent Web Branding effects can be related to offline purchases.

In conclusion, the current research has achieved its objectives as stated in Chapter 1. It provides a meaningful contribution to the literature of Internet marketing and e-business. Its results also have practical implications for local manufacturers interested in improving their Web marketing strategy.

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APPENDICES

APPENDIX A: Survey Questionnaire from Customer Perspective

WEB BRANDING
AT VIETNAMESE MANUFACTURING COMPANIES

Dear Sir or Madam:

This survey is conducted by a Doctoral Researcher to complete a market study submitted as partial requirement for the degree of Doctor rerum politicarum (Dr.rec.pol.) at University of Fribourg, Switzerland. The purpose of the survey is to obtain information on the customers' perception and evaluation of the local manufacturing companies' practice in building and promoting their Websites and their brands on the Internet. The questionnaire is being sent to Internet users, who already have an online experience with Website of local manufacturers.

This questionnaire takes about 20 minutes to complete. Questions can be answered quickly and will not require details. If you would like a copy of the executive summary of this study, please attach a note with your mailing address.

Your response will be kept confidential. Your answers will be combined with those of other respondents and presented only in summary form in the PhD thesis. Your help is vitally important for us to obtain a valid result of the study.

Thank you very much for your assistance,

Best regards,

Luc Thi Thu Huong
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PART I: OPENING SECTION

So: Please tell me about your age?

❑ Less than 18 years old (Thank & cancel interview)   ❑ From 31 to 35
❑ From 18 to 25   ❑ From 36 to 40
❑ From 26 to 30   ❑ More than 40 years old

S1: How long have you used Internet?

❑ more than 3 years   ❑ 1-3 years
❑ less than 1 year   (thank & cancel the interview)
❑ not use   (thank & cancel the interview)

S2: Did you ever visit a WEBSITE OF VIETNAMESE MANUFACTURING FIRMS? (both local and join-venture)

❑ Yes   (If yes, go to question S3; skip questions S4, S5 & S6)
❑ No   (If no, go to questions S4, S5 & S6; skip question S3)

S3: Which Website did you visit in the last two month? (If you visited more than one Website of manufacturers, please note only the most familiar site)

❑ Please write down it's web address: --
❑ If you can't remember its exact address, please write down its company name or products: --

S4: Could you please open 3 Websites among the addresses in the following lists and examine them carefully? We will come back and continue the interview later.

(Interviewer shows 2 cards with Websites addresses of both local and foreign invested firms. Each card contains 20 addresses. Interviewer ask for permission to continue later, ask respondent for time and location to come back)

Website 1: ....
Website 2: ....
Website 3: ....

S5: Please write down the address of one Website that you will evaluate in the questionnaire? --

S6: Please evaluate the overall quality of the Website among the three examining sites?
❑ It is the best Website among those three I have accessed
❑ It is the worst Website among them
❑ It is the average Website among them

PART II: OPINION AND EVALUATION OF WEBSITE

(This section asks questions about your opinion and evaluation of the site visited.
Please tick the box or circle the number that corresponds to your answer. In which,
1= strongly disagree; 2= disagree; 3=not sure; 4= agree; 5 = strongly agree;
NA = Not applicable
Please consult glossary to make sure you understand terms as we are using them)

Q1: What are the purposes for you to visit the Website?
(You can tick more than one option)

- ❑   To know more about their products/services
- ❑   Have intention to buy products and come to gather information for right choice
- ❑   Website has attractive promotion program
- ❑   Website has interesting discussion forum and I want to look some content in that forum
- ❑   To know how our competitors doing business on internet
- ❑   Other, please specify--

Q2: From which sources did you know about this Website?
(You can tick more than one option)

- ❑   Online local yellow page (e.g.: www.yp.com.vn ; www.trangvang.fpt.vn)
- ❑   Global and local search engine (e.g.: Google; Yahoo; Vinaseek)
- ❑   Random surfing
- ❑   Links from other sites
- ❑   From friends' recommendation
- ❑   From company's e-mails from company
- ❑   From company's advertising activities (both online and offline)
- ❑   From inquiry of interviewer
- ❑   Other, please specify---

Q3: How do you agree with the following statements about
    YOUR AWARENESS with the Website?

a. This Website caught my interest	1	2	3	4	5	NA
b. I am very familiar with this Website	1	2	3	4	5	NA
c. I can recall immediately about Website if someone mention its products	1	2	3	4	5	NA
d. This site is my favorite address I could recognize among the similar product category	1	2	3	4	5	NA

Q4: How do you agree with the following statements about the
PROMOTION TOOLS, which impact your awareness of the Website?

