AN INVESTIGATION INTO THE USE OF ICT TOOLS IN MARKETING COMMUNICATION IN THE TIMBER INDUSTRY IN GHANA. A CASE STUDY OF NAJA DAVID GROUP OF COMPANIES (NDGC)

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By

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DECLARATION

I, **GOLOH HELEN IHE – EYIGHNWA,** hereby declare that this submission has been done by me under the supervision of Mr.Hayford Wilson towards the CEMBA and that to the best of my knowledge, it contains no material previously published by another person nor material, which has been accepted for the award of any other degree of the university, except where due acknowledgement has been made in the text.

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ABSTRACT

The study researched into how timber companies in Ghana with particular focus on Naja David Group of companies use Information Communication Technology (ICT) in their Marketing Communications. Empirical evidence in developed countries suggest that organizations in these countries have found creative ways of maximizing the use of ICT tools in marketing communications. It became imperative to discover if these same tools are being exploited by organization in emerging countries like Ghana. The paper investigated whether ICT tools are used rightly or wrongly, the quality of the websites and the impact of the usage on revenue generation. A survey method was used with focus on a Timber company- Naja David Group of Companies. The questionnaire was targeted at the Marketing and IT department as it is believed that these people had a better understanding of what was required as well as having the information needed to provide accurate responses. The questionnaires were sent Via email through Microsoft Outlook which enabled the respondents to provide responses directly on the soft copy. The findings of the research showed that NDGC commenced the use of ICT in marketing communication in 2001. The company has a working website and has over the years built a mailing list. The website is a basic website with light graphics and offers opportunity for clients to sign up on line to receive correspondence from the company.Unfortunately, it seems that this particular feature has not been used by clients as NDGC resorts to coping e-mails. This violates the CAM-SPAM law and could open up NDGC to spamming complaints. Findings also indicate that the organization has made effort to maximize the use of e-mail marketing. They often change the e-mail marketing message, update the content of the website and constantly update software and hardware. Findings also showed a two hundred percent increase in revenue earned prior

to 2001 as compared with revenue earned in 2009. It was recommended that NDGC build a website that is heavier in pictures and graphics while not reducing the text, that the company must protect itself from spam complaints by ensuring that only consented clients are sent e-mail and that the Company should advertise their website and encourage people to sign up to receive e-mail from them.

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DEDICATION

I dedicate this work to my husband: Mr. Jennings George Goloh, my mother Mrs. Helen Inwere, my children Priscilla, Leslie and Lily and to all my siblings.

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The Lord, the Lord is my strength and my song. He has become my salvation. Glory to the Lord God Almighty for making it possible for me to bring this project to a successful completion. May his great name be praised forever and ever.

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CHAPTER ONE

DEFINITIONS

Information and Communication Technology (ICT), is a composite term, which embodies three important concepts. To understand ICT, one must understand all three concepts.

"Information" means many things to many people, depending on the context. Scientifically, information is processed data. Information can also be loosely defined as that which aids decision making. Information, though abstract, could also be visualized as a commodity, which could be bought or sold. Other writers have defined information as: Any potentially useful fact, quantity or value that can be expressed uniquely with exactness. Information is whatever is capable of causing a human mind to change its opinion about the current state of the real world deWatteville & Gilbert (2000)

Communication refers to the transfer or exchange of information from person to person or from one place to another. When action produces a reaction, whether positive or negative, communication has taken place. Other writers in the field of communication studies have defined communication as: A process: a transfer of information, ideas, thoughts and messages. It involves a sender, a receiver, a code and a language that is understood by both the sender and the receiver. James, et al., (2004)

A process involving the passing of messages through the use of symbols which all parties in the communication encounter understand. It involves the exchange of ideas, facts, opinions, attitudes and beliefs between people. It is not a one-way affair. There must be a sender to transmit the message, and a receiver to make appropriate decisions on how the rest of the exchange should continue. James, et al. (2004)

Marketing Communications are messages and related media used to communicate with a market. Marketing communications is the "promotion" part of the "Marketing Mix" or the "four Ps": price, place, promotion, and product. (Wikipedia).

In this study, the term Marketing will be used interchangeably with Marketing Communication.

Technology refers to the use of scientific knowledge to invent tools that assist human beings in their effort to overcome environmental hazards and impediments to comfort. In this regard, technology refers to things like the computer, telephone, cell phone, GSM handsets, television, radio, etc.

Put together, therefore, ICT has been defined as the acquisition, analysis, manipulation, storage and distribution of information; and the design and provision of equipment and software for these purposes. deWatteville et al (2000)

1.0 Introduction

In this twenty first century it is difficult for marketers to perform their duties efficiently without ICT tools. It is evident that the impact of ICT on the growth of Marketing, especially Marketing communication in the past decade has been tremendous. Organizations in

developed countries saw the potential that this growth held and found creative ways of using ICT to grow their businesses. In order to remain competitive they continually changed to keep pace with advances in technology.

This research seeks to discover if timber firms in Ghana are also using this new technology to their advantage; the extent to which the firms are using ICT tools in their marketing efforts; whether they use them basically or extensively, and what impact the usage is having on the effectiveness and efficiency of their marketing efforts.

In order to understand why organizations rapidly gain and lose market share, why the revenue of many industries increased or decreased rapidly in the latter 1990s and 2000s, many marketers have looked at the development, application and utilization of ICT as a critical factor. There is an argument that ICT represents a new general purpose technology that generates sustained increase in growth through the processes of technological development and innovation. Firms expect that with the deployment of ICT tools there will be greater efficiency, lower cost and access to new and larger markets. ECORYS (2007)

In the words of Yann, (1996), "Marketing is a very broad ranging discipline which is undergoing radical changes. The approach that should be adopted by marketing management in the 21st century is conditioned by the deep social and cultural changes that we are going through at the end of this century. It is also greatly impacted by the significant alterations of today's business practices".

To respond to these developments, a number of studies have been and are still being carried out to assess the use of ICT in marketing by firms.

ICT usage can be sub-divided into two: **e-ICT – Personal Computer (PC) internet and mICT - mobile internet.** In this study, ICT is related mainly to the use of internet (email & website) via personal computer (PC).

1.01 e-ICT

e-ICT here refers to using **email and website** to communicate with customers and prospects.

1.02 Email

In its broadest sense, the term email covers every e-mail that is sent to a customer, potential customer or public venue. Specifically, it is used to refer to:

• Sending direct promotional e-mails to try and acquire new customers or persuade existing customers to buy again.

• Sending e-mails designed to encourage customer loyalty and enhance customer relationship.

• Placing marketing messages or advertisements in mails sent by other people.

(Email Marketing Reports - www.email-marketing reports.com/intro.htm).

1.03 Website

A **website**, is a set of related web pages containing content , including text, video, music, audio, images, etc. which are accessible via a network such as the Internet. All publicly accessible websites collectively constitute the World Wide Web. (Wikipedia)

1.1 Background To The Research

ICT tools have become indispensable for firms to effectively and efficiently carry out their marketing communications. However, there is a little confusion when marketers decide to use a global medium like the internet for marketing communications. This confusion arises from the fact that marketers may not know how to communicate properly. Oshunloye, (2009).

This research attempts to discover if timber firms in Ghana in general and Naja David Group of companies (NDGC) in particular are using ICT optimally in marketing to achieve desired revenue and profit.

In the past, businesses struggled to accommodate the use of ICT tools in their integrated marketing communications .Hofacker&Murphy (1998), Dholakia &Rego (1998). Now, marketers who ignore and or fail to incorporate these tools in their marketing functions will find themselves losing significant revenue. It will be worthwhile to discover wheater NDGC is keeping pace with the times and how this is affecting its business.

1.2 Statement Of The Problem

The use of ICT in marketing has been examined by many researchers especially in industrialized nations. Unfortunately, not a lot of work has been done in emerging economies like Ghana. This thesis seeks to close the gap between what is known about the use of ICT in marketing in industrialized nations and emerging economies by focusing on the use of ICT in marketing in the timber industry in an emerging economy like Ghana with particular reference to NDGC.

1.3 Objective Of The Study

Every organization aims to get closer and closer to its market. It will be worthwhile to discover whether the application of ICT tools in marketing enables organizations in the timber sector to achieve this goal faster.

The main objective of this study is to find out **how timber firms in Ghana use ICT tools in their marketing communication efforts and the impact of the use on the revenue generated by the company. Its focus is on Naja David Group of Companies (NDGC).**

Specifically, the study sought:

1) To ascertain if NDGC was generating more revenue by incorporating email and website in its marketing communication.

2) To evaluate what NDGC may be doing right or wrong in the use of ICT in marketing communication.

3) To evaluate the quality of NDGC's website

1.4 Research Questions

In this thesis I empirically answered these questions:

1) What is the percentage increase in NDGC's revenue since it started using email and website?

2) What is NDGC doing right or wrong in the use of ICT in marketing communication?

3) What is the quality of NDGC's website?

1.5 Significance Of The Study

A clear understanding of the application of ICT tools will help organizations map out an effective strategy for deploying this technology. Individuals will benefit by understanding how marketing with ICT tools can make their life easier and give value for money. The study builds on previous researches and adds to the understanding of how ICT tools are used in marketing. Lessons learnt from firms who have used ICT tools successfully and effectively, can be used to strategize and improve the function of marketing in organizations in emerging economies like Ghana.

Policy makers who have a clear understanding of the potentials of ICT tools and the role which ICT can play in economic growth through more effective marketing will make policies that will encourage the extensive use of ICT by individuals and firms in the country. Finally, the findings of this study will motivate researchers to do a more detailed study into the use of ICT tools in marketing in emerging economies.

1.6 Scope and Nature Of The Study

The research was empirical and analytical in that the data collected was analyzed without manipulation. The research is designed to investigate how timber companies in Ghana use ICT in marketing communication. To discover if timber firms use ICT basically or extensively, properly or improperly, and the positive impact it has on the revenue generated by the firms.

Findings from a case study of a timber firm – NDGC was used for generalization.

The focus was on Marketing and IT personnel.

1.7 Limitations

Time constraints of the semester afforded less time than was ideal for an extensive study involving travelling to companies of interest. Finance also imposed a limitation on the number of firms that were sampled.

1.8 Delimitation

The sample size was left small to avoid the analysis of vast data that may obstruct other form of studies on the course and also because of the difficulty of getting large or small companies to answer surveys.

1.9 History Naja David Group Of Companies.

Ghana is one of the largest manufacturers and exporters of wood based products in the West African sub region. The timber industry is the 4th revenue earner for the Ghana Government. In 2009, the timber industry raked in Euro 128,226,984. Of this, Naja David Group of Companies contributed nearly 20% (www.fcg.org). The group has a total workforce of more than 4500.

It has a substantial investment in plant, resource development, its workforce and communities in which it operates. The group is committed to remaining in the forest and wood products industry and has achieved a credible position in the timber industry in Ghana.

It has its own plywood sales and distribution outlet in Kumasi which caters for the right standard of the products on the domestic market and other West African countries.

Naja David Veneer and Plywood Limited (NDVPL), AG Timbers Limited (AGT) and Ayum Forest Products (Mim) Limited (AFP) are the key companies forming the Naja David Group of Companies. The group has been in existence for more than 4 decades and has thrived in the competitive timber industry to date.(www.najadavidgroup.com)

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They produce a wide range of products some of which include products in the secondary category

- Plywood: In 2009, NDVP and AFP produced and exported 3,187.3m3 of the total 7,241.2m3 of plywood exported from this country representing 44% of Ghana's plywood export.

- Rotary Veneer: The three subsidiaries NDVP, AGT and AFP exported 5877.8m3 of the 10,056.7m3 representing 58.45% of rotary veneer exported in 2009.
- Sliced Veneer: AGT and AFP exported 11,174,166.1 m2 of the 48,906,928.4 m2 representing 22.85% of sliced veneer exported in 2009.
- Curls Veneer: AGT exported 18,961.2 m2 of the 88,641.8 m2 representing 21.39% of curl veneer exported in 2009.

- Air dried Lumber: AFP alone exported 2,033.1 m3 of 50, 074.7 m3 representing 4.06% of air dried Lumber export in 2009.
- Kiln Dried Lumber: AFP also exported 6,899.0 of the 69,207.3m3 representing 9.97% of kiln dried Lumber export for 2009.

- Blockboards: NDVP exported 607.4 m3 of the 797.8m3 representing 76.13% of exports in 2009`

The company is also involved in the production of the following tertiary timber products.

- Dowels: AFP exported 113.4m3 of the 437.2m3. Representing 25.94% of Dowels exported in 2009.
- Layons: AGT exported 57,8m3 of the 65.8m3. Representing 87.85% of Layons exported in 2009.
- Moldings: AFP and AGT exported 1,666.421m3 of 14,130.689m3. Representing 11.79% of Moldings exported in 2009. (www.fcg.org)

1.92 Market Performance

Leading exporters of wood products: January-December 2009

PRODUCT EXPORTER	VOL(M3)
(PLYWOOD) OVERLAND NAJA DAVID VENEER	54,525
LUMBER (KILN DRIED) JOHN BITAR & CO. LTD	7,554
POLES AMINEXO CO.LTD	8,642
SLICED VENEER LOGS & LUMBER CO. LTD	7,720
PROCESSED L/MOULDING LOGS & LUMBER CO. LTD	3,940
LUMBER (AIR DRIED) SWISS LUMBER CO.LTD	4,847
ROTARY VENEER AYUM FOREST PRODUCTS LTD	3,216
PLYWOOD NAJA DAVID VENEER	2,329
LUMBER (OVERLAND) RAHMUSA CO. LTD	20,832
BOULES (AIR DRIED) G.D.C.LTD	852
BILLET ROOT EXPORT LTD	2,606
FLOORING MODERN WOOD TECHNOLOGY	527
BLOCKBOARDS NAJA DAVID VENEER	607
DOWELS BIRIM WOOD COMPLEX	259
LAYONS A. G. TIMBERS LTD.	58
BOULES (KILN DRIED) SAMARTEX TIMBER & PLYWOOD	117

CURLS VENEER PYRAMID VENEER LTD	24
KINDLING BIG K PRODUCTS LTD	568
CURLS BOARD JOHN BITAR & CO. LTD	1

Table 1.0

Source: Timber Industry Development Division Report On Export Of Wood Products, December 2009

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CHAPTER TWO

2.0 LITERATURE REVIEW

In this chapter, an overview of the literature and past research work related to the subject area will be given providing a setting for and connection to this research. This provides background information required for the understanding of the entire work.

The chapter will begin with past studies in the area of ICT as a whole and of its component namely, Internet (Website & Emailing).