a. Yellow page is useful way for me to discover this site	1	2	3	4	5	NA
b. Recommendation from friends or colleagues have strong impact for me to visit this site	1	2	3	4	5	NA
c. E-mails from company encourage me to visit the site	1	2	3	4	5	NA
d. The banner caught my attention and lead me to come and see at Website	1	2	3	4	5	NA
e. Company promotion on Website is attractive enough to pull my attention and curiosity	1	2	3	4	5	NA
f. Web address printing on promotional materials (package, calendar, business card,) raises my interest for Website visit trial	1	2	3	4	5	NA
g. The company various offline advertising tools remind me to come back when needs arise	1	2	3	4	5	NA
h. I often return to site to check for the latest company's sales promotion	1	2	3	4	5	NA

Q5: How do you agree with the following statements about
INFORMATION QUALITY offered on Website?

a. Site provides accurate information	1	2	3	4	5	NA
b. Site provides timely information	1	2	3	4	5	NA
c. Site provides complete information	1	2	3	4	5	NA
d. Site provides detailed information about products/services	1	2	3	4	5	NA
e. Site provides applicable information	1	2	3	4	5	NA
f. Site provides easy to understand information	1	2	3	4	5	NA
g. In general, site offers high quality of information	1	2	3	4	5	NA

Q6: How do you agree with the following statements about
NAVIGATION/ORGANIZATION in Website?

a. Site is being easy to go back and forth between pages	1	2	3	4	5	NA
b. Site is providing a few clicks to locate information	1	2	3	4	5	NA
c. Search options give me useful results	1	2	3	4	5	NA
d. Links are problem-free	1	2	3	4	5	NA
e. Site is well-organized	1	2	3	4	5	NA
f. Site is user-friendly	1	2	3	4	5	NA
g. In general, site is easy and convenient to navigate	1	2	3	4	5	NA

Q7: How do you agree with the following statements about the
DOWNLOAD SPEED of the Website?

a. Site loads quickly	1	2	3	4	5	NA
b. Site doesn't waste my time	1	2	3	4	5	NA
c. I can go to what I want quickly	1	2	3	4	5	NA
d. There is very little waiting time between my actions and site's response	1	2	3	4	5	NA
e. In general, site is providing good access for me to use	1	2	3	4	5	NA

Q8: How do you agree with the following statements about the
WEBSITE APPEARANCE?

a. Site has creative visual appearance	1	2	3	4	5	NA
b. Site has professional look	1	2	3	4	5	NA
c. Site has color appeal	1	2	3	4	5	NA
d. Site is visually pleasing	1	2	3	4	5	NA
e. Information is attractively displayed in the site	1	2	3	4	5	NA
f. Site shows goods pictures of products	1	2	3	4	5	NA
g. In general, site has an attractive appearance	1	2	3	4	5	NA

Q9: How do you agree with the following statements about the PRIVACY/SECURITY of the Website?

	1	2	3	4	5	NA
a. Site has adequate security features	1	2	3	4	5	NA
b. I feel like my privacy is protected	1	2	3	4	5	NA
c. I trust this site will not misuse of my personal info	1	2	3	4	5	NA
d. I feel I can trust this site	1	2	3	4	5	NA
e. The company behind the site is reputable	1	2	3	4	5	NA
f. In general, I am satisfied with the site's privacy/security policy	1	2	3	4	5	NA

Q10: How do you agree with the following statements about the PERSONALIZATION level of the Website?

	1	2	3	4	5	NA
a. Site encourages registration	1	2	3	4	5	NA
b. Site recognizes return visitor	1	2	3	4	5	NA
c. Site provides quick feedback	1	2	3	4	5	NA
d. In general, site has a high level of personalization	1	2	3	4	5	NA

Q11: How do you agree with the following statements about the COMMUNITY BUILDING activities on the Website?

	1	2	3	4	5	NA
a. Site provides a good platform for community	1	2	3	4	5	NA
b. Site provides enjoyable discussion forum	1	2	3	4	5	NA
c. Site facilitates communication among visitors	1	2	3	4	5	NA
d. I can benefit from content available in community	1	2	3	4	5	NA
e. I like to participate in the site's discussion forum	1	2	3	4	5	NA
f. In general, site has good online community activities	1	2	3	4	5	NA

Q12: How do you agree with the following statements about your PERSONAL ATTITUDE and SATISFACTION of the Website?

a. I am pleased with my visit to this Website	1	2	3	4	5	NA
b. I am satisfied with my visit to this Website	1	2	3	4	5	NA
c. I prefer this Website above other in the similar category	1	2	3	4	5	NA
d. I have intention to revisit the site when need arises	1	2	3	4	5	NA
e. I have intention to buy products from this company	1	2	3	4	5	NA
f. I am willing to recommend the Website to others (friends, relatives or business concerns)	1	2	3	4	5	NA

Q13: How IMPORTANT do you see each of these 9 factors which can contribute to your Website awareness and satisfaction?