2.1 ICT Diffusion

ICT has diffused in various ways over the years but still has a long way to go in achieving perfection or near perfection. *Porter (1990)* was insistent upon the crucial role that IT would play in the 1990's. According to him, the mastering of the processes, the access and the circulation of Information had become fundamental in the acquisition of a competitive advantage across one's industry - or even across industries when they are competing with one another. Moreover, he established that there existed a hierarchy of the effects of the

implementation of Information Technology. The most common effects being to optimize each activity in its current form, add new function to activities and reorganize individual activities. Then there are effects with high value like coordinate various activities in different locations, link corporate activities together and inter activities exchanges.

In marketing, the presence of IT is crucial in the area of information gathering, analyses, data mining, market surveys, information dissemination, Executive Information Systems and Marketing Orientated Information Systems. These are the major events in the informational revolution of marketing. *Yann, (1996).*

In order to go forward in this, it is necessary to distinguish between Information and Information Technology. Information technology consist of all the hardware and software a firm needs to use in other to achieve its business objectives while information is the definite knowledge acquired or supplied about the firm.

According to *Yann,(1996),* because of the prevailing role of IT in changing the behaviour of organizations, there is a tendency to exaggerate the importance of technology itself. Technical problems become the focal point, and the basics are often shifted to the background.

The approach is not to focus on the tools that transfer Information, but instead on the understanding of the big picture of the Information System. A holistic approach must be applied at all times to achieve best results.

2.2 ICT In Marketing

ICT in marketing has come of age and organizations of various sizes employ various ICT techniques. According to *Redoli. et al., (2008),* for organizations to be innovative in any of their functional duties they need to use information and communication technologies (ICTs).

At the time, they were writing about Small and medium enterprise companies. This also holds true for all organizations irrespective of their size. This means that the use of ICTs can be considered as key factor for innovation and Entrepreneurship. ICTs are a must for organizations to innovate. In fact, a look at the Global Innovation Scoreboard (GIS) reveals that all African countries excluding South Africa are omitted in the list. South Africa which is even mentioned belongs to the list of countries lagging behind in innovation. It is found in the same group with Brazil and Mexico. It is not surprising then that Africa is considered a third world continent.

On the other hand, a look at the distribution of internet users worldwide for 2011 reveals that though Africa continues to lag, there are phenomenal gains that bode well for our growth and innovation.

From (*wiki.answers. com*), we discover that about 2,095,006,005 people are online daily and 83% of the world order on line. This rate of growth definitely makes the internet a viable tool for marketing. The growth rate between the year 2000 – 2011 in Africa is 2527.4%. The diagrams and table below illustrate this:

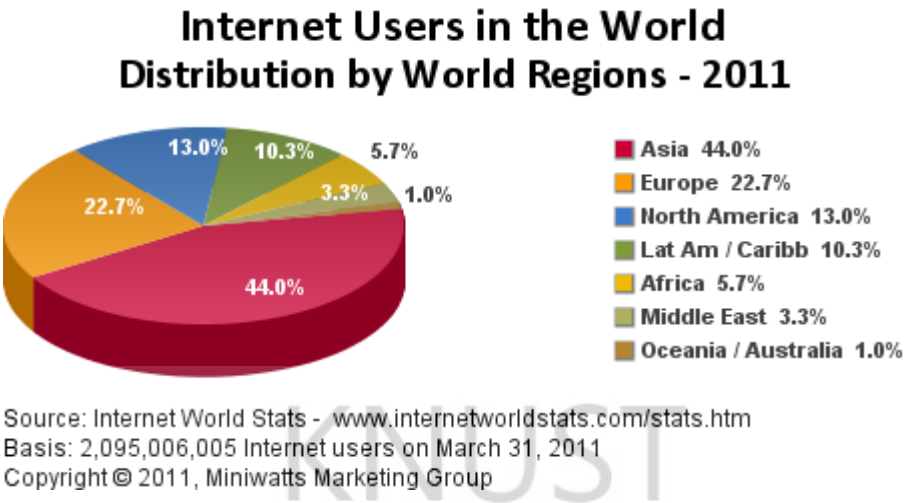

Figure 2.0 World Internet Users by World Region

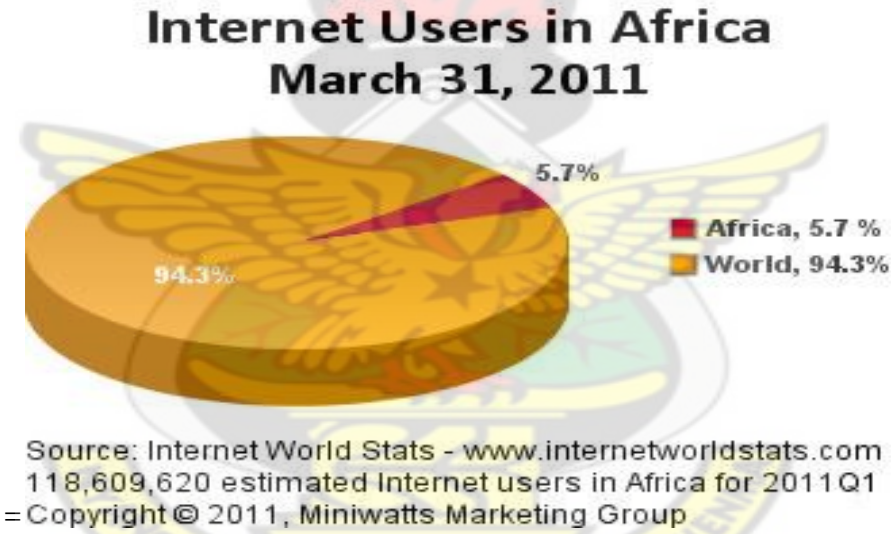

Figure 2.1 Internet users in Africa

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WORLD INTERNET USERS AND POPULATION STATISTICS

WORLD INTERNET USAGE AND POPULATION STATISTICS March 31, 2011						
World Regions	**Population (2011 Est.)**	**Internet Users Dec. 31, 2000**	**Internet Users Latest Data**	**Penetration (% Population)**	**Growth 2000-2011**	**Users % of Table**
Africa	1,037,524,058	4,514,400	**118,609,620**	11.4 %	2,527.4 %	5.7 %
Asia	3,879,740,877	114,304,000	**922,329,554**	23.8 %	706.9 %	44.0 %
Europe	816,426,346	105,096,093	**476,213,935**	58.3 %	353.1 %	22.7 %
Middle East	216,258,843	3,284,800	**68,553,666**	31.7 %	1,987.0 %	3.3 %
North America	347,394,870	108,096,800	**272,066,000**	78.3 %	151.7 %	13.0 %
Latin America / Carib.	597,283,165	18,068,919	**215,939,400**	36.2 %	1,037.4 %	10.3 %
Oceania / Australia	35,426,995	7,620,480	**21,293,830**	60.1 %	179.4 %	1.0 %

WORLD TOTAL	**6,930,055,154**	**360,985,492**	**2,095,006,005**	**30.2 %**	**480.4 %**	**100.0 %**

Table 2.0:

Source: www.internetworldstats.com.

Copyright © 2001 - 2011, Miniwatts Marketing Group.

Compared to any other continent, the growth rate in the world internet usage in Africa is astronomical. Various articles and research however show that the know-how of ICT usage is still at the elemental stages. This growth rate in Africa is interesting. This study focuses on a selected company in the timber industry in one of the Africa countries (Ghana). It will be revealing to discover if this growth rate is being exploited by organizations in Africa in performing their marketing functions.

According to *Bengtsson et al.,* (2007) the process of adopting and developing Internet applications in firms can be very rapid because of the international diffusion of computer and Internet technology. Stage models are derived mainly from studies of small and medium-sized enterprises (SMEs.) Studies suggest that a more basic use of the Internet is adopted before more advanced applications are developed. However, they neither elaborate adequately on the challenges of introducing more advanced applications, nor on how the introduction of different innovations is stimulated or hindered.