	Not at all important			Very important		
a. Offline communication	1	2	3	4	5	NA
b. Online communication	1	2	3	4	5	NA
c. Information quality	1	2	3	4	5	NA
d. Website navigation	1	2	3	4	5	NA
e. Site appearance	1	2	3	4	5	NA
f. Downloading speed	1	2	3	4	5	NA
g. Website privacy/security	1	2	3	4	5	NA
h. Site personalization ability	1	2	3	4	5	NA
i. Site community building ability	1	2	3	4	5	NA

Q14. How do you EVALUATE the quality of each factor in the Website performance?

	Very bad			Very good		
a. Offline communication	1	2	3	4	5	NA
b. Online communication	1	2	3	4	5	NA
c. Information quality	1	2	3	4	5	NA
d. Website navigation	1	2	3	4	5	NA
e. Site appearance	1	2	3	4	5	NA
f. Downloading speed	1	2	3	4	5	NA
g. Website privacy/security	1	2	3	4	5	NA
h. Site personalization ability	1	2	3	4	5	NA
i. Site community building ability	1	2	3	4	5	NA

PART III: INTERNET USAGE AND EXPERIENCE

Q15: How regularly do you use the internet?

- ❑ Several times a day
- ❑ One or two times a day
- ❑ Few times a week
- ❑ Once a week
- ❑ Few times a month
- ❑ No regular use. Sometimes I use very intensively, sometimes not.

Q16: How many hours do you typically spend on the Internet in a week?
(do not account the time for online game)

- ❑ Less than 5 hours/week
- ❑ 5-10
- ❑ 11-15
- ❑ More than 15 hours/week
- ❑ It depends. Sometimes I spend a lot of time on Internet, sometimes not .

Q17: What are the typical activities when you connect to the Internet?

	Not used at all	Rarely	Some times	Often	Very often
a. E-mails					
b. Chatting with friends and others					
c. Supporting my job/study					
d. Seeking information for goods/services					
e. Buying products online					
f. Entertainments					
g. Reading news					

Q18: Where do you use Internet? (You can tick more than one option)
- ❑ Home
- ❑ Office
- ❑ Café internet

Q19a: Which is your Internet connection mode?
(You can tick more than one option)

- ❑ Home: ❑ dial up
      ❑ ADSL

- ❑ Office: ❑ dial up
       ❑ ADSL

Q19b: What are the levels of your satisfaction with the quality of Internet connection mode?

	Not satisfied at all	Not very satisfied	Normal	Satisfied	Very satisfied
At home	1	2	3	4	5
At office	1	2	3	4	5

Q20: Please note down your gender:

- ❑ Male
- ❑ Female

Q21: Please tick on your education level:
- ❑ high school
- ❑ undergraduate
- ❑ postgraduate

Q22: Please tick on your corresponding job:

- ❑ Students
- ❑ Academic staff / researcher
- ❑ Businessman / businesswoman
- ❑ Clerical worker
- ❑ Senior official / manager
- ❑ Others, please specify:-----------------

Q23: Please write down the name of your company / institution / work place:

Q24: Would you like to have an executive summary of this research?
- ❑ Yes
- ❑ No

Thank you very much for your cooperation!

Glossary

(Please consult this glossary to make sure you understand the term
as we are using them)

1. **Online communication:** Company communication activities in online environment: e-mail, banner, coupon, sweepstake, etc.

2. **Offline communication:** Company communication activities in offline environment: advertising, promotion, public relations, etc.

3. **Information quality:** Ability of a site to provide a visitor with information of value both in terms of quantity and quality

4. **Navigation/Organization:** Ability of a site to arrange content, information, hyperlinks, images and graphics in a manner that increases clarity of information and makes it easy to find needed information

5. **Site appearance:** The look-and-feel of a screen-to-face customer interface

6. **Download speed:** The initial access speed to the Web page and the speed of display between pages

7. **Privacy/ Security:** Ability of a site to protect personal, financial, and transaction-related information of a visitor

8. **Personalization:** Ability of a site to match a product, service or Web content to specific user preferences.

9. **Community:** Ability of a site to create platforms for visitors to share common interest and to foster the communication.

10. **Web awareness**: The customers' ability to remember or identify the Website across a reference in his/her online and offline environment.

11. **Web loyalty:** The customers' favorable attitude toward Website and their intention to revisit the site

APPENDIX B: List of Websites Evaluated in Survey with Visit Frequency (VF)

No	Websites addresses	VF	No	Websites addresses	VF
1	www.samsungvina.com.vn	13	33	www.canon.com.vn	6
2	www.ford.com.vn	12	34	www.baotinminhchau.com	6
3	www.suzuki.com.vn	11	35	www.tiendatvn.com	5
4	www.yamaha-motor.com.vn	10	36	www.simply-vn.com	5
5	www.vinamilk.com.vn	10	37	www.saigoncosmetics.com.vn	5
6	www.vietthy.com	10	38	www.rohto.com.vn	5
7	www.trungnguyen.com.vn	10	39	www.pnj.com.vn	5
8	www.toyotavn.com.vn	10	40	www.ninomax.com.vn	5
9	www.sony.com.vn	10	41	www.kovapaint.com	5
10	www.eurowindows.com.vn	10	42	www.jvc.com.vn	5
11	www.kinhdofood.com	9	43	www.donglucsport.com	5
12	www.kimdan.com.vn	9	44	www.blue-exchange.com.vn	5
13	www.viettien.com	8	45	www.tuongan.com.vn	4
14	www.ladoda.com.vn	8	46	www.holcim.com/vn	4
15	www.honda.com.vn	8	47	www.foci.com.vn	4
16	www.bitis.com.vn	8	48	www.doximex.com.vn	4
17	www.vtb.com.vn	7	49	www.dongtamtile.com	4
18	www.traphaco.com.vn	7	50	www.american-home.com	4
19	www.thienlongvn.com	7	51	www.vinhhao.com	3
20	www.singpc.com.vn	7	52	www.trungthanh.com.vn	3
21	www.opcpharma.com	7	53	www.laviewater.com	3
22	www.lioa.com	7	54	www.hicrete.com	3
23	www.khoaviettiep.com.vn	7	55	www.hgpharm.com.vn	3
24	www.happycook.com.vn	7	56	www.cms.com.vn	3
25	www.sym.com.vn	6	57	www.agifish.com.vn	3
26	www.sjc.com.vn	6	58	http://dienquang.com	3
27	www.myduc.com	6	59	http://bienhoacoffee.com	3
28	www.mercedes-benz-vn.com.vn	6	60	www.vpphongha.com.vn	2
29	www.lge.com.vn	6	61	www.vissan.com	2
30	www.e-rossano.com	6	62	www.vinhthinh.com.vn	2
31	www.elead.com.vn	6	63	www.vinastarmotor.com.vn	2
32	www.daidongtien.com.vn	6	64	www.vinagsc.com.vn	2

No	Websites addresses	VF	No	Websites addresses	VF
65	www.vina-acecook.com	2	100	www.thangloi.com	1
66	www.vietducsteel.com	2	101	www.tcl.com.vn	1
67	www.tungshinaluminum.com	2	102	www.tantan.com.vn	1
68	www.tomboyaquafeed.com	2	103	www.taicera.com	1
69	www.sonhagroup.com	2	104	www.sofiapack.com	1
70	www.sanyo.com.vn	2	105	www.sinco.com.vn	1
71	www.nhabe.com.vn	2	106	www.scansia.com.vn	1
72	www.naviexport.com	2	107	www.phuthanhco.com.vn	1
73	www.namphat.com	2	108	www.phuquoc.com.vn	1
74	www.mp-vn.com	2	109	www.phucanh.com.vn	1
75	www.maihoang.com	2	110	www.pharbaco.com.vn	1
76	www.honghanh.com.vn	2	111	www.nhadep.com.vn	1
77	www.hoaphat.com	2	112	www.nghison.com.vn	1
78	www.hoanvuco.com	2	113	www.newtopnhattan.com	1
79	www.dvfoods.com	2	114	www.liskin.com	1
80	www.deltafood.net	2	115	www.lgisvina.com.vn	1
81	www.cp.com.vn	2	116	www.legamex.com.vn	1
82	www.cocacola.com.vn	2	117	www.laskatwc.com	1
83	www.coastvn.com.vn	2	118	www.kimanhtea.com	1
84	www.ceramichn.com	2	119	www.inrahani.com.vn	1
85	www.cadivi.com.vn	2	120	www.huubinh.com	1
86	www.bibica.com.vn	2	121	www.huda.com.vn	1
87	www.austnam.com.vn	2	122	www.hps.com.vn	1
88	www.aluminum.com.vn	2	123	www.haihaco.com.vn	1
89	www.aacorporation.com	2	124	www.gfsvn.com	1
90	www.zamilsteel.com.vn	1	125	www.fugamex.com	1
91	www.xuanhoa.com	1	126	www.duytan.com.vn	1
92	www.vinausteel.com.vn	1	127	www.donasa.com.vn	1
93	www.vinakyoci.com,vn	1	128	www.danggiang.com.vn	1
94	www.vinaconex.com.vn	1	129	www.binhdien.com	1
95	www.viglacera.com.vn	1	130	www.banhminhulan.com	1
96	www.viet-collection.com	1	131	www.app.com.vn	1
97	www.vieta.com.vn	1	132	www.anphuoc.com	1
98	www.thuykhueshoesco.com	1	133	www.anhdao.com.vn	1
99	www.thuanphatfoods.com	1			