Basic use of the Internet includes online presentation of the firm, its products or services, and simple information exchange via email. Advanced use of the Internet assumes more sophisticated two-way interaction and data processing, and includes online ordering and

payment, collecting feedback from customers and integrating the homepage with the firm's internal functions .*Bengtsson et al., - (2007*).

A number of studies have mainly focused on basic use of the Internet and have barely touched upon its advanced use, or have not clearly distinguished between the basic and advanced uses. *BarNir et al., (2003); Cohen et al.,(1987); Höst et al,(2001*). However, the distinction between basic and advanced use of the Internet is significant and has far-reaching implications for the adoption process. Some earlier studies in this area will be examined before moving to specifics such as, emails and internet.

A study by Oshunloye,(2009), analysed survey data from five selected companies in Ireland, Dublin in relation to how they use the internet and mobile phones in Information and Communication Technology (ICT) marketing. The study investigated the variations and combination of ICT tools used (Internet, Emails, SMS, MMS) by these companies. Data for this study was collected through the sampling of Irish firms located in the retail/hardware stores, banks, music/entertainment, IT, and print media. It was collected through eSurveyspro at www.esurveyspro.com. This on-line software allows survey questionnaire structuring, formatting, emailing to respondents, exporting of data, and percentage/graphic presentation.

The survey results and analysis showed that the companies under study used ICT in their marketing but did not maximize the use of the different ICT tools like emails, short messaging service(SMS) and multimedia messaging service (MMS). The study revealed that most of the companies had a working website but that a more advanced website use was yet to be achieved in terms of the website presentation and capabilities.

This research is similar to the one by Oshunloye A.O. The central topic was the same and the focus was also on marketing and IT personnel. The difference, however, is in the fact that the scope of this paper is narrower and the sample size is smaller than that conducted by Oshunloye. Furthermore, the questionnaire used in this study was administered by email via Microsoft Outlook.

A study by *Bengtsson et al.,* (2007), analyses survey data from 379 Swedish manufacturing firms. The results of the analysis showed that the composition of factors on which firms base their decision to adopt advanced Internet-based marketing operations varies significantly with firm size. The aim of the study was thus to further elaborate on drivers behind the development of advanced Internet use. They chose to focus on one specific advanced use of the Internet, namely the use of **Internet market channel**s.

While adopting the Internet for basic purposes does not require major investments or organizational changes, adopting advanced Internet operations as a market channel might require the firm to change its established channels of distribution and routines, sustain short-term losses, and also require significant competencies and financial resources.

Data for this study was collected through the sampling of Swedish firms located in four different regions. These different types of industrial context represent one metropolitan area and three provincial regions in the south, north and middle parts of Sweden. The firms are active in six traditional industrial sectors – wood, publishing/printing, chemicals, metal, machinery and electrical equipment. The questionnaire, together with an explanation of the study, was mailed to the firms. It was underlined that it was important that the questions

should be answered by the person responsible for marketing or the marketing manager in the respective firms.

It was considered that the project was relatively tightly connected to aspects of the Internet technology linked to marketing and that the person responsible for the marketing function also normally has the greatest insight and knowledge about these aspects.

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The way the above research was conducted is related very much to this one in some aspects such as who the questionnaire should be administered to and the central topic (i.e ICT in marketing). The difference, however, is in the sample size and scope. The aim of the study was to elaborate on drivers behind the development of advanced Internet use. In this research, the focus is on the variation of ICT tools used and focuses on one firm.

Largely, the above research findings and conclusions were: **size** is positively associated with the adoption of the advanced Internet-based marketing operations. This present research is to find out how the selected company uses ICT and for advice to be given based on available literature in areas of short-comings.

Rettie (2001), in her paper: *How Will the Internet Change Marketing?*, attempted to categorize some of the ways in which the Internet would transform marketing. Three sources of change were identified: Cultural change, marketing management change and marketing in the new medium - Internet marketing. The study indicated that the Internet clearly had a role in marketing strategy, both as a segmentation and targeting instrument, and as a vehicle for

market research (secondary research, online surveys, online focus groups, email panels, etc.). It could also augment the traditional areas of operational marketing: promotion, distribution, product and price.

The Internet was initially seen as a new advertising medium, with web sites as virtual perpetual posters, and banner advertisements as the gateways to these web-sites. Despite declining click-through rates and the use of traditional media by Internet businesses, online advertising grew rapidly. Revenue for 2005 stood at $16.5 billion. There is evidence that advertising banners work better as virtual 'posters' than as gateways, with the branding and image enhancement effect being up to 10 times the click through rate.

The potential of the Internet in many other areas of promotion is also being recognized. The Internet is a low cost direct marketing tool (for example, email marketing), it can be used for public relation, sponsorship and for building brand image (for example, Pepsi's association with music sites to enhance its young image). The potential of the Internet as an intermediary was quickly recognized.

There were predictions that electronic commerce would lead to the emergence of new types of electronic intermediaries: virtual malls, electronic 'brokers', rating services and automated ordering services. The Internet is also a low-cost and efficient distribution medium for information-intensive products such as news, software, music and video. In the study it was indicated that Slywotzky (2000) introduced the concept of the 'choiceboard' whereby consumers design their own products (e.g. Dell's on-line computer configuration), and predicts that by 2010 choiceboards will be involved in 30% of US commerce.

At the same time, the Internet enables new pricing mechanisms such as variable pricing (e.g. airline seat pricing) which theoretically increases both volume/utilization and profit and auctions, where prices are determined by the bidding of consumers or manufacturers. The Internet has the potential to be a powerful customer service tool, because companies can use it to provide 24/7 product and service information, and can develop customer relationships, all at relatively low cost. The cost of an email is a fraction of a letter, and the cost of an Internet 'chat' is a fraction of a telemarketing call. The medium can also provide virtual evidence of intangible services, so that, for example, one can now see online insurance policies and bank accounts. Mobile Internet creates further opportunities to improve customer service. In the United States "Starbucks" ran a trial allowing users to pre-order their drinks. Consumers sent SMS text messages while walking to the coffee shop, so that their drinks were waiting for them when they got there.

While the above study elaborates on the importance of ICT in marketing it also indicates that there are some threats, particularly to brands, making brand strength weaker than ever before. Virtual community members focus less on the brand and more on product and service features. Internet supports highly rational shopping, encouraging dispassionate comparisons of prices and features, which may undermine brands based on facts.

New marketing techniques have appeared. These include viral marketing, (which uses email to spread messages without cost from consumer to consumer), guerrilla marketing (which uses underhand tactics such as 'dropping' brand names in chat rooms), permission marketing (in which relevant targeted messages are sent to consumers with their prior permission,

Godin (1999) and affiliate marketing, where sites carry links for associate sites and share the revenue generated.

The digitisation of the Internet enables the recording, analysing and understanding of consumer decision-making behaviour. Analysis of web-site logs enables the marketer to identify relevant consumer behaviour, for instance the precise point at which potential consumers lose interest (currently about 66% of browsers who commence an online purchase leave the site before completing a purchase). In some cases these details can be used to create future sales, as a result of this analysis Amazon.com created "Wish Lists" and an 'advise when stock is available' facility.

Digital technology enables concurrent customization, so that one can customize the Internet site, the market research survey or the service offered during the marketing interchange. For example, recognizing from his online behaviour that the user is very price conscious, he may be offered a better deal; recognizing that the user is a novice or has an out of date computer, the site is tailored to his ability or technology level.