APPENDIX C: Summary Statistics of Missing Data

	No of cases with valid data	Mean	SD	Missing data	
				No	%
Q9a - Site has adequate security …	329	3.17	.791	148	31.0
Q9b - I feel like my privacy is …	340	3.29	.802	137	28.7
Q9c - I trust this site will not misuse …	351	3.51	.785	126	26.4
Q9d - I feel I can trust this site	365	3.70	.711	112	23.5
Q9e - The company behind the site …	375	4.11	.661	102	21.4
Q9f - In general, I am satisfied with…	352	3.48	.743	125	26.2
Q10a - Site encourages registration	320	3.48	.815	157	32.9
Q10b - Site recognizes return visitor	319	3.23	.867	158	33.1
Q10c - Site provides quick feedback	319	3.41	.878	158	33.1
Q10d - In general, site has …	320	3.42	.788	157	32.9
Q11a - Site provides good platform	290	2.98	.930	187	39.2
Q11b - Site provides enjoyable forum	290	2.77	.996	187	39.2
Q11c - Site facilitates communication	290	2.86	.983	187	39.2
Q11d - I can benefit from community	290	2.83	1.022	187	39.2
Q11e - I like to participate in forum	290	2.82	1.009	187	39.2
Q11f - In general, site has…	290	2.83	.904	187	39.2

Note: there is no missing data for other questions and n=477 for these variables.

APPENDIX D: Results of Exploratory Factor Analysis (Original Data)

	Factors loadings											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
APP-Q8g	.760											
APP-Q8d	.749											
APP-Q8c	.734											
APP-Q8e	.706											
APP-Q8b	*.646*						*.314*					
APP-Q8a	*.633*					*.326*						
APP-Q8f	.621											
WL-Q12c	*.389*							*.310*				
COMM-Q11f		.889										
COMM-Q11d		.863										
COMM-Q11c		.857										
COMM-Q11b		.846										
COMM-Q11a		.790										
COMM-Q11e		*.754*							*.331*			
OFFCOM-Q4h		*.387*										*.314*
NAVI-Q6b			.744									
NAVI-Q6g			.738									
NAVI-Q6a			.733									
NAVI-Q6f			.720									
NAVI-Q6e			.692									
NAVI-Q6c			.618									
NAVI-Q6d			.610									
PRIV-Q9f				.795								
PRIV-Q9c				.781								
PRIV-Q9b				.779								
PRIV-Q9a				.765								
PRIV-Q9d				*.684*		*.312*						
PRIV-Q9e				*.375*		*.562*						
SPEED-Q7e					.747							
SPEED-Q7d					.717							
SPEED-Q7c					.692							
SPEED-Q7b					.692							
SPEED-Q7a					.629							
INFO-Q5c						.672						
INFO-Q5d						.657						
INFO-Q5a						.655						
INRO-Q5g						.612						
INFO-Q5b						.471						
INFO-Q5f			*.379*			*.396*	*.384*					
INFO-Q5e						*.371*	*.336*					

	Factors loadings											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
WL-Q12d							.683					
WL-Q12e							.624					
WL-Q12f							.624					
WL-Q12a							.494					
WL-Q12b							.403					
PERS-Q10d								.695				
PERS-Q10a								.686				
PERS-Q10c								.613				
PERS-Q10b								.570				
ONNCOMM-Q4a									.718			
ONNCOMM-Q4e									.699			
ONNCOMM-Q4d									.628			
ONNCOMM-Q4c									.619			
WA-Q3c										.687		
WA-Q3d										.663		
WA-Q3b										.592		
WA-Q3a										.448		
OFFCOMM-Q4f											.809	
OFFCOMM-Q4g											.701	
OFFCOMM-Q4b												***.791***

Note: *1. Factor Extraction Method: Principal Component*
          2. Rotation Method: Varimax with Kaiser Normalization.
          3. Loadings sort by size
          4. Loandings <0.3 are omitted

APPENDIX E: Results of Exploratory Factor Analysis (Survived Data)
(After Deleting 10 Items: Q4b; Q4h; Q5e; Q5f; Q8a; Q8b; Q9d; Q9e; Q11e; Q12c)

	Factor Loadings										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
NAVI-Q6g	.755										
NAVI-Q6b	.740										
NAVI-Q6a	.729										
NAVI-Q6f	.724										
NAVI-Q6e	.697										
NAVI-Q6d	.631										
NAVI-Q6c	.628										
COMM-Q11f		.880									
COMM-Q11c		.868									
COMM-Q11b		.858									
COMM-Q11d		.852									
COMM-Q11a		.788									
APP-Q8c			.760								
APP-Q8d			.750								
APP-Q8e			.711								
APP-Q8g			.688								
APP-Q8f			.589								
SPEED-Q7e				.753							
SPEED-Q7d				.722							
SPEED-Q7c				.706							
SPEED-Q7b				.702							
SPEED-Q7a				.649							
INFO-Q5c					.737						
INFO-Q5d					.726						
INFO-Q5a					.679						
INFO-Q5g					.664						
INFO-Q5b					.561						
PRIV-Q9b						.823					
PRIV-Q9a						.820					
PRIV-Q9f						.805					
PRIV-Q9c						.744					
PERS-Q10d							.735				
PERS-Q10a							.684				
PERS-Q10c							.639				
PERS-Q10b							.582				
WL-Q12e								.625			
WL-Q12d								.600			
WL-Q12f								.568			
WL-Q12a								.541			
WL-Q12b								.425			

	Factor Loadings										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
ONCOM-Q4a									.731		
ONCOM-Q4e									.728		
ONCOM-Q4d									.643		
ONCOM-Q4c									.619		
WA-Q3d										.762	
WA-Q3c										.665	
WA-Q3b										.606	
WA-Q3a										.448	
OFFCOM-Q4f											.820
OFFCOM-Q4g											.755

Note: *1. Factor Extraction Method: Principal Component*
         2. Rotation Method: Varimax with Kaiser Normalization.
         3. Loadings sort by size
         4. Loandings <0.3 are omitted

APPENDIX F: Correlations between Constructs and Collinearity Diagnosis

	1	2	3	4	5	6	7	8	9	10	Collinearity Diagnosic	
											Tolerance	VIF
1.Web Awareness	1											
2.Web Loyalty	.443	1										
3.Online Communication	.280	.216	1								.888	1.126
4.Offline Communication	.358	.240	.260	1							.856	1.169
5.Information Quality	.368	.763	.236	.226	1						.412	2.425
6.Navigation	.433	.475	.166	.211	.501	1					.591	1.693
7.Download Speed	.398	.690	.261	.169	.666	.501	1				.461	2.169
8. Site Appearance	.426	.771	.222	.221	.708	.517	.649	1			.436	2.293
9.Privacy/ Security	.419	.471	.219	.215	.370	.409	.442	.496	1		.654	1.530
10.Personalization	.434	.671	.166	.247	.592	.392	.609	.623	.539	1	.540	1.851
11.Community	.292	.340	.412	.202	.270	.147	.291	.329	.340	.452		

Note:

- *All Correlations ares significant at the 0.01 level (1-tailed).*
- *The **tolerance** value (a common cutoff value is lower 0.10)*
- *The **Variance Inflation Factor** (**VIF**) = Inverse value of tolerance (a common cutoff threshold is above 10)*