With the development of mobile and Personal Digital Assistants (PDAs) Internet, segmentation and targeting can include time and place. In conclusion, the finding in the above research indicated that the Internet is revolutionizing marketing, by radically changing the relationships between consumer, intermediary and manufacturer. The Internet allows companies to address consumers individually and interactively, developing relationships and facilitating targeted marketing. Consumers are now able to play a **pro-active role**.

The above study is very important to the present research work because it highlights the importance of **properly incorporating** a working and effective ICT strategy in marketing in organizations of today.

To further understand the study's scope and objectives, email and website marketing are described below.

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2.3 E-Mail Marketing

E-mail marketing is the most used and the fastest way of getting marketing information to a targeted audience today.

In an article by *Joukhadar (* 2006) *E-marketing in an Integrated World* – Joukhadar spoke to circulation directors on both consumer and Business to Business(B-to-B) print publications and Web sites. She found out that email marketing and e-newsletters vary from a small part of the marketing process to a full-blown, money making product channel. Everywhere, it seemed, email techniques were being used to save money and grow new revenue.

Leonard Timm, director of circulation for the Interiors division, *Vance*, says the majority of e-mailings they do are print-magazine related email newsletters. Most are supported by advertising, either within the newsletter or on the web site. According to Timm, during the email newsletter start-up phase, the company used three different vendors. But, currently to gain economies of' scale, they use one vendor (EmailLabs – email software). The email

system gave the company the capability to compose the message, creatively send out the emails and get feedback on statistics. It provided counts on delivered copies, open and clicks through. *Entrepreneur* used its email newsletters to extend the brand name, to build a relationship with its readers and allow them to consume the content in a different form. They signed with Avantgo to put their wireless content on its service. The service was free, and the registration was very simple - email, name, demographics. His idea was an entrepreneural spirit of email marketing.

The above snapshots of how some print market leaders use the email/website in marketing shows its viability as part of a major marketing strategy.

In 2006, as the Internet/Emailing awareness increased **The Irish Internet Association (IIA)** appointed Experian owned email marketing and Web analytics company CheetahMail to bolster online communication with members. *PrecisionMarketing,* (2006). The IIA's in house team used CheetahMail's targeting and segmentation features to create highly personalised email campaigns - based on member demographics, preferences and online behaviour. Extensive campaign testing took place, allowing creative work to be refined for maximum impact.

Generally, email is now more popular and widely used than direct mail. The findings of a research conducted by Precision Marketing, (2006) showed that email has overtaken direct mail as consumers' preferred method of marketing communication.

In an article in Travel Trade Gazette*; E-mail can help win over youth market*-, Branwell (2006) pointed out that, youthful consumers prefer to receive their marketing by email.

2.3.1 Email Marketing Tips By Carol Ellison

Email is a very personal advertising. Best practices in email marketing demand communications that go beyond advertising, respect the customer, and speak in a familiar one-on-one style. In response to the impersonal abuses of spam, email marketing became personal following the adoption of the "*C*ontrolling the *A*ssault of *N*on-*S*olicited *P*ornography *A*nd *M*arketing Act of 2003" (CAN-SPAM) of then U.S president, George W. Bush.

The act defined spam as marketing messages sent without permission and set penalties not only for spammers, but also for companies whose products were advertised in the spam. Marketers, recognizing that people's aversion to spam destroyed the customer loyalty they worked so hard to build, had already begun to address the problem with best practices that focused on permission. Today, what is best is often defined by the size of one's company and the industry one is in. However, a few core practices hold for everyone. Ellison, (2006) a freelance writer in a Customer Relationship Management (CRM) magazine, gave eight simple email marketing tips, which if followed can prove to be very helpful in any email marketing campaign. The 8 tips are quoted directly below:

1) Get Permission

"Email is one of the most powerful and yet one of the most dangerous mediums of communications we have," said Jim Cecil, president of Nurture Marketing, a customer loyalty consultancy in Seattle. "Virtually everyone uses it and in Business-to- Business

marketing everyone you want to reach has access to email. It's also very inexpensive and it can easily be built into existing marketing systems. But of all media, it is the one where it is most critical that one have explicit permission." Without permission organizations not only risk losing customer goodwill and inviting CAN-SPAM penalties. But, could end up blacklisted by internet service providers (ISPs) that refuse all mail coming from the organizations domain if spamming complaints have been lodged against them.

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2) Build a Targeted Mailing List

"The very best way to get permission is to have your best customers and your biggest fans ask their friends to sign up," said Godin. This results in a self-screened database of prospects who are probably interested in a firm's offering. That is how Tom Sant built a mailing list numbering 35,000 for his newsletter - *Messages That Matter*. According to Sant, author of *Persuasive Business Proposals* and *Giants of Sales*, "We simply began by following up with people we met at trade shows or on sales calls and asked them, 'Would you like to get a tip from us every few weeks about how to do your proposals better?'

We made it clear that people should not be getting this if they did not want to." Sant includes a Subscribe link in his mailing so new readers have a means of signing up when their friends forward it to them. His mailing list "just grew organically," he said, "because people would pass it around. We created an entire network of people who were getting these messages. It's very effective and it's enabled us to strengthen our position as thought leaders or recognized experts in the field."

3) Work With a Clean, Targeted Database:

Jack Burke, author of *Creating Customer Connections*, advised that one should work with the cleanest permission-based list that could be found and that is targeted to ones industry and ones offering. Many companies have this information in customer relationship management (CRM), sales force automation (SFA), and contact management databases (CMD). "A good place to look is with traditional, established data merchants for your industry," said Burke. In the insurance industry, for instance, Programbusiness.com allows its members to send broadcast emails to its database of some 50,000 targeted subscribers and members have the opportunity of selecting subsets of addresses categorized by insurance type such as commercial, health, life, and auto. Co-registration services Web sites, such as www.listopt.com or www.optionsmedia.com, can help. Co-registration means the firm offer their e-zine and email promotions through a registration form that appears on multiple sites.

4) Adopt a Strategy of Persistence

It takes time to build customer relationships. "They used to say it takes something like 7.3 impacts to make an impression with an ad, and that was long before the Internet. I believe today it's approaching 20 imprints before it makes an impression," Burke says. "So if one is not touching ones clients in some way at least once a month, the chances are they are going to find somebody else to do business with."

"After the customer has registered for future emails, downloaded the company's whitepaper, or entered the company's sweepstakes, there often is nothing to enhance that relationship. Companies need to think about what should happen next," says Jeanniey Mullen, partner and

director of email marketing at OgilvyOne Worldwide. Ogilvy's research shows the first three emails are the most critical. Mullen advised that there should be an introductory message in which customers accept an invitation and give permission for future communications, followed by a second message that sets up customers' expectations by explaining future benefits (discounts, coupons, or high-value informational newsletters). The third message should begin to deliver on their expectations by sending the promised newsletter, whitepaper, or discount offering.

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5) Tell a Story

In *All Marketers Are Liars,* Godin emphasized the importance of storytelling as a successful marketing strategy. Email offers the opportunity to tell the story in continuous installments. "Email marketers don't have a prayer to tell a story," Godin says, "unless they tell it in advance, in another medium, before they get permission. Otherwise, it quickly becomes spam. The best email marketing starts with a foundation, like Amazon, and use the email to drip the story, to have it gradually unfold."