APPENDIX G: List of Websites of Vietnamese Top Pharmaceutical Companies

N	Company name	URL	Company Type 1	2	3
1	3/2 Pharmaceutical Factory	www.ft-pharma.com.vn	L	M	JS
2	Bao Linh Oriental Medicine Co.	-	L	M	Ltd.
3	Bao Long Traditional Medicine Herb Co.	-	L	M	Ltd.
4	Binh Dinh Pharmaceutical Medical Equipment Co	www.bidiphar.com	L	M&C	SOE
5	Binh Nguyen Pharmaceutical Co.	-	L	M	Ltd.
6	Central Pharmaceutical Factory No.1	www.pharbaco.com.vn	L	M	SOE
7	Central Pharmaceutical Factory No.25	www.uphace.com.vn	L	M	SOE
8	Central Pharmaceutical Factory No.5		L	M	SOE
9	Central Pharmaceutical JS Co. No.2	www.codupha.com.vn	L	M	SOE
10	Danang Pharmaceutical and Medical Equipment JS Co.	-	L	M&C	JS
11	Domesco Medical Import-Export JS Co.	www.domesco.com	L	M	JS
12	Ha Tay Pharmaceutical JS Co.	www.hataphar.com.vn	L	M	JS
13	Hai Phong Pharmaceutical JS Co.	-	L	M	JS
14	Hanoi Pharmaceutical JS Co	www.hapharco.com.vn	L	M&C	JS
15	Hau Giang Pharmaceutical JS Co.	www.hgphar.com.vn	L	M	JS
16	Hisamitsu Pharmaceutical VN Co	www.hisamitsu.com.jp	F	M	Ltd
17	Hue Central Pharmaceutical Factory	-	L	M	SOE
18	ICA Pharmaceuticals	-	F	-	Ltd
19	ImexPharm JS Co.	www.imexphar.com	L	M&C	JS
20	Kim Chuong Pharmaceutical Co.	-	L	M&C	Ltd

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[1] *Differentiate Local (L) and Foreign (F) companies*

[2] *Differentiate the pure Manufacturing (M) and Commercial (C) firms*

[3] *Differentiate the companies' ownership: Limited company (Ltd); Join stock (JS); State-owned enterprise (SOE). But it should be noted that all the JS companies are the previous SOEs. Nevertheless the company governance of JS companies is somewhat more dependent and more market-oriented than SOEs).*

N	Company name	URL	Company Type 1	2	3
21	Mekophar Chemical Pharmaceutical JS Co.	www.mekophar.com.vn	L	M	JS
22	Nam Ha Pharmaceutical JS	www.napharco.com.vn	L	M	JS
23	National Day Pharmaceutical JS Co.	www.nadyphar.com	L	M	JS
24	Nghe An Pharmaceutical and Medical Equipment JS Co	-	L	M&C	JS
25	OPC Pharmaceutical JS Co.	www.opcpharma.com	L	M	JS
26	Pharmaceutical and Medicinal Public Co.	www.pharmedicsa.com	L	M&C	JS
27	Pharmaceutical Factory 120	-	L	M	SOE
28	Phu Yen Pharmaceutical and Medical Equipment JS Co	www.pymepharco.com	L	M&C	JS
29	Phuc Hung Oriental Medicine Co.	-	L	M	Ltd
30	Quang Binh Pharmaceutical Co.	-	L	M&C	JS
31	Quang Minh Pharmaceutical and Medical Packaging Co.	-	L	M	Ltd.
32	Rohto – Mentholantum VN Co.	www.rohto.com.vn	F	M	Ltd
33	Sanofi-Synthelabo VN	-	F		Ltd
34	Sao Thai Duong Pharmaceutical	-	L	M&C	JS
35	SPM Pharmaceutical Co	www.spm.com.vn	L	M&C	JS
36	Thanh Hoa Pharmaceutical and Medical Equipment JS Co	-	L	M&C	JS
37	Thien Hung Oriental Medicine Co.	-	L	M	Ltd
38	Thien Khanh Pharmaceutical Co.	www.thienkhanhphar.com.vn	L	M	Ltd
39	Tra Vinh Pharmaceutical & Medical Equipment	-	L	M&C	SOE
40	Traphaco Pharmaceutical JS Co	www.traphaco.com.vn	L	M	JS
41	Truong Son Oriental Medicine Co	-	L	M	Ltd
42	United Pharma VN	-	F	M	Ltd
43	Viet Phuc Pharmaceutical Co	-	L	M&C	Ltd
44	Vietnam Industrial Development of Pharmaceutics	www.trade.hochiminhcity.gov.vn/ VIDIPHA	L	M&C	JS

Source: Synthesized from VDA (2006) & VNPCA (2006)

APPENDIX H: Check List For Website Content Analysis

Record for presence or absence of main content and tools used at
www.traphaco.com.vn, which is offer by Simeon (1999, 2001) and Cox and Dale
(2002). AIPDB model was used for items to observe within the site, in which the
Attracting function is left out for the interview part.

- **A**ttracting visitor: This function of Website is done through marketing
  communication activities which can't be observe within the company's
  site. Thus, the information for this part will be collected during the
  interviews.

- **I**nforming function:
  – Information variety;
  – Information depth (details);
  – Relevancy;
  – Currency;
  – Presentation and writing style;

- **P**ositioning function
  – Navigation tools: Bar, map, search, cue, ect.;
  – Appearance: homepage, logo, style, color, graphics, moving objects,
    interface, etc.;

- **D**elivering function:
  – Privacy policy posted in home page;
  – Form for order, contact or request;
  – Speed at different Internet connection modes;

- **B**uilding relationships
  – Personalization tools: registration? Welcome visitor?;
  – Platform for community building: discussion forum, chat room,
    newsgroup, online health consultancy?;
  – Form for feedback & evaluation;

- Others:
  – Website's length: both Vietnamese and English versions;
  – Content comparison between Vietnamese and English versions;

APPENDIX I: Interview Guide about Traphaco Profile and Branding Practice

Interviewees: ☺ Mr. Tran Tuc Ma, Deputy Director on Business
☺ Ms. Nguyen Van Anh, Manager of Planning Department
☺ Ms. Nguyen Thi Vinh Hue, Marketing Manager

1. **Company Overview**
   - major products
   - major markets: local/ foreign; prescription or non-prescription; Why?
   - major competitors
   - product innovation
   - major investors
   - Equitization process? Listed in stock exchange?
   - Revenue/ profit (2005)
   - future direction (strategy/objectives)?

2. **Branding Practice**
   - The branding strategy
     - Branding positioning and values?
     - Target market? Nature of competition?
     - Points of parity and difference?
   - Brand elements to build brand equity?
     - Brand names: company name, products' names
     - Logo and symbols
     - Slogans
     - Packaging
     - Others
   - Marketing communication to build brands?
     - Advertising:
       - Media used? Where and when?
       - Budget?
       - Advertising message?
       - Advertising agency?
     - Public relations:
       - Sponsorships? Press release?
       - How to organize the events? (agency…)
     - Sale Promotions:
       - Sampling? Gifts? Others?
       - Which techniques are the most effective in the market?
     - Trade-Exhibition:
       - Which ones? Why?
       - Frequency to participate?
     - Personal selling:
       - The pharmaceutical representative resources at the company?
       - How many people are they? Their selling capability?
   - Integrated programmes: plan and organization?
   - Measuring brand performance: customer evaluation on brand awareness and loyalty?

APPENDIX J: Interview Guide about Traphaco's Web Branding Practice

Interviewees:
☺ Mr. Nguyen Huy Van, Deputy Director on R&D, Webmaster
☺ Ms. Nguyen Thi Vinh Hue, Marketing Manager

1.   **Web Planning Stage**
  - Objectives and function of Website
  - Audience expected: who will come and visit Website? (general public/ doctors/ pharmacists)
  - Market and customer review
  - Product characteristics and competition
  - Resources devoted for Website (investment)
    – design
    – maintenance
    – % in total marketing budget 2003 / 2005?

2.   **Building the Website**
  - Select a Web host and register a domain name
  - Create and manage content:
    – Content offer: how to create content?
  - Design the Website
    – Navigation: structure? Search option? Links?
    – Appearance: interface, Color, Graphics, Moving objects?
        The reasons for choosing this style of appearance?
    – Speed: download speed at different connection mode? Is there any test?
    – Privacy & security?
        How to confirm that the company is not misused the customer information?
    – Personalization & Community tools?
        Could the Website track its visitors? (cookies or site log?)
        Why/ why not used?
  - Construct the Website and test
    – Technical choice of design & maintenance method: self/oursourcing
    – Quality assurance
    – Fixing problems

3.   **Marketing and Promoting the Website**
  - Attracting visitors to the Website (How to create traffic to the Website? How to get people know and come to see the site?)
    – Grand opening: launching and announcing Website? How?
    – Online activities:

- o e-mail to customers → who? People request for more information? Or core customers
            - o Banners? Buttons? Interstitials or pop-up?
            - o Promotion? Sponsorship?
            - o Register with local/global directories
            - o Links from other sites? Partnership?
        - − Offline advertising:
            - o Tools: print? TV? Outdoor?
            - o How? Where? When?
    - Visitors' retention programs:
        - − Contest, sampling, games, etc.
        - − Other free value-added things: advice column…
    - Integration between online & offline marketing communication?

4. Evaluating the Site and Adjustments

- Criteria for evaluation
    - − Self-evaluation: measurements?
        - o The number of visits
        - o Click-through rates
        - o Page views
        - o Orders from Website
        - o Contribution to revenue 2005?
    - − Customer evaluation:
        - o qualitative/quantitative methods?
        - o Organization and results?
- Feedback mechanism
    - − Frequency to receive comments/feedback/requests from customers? (month/year)
    - − Most frequent asked questions?
    - − Response to customers' requests?
        - o Tools (mail/e-mail/telephone)?
        - o Time to response?
- Adjustments solutions and improvement
    - − How often the site is updated and upgraded?
    - − Which part and why?