A well-crafted newsletter should be more than just a summary of a company's resume or history. For instance, each issue of Sant's *Messages That Matter* offers a free strategy on how to make business proposals effective. "We focus on providing specific content, messages of a page or so about the kinds of things we're good at," Sant says.

6) Let Readers Drive Design

As the delivery emails cannot be guaranteed, design is especially important. Because filters often block logos, graphics, and Flash animation, they can determine whether or not a customer or prospect even sees a firm's message. "Filters are getting extremely thorough in what they are filtering out," Burke says. "If you are not careful, those filters can filter out legitimate email." He recommends using flat text with hyperlinks to your Web site. "It is text so it will go through," Burke says. "A firm can put all of the graphics in the world on the firm's Web site and once they click through to the Web site the firm is better able to capture their identity and their information for future follow up."

Many companies offer both plain and rich text email editions, giving customers the option of registering for the html edition on their Web sites. In those editions, design is especially important. Studies by Ogilvy has revealed that email requires something different from traditional creative marketing design. The studies have shown that users are most likely to respond to images and copy to the left of an image. "We have seen increases up to 75 percent in response rates by moving the call to action button up next to an image instead of below the image, or by literally changing a link to a button so it stands out more prominently in the text," Mullen says.

She has also found that the use of industry-, company-, and brand-specific words and phrases enhances the response. For instance, the word *advice* generates a high response for companies considered to be the thought leaders of their industry, but companies with consumer products, such as Apple with its iPod, will generate a better response using words like *new* or *sleek*.

7) Have an Exit Strategy

People who sign up to communicate with an organization did so because they wanted to hear from that organization. But that can change. “If they stop responding,” Mullen says, “chances are it’s for one of two reasons: either they’re not interested in your content anymore or they’re no longer getting your emails. In either case we recommend that you define a set number of non-response messages [after which you] stop sending them emails. It sends a negative brand message and it doesn’t do anything to help reestablish your relationship with them,” Mullen says.

That number differs by industry. Travel companies, cannot predict when their customers will be travelling and looking for discounts on rooms and airfares, so their horizon is much longer. Sometimes it could be as long as several years. On the other hand, a high-tech Business-to-Business company is probably only going to want specific information on wireless security when it is addressing the problem internally. After the problem is solved, continued mailings about wireless security are likely to irritate. Devising a successful exit strategy is like determining a successful formula for content: Know your industry.

8) Best Practices — Know What You Want

The key to maintaining a set of successful best practices is to know what you want from them and be prepared to rewrite them as the business needs change. Mullen suggests starting with a good awareness of what you want your best practices to achieve. “Identify what you will use them for, the goal of your communications, and how you’ll define the success of your campaign,” she says. “The most important element in any kind of successful email marketing is understanding and defining what your realistic strategy should be.”

2.3.2 Email Marketing Frequency

Email marketing frequency is also a very important aspect to look at. According to *Best*, (2005), once a business has found the right combination of media to effectively reach target customers, the next question becomes how often the business needs to expose target customers to its message in order to achieve a certain level of awareness. Using too few messages may prevent information from getting through to target customers and will probably result in low levels of awareness and comprehension. On the other hand, too many exposures could irritate target customers and potentially have an adverse effect on retained information and perceptions of the advert, product, or company.

For instance AFLAC insurance, a few years ago, had only 13 percent name recognition in the United State. They looked for an effective marketing communications campaign that would raise brand awareness. The company found what it was looking for and initially spent $35 million advertising it. The now infamous **AFLAC duck** led to more sales leads in the first 2 weeks of that year than in the previous 2 years combined, leading to record revenues. AFLAC's brand-name recognition sky-rocketed to over 90 percent and revenues grew 30 percent every year the campaign was run. However, after several years of hearing a duck screaming "AFLAC!" in various situations, many people found it irritating. Best(2005)

It is difficult to tell a company exactly what the frequency of email distribution should be. Each business and audience will react differently. It is up to the company to find out what that perfect frequency is. The only way to find this out is to do as many tests as possible for a certain amount of time. Keeping track of all statistics on *opens* and *unsubscribes* is very

important. Also, it is important to keep track of time the email goes and then analyze the data. It is preferable to put all the information in a spreadsheet and do this for either three or six months to be able to make an accurate decision. Brick Marketing, (2009)

After a time frame has been decided on to analyze this information, small changes should be made to the distribution schedule and then analyze the numbers to see what type of significant changes that occurred from the changes that have been made. This type of testing is very important to ensure that the business is not missing out on any opportunities. Before this is done a decision will have to be taken on the number of emails to be sent out daily. Once this decision has been made the tests can be performed. They could also as part of the test include increasing from one to two emails per week or the other way around.

The Figure below illustrates how to launch an effective email campaign starting from **objectives**:

Figure 2.2: Effective Email Marketing

Source: Email Marketing Journal

2.4 The Website and the Internet

A **website**, is a set of related web pages containing content (media) such as text, images, video, audio, etc. A website is hosted on at least one web server, accessible via a network such as the Internet or a private local area network through an Internet address known as a Uniform Resource Locator (URL). All publicly accessible websites collectively constitute the World Wide Web (Wikipedia)

Websites can be used in various interactive ways. Initially, it was just to give universal access to information. It has since developed to e-Commerce usage, social networking and many more. Some websites have inbuilt application for graphic design and online customer customization (www.print24.ie and www.dell.ie respectively).

The **Internet** is a massive global network of interconnected packet-switched computer networks. Krol and Hoffman (1993) offer three mutually consistent definitions of the Internet:" 1) a network of networks based on the Transmission Control Protocol (TCP) / Internet Protocol (IP) 2) a community of people who use and develop those networks and a 3) collection of resources that can be reached from those networks".

The tremendous growth of the Internet, and particularly the World Wide Web, has led to a critical mass of consumers and firms participating in a global online marketplace. The rapid adoption of the Internet as a commercial medium has caused firms to experiment with

innovative ways of marketing to consumers in computer-mediated environments. These developments on the Internet are expanding beyond the utilization of the Internet as a communication medium to an important view of the Internet as a new market. Ricciuti, (1995).

Anecdotal evidence suggests that Web-based commercial efforts are more efficient and possibly even more effective than efforts mounted in traditional channels. Initial conjectures on efficiencies generated by online commercial efforts suggests that marketing on the Web results in "10 times as many units [sold] with 1/10 the advertising budget" Potter, (1994). It is about one-fourth less costly to perform direct marketing through the Net than through conventional channels Verity et al, (1994). This fact becomes especially critical in the face of shrinking technology and product life cycles and increasing technological complexity. IITA, (1994)

2.4.1 Benefits of the Internet and Website

Several benefits can be attributed to the use of the website for both distribution and Marketing Communication as follows:

2.4.2 Benefits for Marketing Communications

Presently, most firms use the Web primarily to deliver information about the firm and its offerings and for both internal and external communication with other firms and consumers. zzMagid, (1995); Sharples, (1995). The interactive nature of the medium offers another category of firm benefits since it is especially conducive to developing customer relationships. Hoffman et al, (1995). This potential for customer interaction, which is largely

asynchronous under current implementations, facilitates relationship marketing and customer support to a greater degree than ever before possible. Cuneo, (1995)

Web sites are available on demand to consumers twenty four hours a day. The interactive nature of the medium can be used by marketers to hold the attention of the consumer by engaging the consumer in an asynchronous "dialogue" that occurs at both parties' convenience. This capability of the medium offers unprecedented opportunities to tailor communications precisely to individual customers, allowing individual consumers to request as much information as desired. Further, it allows the marketer to obtain relevant information from customers for the purpose of serving them more effectively in the future.

The simplest implementations involve engaging customers through the use of email buttons located strategically on the site. More sophisticated implementations may involve fill-out forms and other incentives designed to engage customers in ongoing relationships with the firm. The objective of such continuous relationship-building is dual-pronged: to give consumers information about the firm and its offerings and to receive information from consumers about their needs with respect to such offerings. Hence, effective customized advertising, promotion and customer service is the fifth benefit that the commercial Web offers to the firm. Berniker, (1995)

Most importantly, the Web offers opportunity for competition on the "specialty" axis instead of the price axis. From a marketing perspective, it is rarely desirable to compete solely on the basis of price. Instead, marketers attempt to satisfy needs on the basis of benefits sought, which means pricing is dependent upon value to the consumer, not costs. Such opportunity arises when the offering is differentiated by elements of the marketing mix other than price.

This results in the delivery of value-laden benefits, for example, convenience through direct electronic distribution of software, or enjoyment through a visually-appealing and unusual Web site. As evidence that this is occurring, consumers indicated that price was the least important product attribute considered when making online purchases. Gupta, (1995). The ability to compete on dimensions other than price will become especially critical in categories where brands are perceived as substitutes, since it allows for more opportunities to differentiate along other dimensions.

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2.5 Metrics Of Effectiveness

Like any other business area, Marketing needs performance/effectiveness measurement and evaluation. It is important to monitor and analyze the performance of a website to see if it is attracting the right people and achieving corporate objectives.

Analyzing visitors' traffic can provide clues to the way people are using the website. This can be done by various metrics (method of measurement and or evaluation).

For the purpose of this study and the literature reviewed so far, the term **Web Analytics** and general **marketing performance metrics** will be examined.

The *Web Analytics Association* offers this concise definition "Web Analytics is the objective tracking, collection, measurement, reporting, and analysis of quantitative Internet data to optimize web sites and web marketing initiatives". The use of web analysis is said to enable

a business to attract more visitors, retain or attract new customers for goods or services, or to increase the dollar volume each customer spends. Ultimately, this can help to improve the ratio of revenue to marketing costs. There is also the need for qualitative analysis in web analytics. Web analytics can be sub-divided into **quantitative and qualitative studies** *Sweeney S. et al.*, (2007).

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(A) Quantitative Studies:

Quantitative Studies produce results which can be measured, such as the number of unique click-throughs to a web page, number of people in Africa with broadband Internet access, and so on. The data here is objective and speaks more of the general population using structured research tools. Quantitative data is measurable. For example "this happened 2,000 times over 24 hours".

(B) Qualitative Studies:

Qualitative methods of measurement include the use of usability testing, interviews, surveys and focus groups. Qualitative studies produce results that offer an insight into the motivation and rationale of a customer for a given situation. It can be thought of as **feedback** or **opinion**, not facts justified by numbers. Qualitative studies speak more to the personal reaction of an individual. Qualitative research is often used with quantitative research to help explain what happened by providing an insight into an individual's motivation, attitude, and behavior. Together they provide a very useful insight.

2.5.1 Key Performance Indicators

Key Performance Indicators (KPIs) is a phrase that is often used to discuss web analytics. with regard to web analytics, KPIs concern those measurements that make a difference to the business in relation to the Internet *Sweeney. et al.(* 2007).

For example, when performing a web page keyword analysis in other to know which keywords are used the most by search engine users in an area of business, the results that come up (using a search engine optimization software), that show the most used words by search engine users, stand to be the Key Performance Indicator. This will normally come under KPIs. An example of such software is "*Web CEO*" search engine optimization/marketing software.

2.5.2 Common Measurements of Performance

For Timber companies to effectively measure the performance of the use of ICT in their marketing efforts, they must first establish what KPIs are important to their business model. What questions about their on-line customers do they want answers to?

There are several performance measurements that can be used for evaluation, but for the purpose of this study, some basic ones as outlined by *Sweeney. et al., (*2007) are listed below:

(1) Click-through Rate (CTR): This is a way of measuring the success of an online advertising campaign for a particular website. The click-through rate of an advertisement is defined as the number of clicks on an advert divided by the number of times the advert is shown (impressions), expressed as a percentage.(wikipedia.org)

CTR = Number of Click \ Impression * 100%

(2) Unique Visitors: This refers to a person who visits a Web site more than once within a specified period of time. (Webopedia.com).

(3) Time spent: Time Spent is the time lapsed between 2 page requests.(optimizationtoday.com)

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(4) Click Stream Analysis: On a Web site, clickstream analysis (sometimes called clickstream analytics) is the process of collecting, analyzing, and reporting aggregate data about which pages visitors visit and in what order.(searchcrm.techtarget.com)

(5) Single-page Access: The Single Access Page report counts visits to a specific page where it was the only page looked at.(conversionchronicles.com)

(7) Customer Conversion Ratio: This is the ratio of visitors who convert casual content views or website visits into desired actions based on subtle or direct requests from marketers, advertisers, and content creators. (Wikipedia.org).

$$\text{Conversion rate} = \frac{\text{Number of Goal Achievements}}{\text{Visits}}$$

(8) Cost Per Customer or Customer Acquisition Cost: this is the cost of acquiring each new customer through ones website.(panalysis.com)

(9) Average Cost Per Visitor (ACPV): this is defined as: ACPV = Total Acquisition Marketing Costs / Visitors. (webanalyticsdemystified.com)

(10) Average Order Size: The average order size is calculated from revenue divided by the number of transactions. (websiteceo.com)

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2.5.3 Marketing Evaluation

The metrics of effectiveness in terms of on-line marketing and certain tools/software used for measurements have been discussed above. However, focusing on the use of ICT in Marketing is just one aspect of a business. The marketing ideology has to be whole and all encompassing; the general marketing wellbeing of a business is crucial to sustainable profit and competitive advantage.

ICT is just a tool in marketing and emphasis should be more on a market orientation not just the tools. Today, marketing should be every employee's priority and not just that of the marketing department. A “hello” and “thank you” would matter a lot to a company’s image. The ultimate idea is to have satisfied customers who will become loyal and translate to sustained profit, value and competitive advantage.

Although a market-based business will use several external metrics to track market performance, an essential performance metric is customer satisfaction *Best*, (2005). Many

marketing strategies can be developed to attract customers, but it is the business that completely satisfies customers that can keep them.

This viewpoint may sound philanthropic to those who do not accept the whole concept of market orientation and market-based management. In his book *Market-Based Management, Best, (*2005), demonstrated the tremendous leverage a business can create in growing profits from a base of "very satisfied" customers and proactive management of dis-satisfied customers.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Research Design

The study was carried out through a survey. A case study approach was used and Naja David group of companies constituted the case. This qualitative model was chosen because it is suitable for practical problems. It is often seen as being problem – centered, small scaled and manageable. It is amenable to different application of different empirical evidence. Yin (1994). The study examined the extent to which Naja David Group of Companies (NDGC) use ICT tools in marketing communication hence, the use of a case study.

3.2 Population

The study focused on the Marketing and IT staff of NDGC. These people were used because they had a better understanding of what was required as well as having the information needed to provide accurate responses.

This was based on the knowledge that these group of employees were daily involved in using these tools to communicate with clients and potential clients. The total population of the Marketing and IT staff in the organization is seven (7).

3.3 Sampling Technique

A census of the population was taken. A census is a non probability sampling technigue that entail complete enumeration of the population. This method was chosen because the population size was very small and the researcher believes that complete and accurate information would be gathered through a census.

3.4 Sample

A total of seven employees took part in the study. Of these, three were from Marketing and four from IT department, seven of the respondents representing 100% of the total sample returned their questionnaires. All questionnaires were completely filled out and used for the study. They were sampled from the three subsidiaries of NDGC in Kumasi and Mim in the Brong Ahafo Region. During the Pilot study it was realized that no respondent had any reservations about taking part in the study. However one item of the questionnaire was ambiguous. This led to the rephrasing of this item. Furthermore, two items of the questionnaire were too sensitive to answer. They sought specific responses on revenue that organizations did not want to divulge. Those two items were rephrased by providing a range of options.

The table below represents the departmental distribution of the sample.

	Frequency	Percent	Valid	Cumulative

				percent	percent
Valid	Marketing	3	42.9	42.9	42.9
	IT	4	57.1	57.1	100.0
	Total	**7**	**100.0**	**100.0**	

Table 3.0

Departmental distribution of respondents

3.5 Data Collection Procedure

The Management of NDGC was contacted for their consent to carry out the study in their organization. The questionnaires were forwarded to the Head of Marketing and IT department. The Heads of department forwarded the questionnaires to the staff members in their departments through the company's internal mail system and copied the researcher. This mail system has the ability to enable editing on a document. They filled out the questionnaires and returned it through e-mail.

3.6 Instrument and Measure

The instrument was department specific and hence in two (2) parts. A nineteen (19) item instrument for the Marketing department and a seventeen(17) item instrument for the IT department. The instrument was adapted from Oshunloye, (2009). The instruments were designed to elicit specific response from the target group that would provide answers to the research questions.

3.6.1 Revenue Generation

The measuring instrument consists of two items. Responses were obtained on a five point dimension. The responses represented range of revenue that could be earned by Timber companies(less than GHc 1million – GHc 8million).

The two items were "what was your revenue before you started using email marketing'' and "what is your revenue now". The responses were

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5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
Less than 1 million Ghana cedis	GHc 1million-GHc 2 million	GHc 3million-GHc 4 million	GHc 5million-GHc 6million	GHc 7million-GHc 8million

Findings were expressed as percentages.

3.6.2 Rightness of Use

Three dimensions of the rightness of use were measured in this study. These include the mailing list, permission marketing and metrics of effectiveness.

Under mailing list, two item dimensions were used. They include having a mailing list and method used for building the mailing list.

With permission marketing, three item dimensions was used including ability to sign on for newsletters on the website, recognition of the law against spamming and permission before sending marketing message.

To measure metrics of effectiveness, two item dimensions was used: performance of search engine optimization (SEO) and conduction of web analytics

The results were expressed as means frequencies and percentages.

3.6.3 Quality of the Website

Two dimensions of the quality of the website were used in the study. These include the type of website and navigation of website.

On the type of website two item dimensions was used including design in terms of graphics and mode of presentation either as flash, static or both.

On the ease of website navigation two item dimensions was used including the friendliness of navigation and rendering on mobile phone.

The findings were expressed in percentages.

3.6.4 Summary Of Measures In This Study

Measure	Author	No of items
Revenue generation	**Goloh H., 2012**	**2**
Rightness of Use	**Oshunloye A.O. (2009)**	**11**
Mailing List		2

Permission Marketing		3
Metrics of Effectiveness		6
Quality of Website	**Oshunloye A.O (2009)**	**2**
Friendliness of Navigation		1
Rendering on Mobile phones		1
Obtaining permission		2

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CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

4.1 Research Findings

The purpose of this study was to find out how timber companies in Ghana, with particular reference to NDGC, use ICT in marketing communication. This chapter presents a description of preliminary analysis, sample statistics, findings and discussion of the findings.

4.2 Data Analysis Procedure

The SPSS **descriptive** statistics procedure was used to capture the means, frequencies and percentages and charts were used to represent the results. The results and their corresponding discussions are presented below.

4.2.1 Research question 1: *What is the percentage increase in NDGC's revenue since it started using these tools?*

Research question 1 sought to find out by what percentage NDGC's revenue had increased since the company commenced the use of ICT in marketing communication with clients and potential clients. Two areas were considered including revenue generated before and after. Respondents were asked to indicate how much revenue the company was generating before they commenced the use of ICT in marketing and how much revenue they were generating now. The result is presented in the table below.

Revenue before and after NDGC started using email marketing

Revenue before start (2001)	Revenue Now (2012)	Percentage increase
GHS 1M – GHS 2M	GHS 3 – GHS 6	200%

Table 4.0

Source field work, 2012

The result presented in the table indicates that 100% of those in the marketing department said that prior to the use of ICT in marketing communication the organization was generating revenue in the range of GHS 1million to GHS 2million and currently generating revenue in the range of GHS 3million to GHS 6million, an increase of about 200%. Thus, NDGC is

currently generating 200% more revenue than it previously did. The increase in revenue observed here might have been partly due to the use of ICT in marketing communication which made it possible to easily reach a wider range of the market, leading to more sales. This lends credence to literature reviewed so far that the adoption of ICT in marketing communication reduces cost and increases market reach thereby increasing revenue.

4.2.2 Research question 2: *What is NDGC doing right or wrong in the use of ICT in marketing communication?*

Research question two (2) sought to find out what NDGC is doing right or wrong in the use of ICT in marketing communication. Several areas of internet marketing were considered and respondents were asked to indicate whether they engaged in a particular act or not. The results are presented in table 4.1 below. The results indicate that 66.6% of those in the marketing department said they had no mailing list while 33.3% claimed to have a mailing list. This implies that only about one-third of NDGC admits that the organization has a mailing list that it uses to determine who to send messages to. This is contrary to literature reviewed which associates having a mailing list as a determinant of successful internet marketing (Ellison, 2006).

What NDGC is doing right or wrong in the use of ICT in marketing communication

	Marketing		IT	
Items	Yes (%)	No (%)	Yes (%)	No (%)
Do you have an email mailing list?	33.3	66.7		
Do you change the email marketing message?	100.0	0.0		
Can customers sign-up for your newsletter?	66.7	33.3	75.0	25.0
Do you take into cognizance the laws against spamming?	66.7	33.3	100.0	0.0
Do you obtain permission from clients and prospective clients before sending them email marketing messages?	66.7	33.3		
Does your company undertake web search engine optimization (SEO)?	66.7	33.3		
Does your company undertake web analytics	66.7	33.3	75.0	25.0
			75.0	25.0
Does your company update their ICT infrastructure (software and hardware)?			100.0	0.0

Table 4.1 *Source: field research, 2012*

The study further explored how often marketing messages are changed by NDGC.

How often does NDGC change the email marketing messages

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	monthly	2	66.7	66.7	66.7
	Daily	1	33.3	33.3	100.0
	Total	3	100.0	100.0	

Table 4.2 *Source: field research, 2012*

With regards to changing the marketing message to suit prevailing conditions, all the respondents in the marketing department (100%) responded that they change the e-mail marketing message. Thus they constantly kept the clients abreast with any new development within the company. Change of e-mail marketing message keeps the communication vibrant and interactive and increases the rate at which people read the organization's mail.

The result also shows that 66.7% of those in Marketing and 75% of employees in IT responded that the website has a facility for clients and prospective clients to sign up for the organization to correspond with them while 33.3% of those in marketing and 25% of those in IT responded that the website does not. The implications of this is that NDGC made provisions for a subscribe link through which they could build a mailing list legitimately. This is a critical success factor in e-mail marketing. *Sant* used this method to build a mailing list of more than 35,000 subscribers for messages that matter and propelled his business forward.

Majority of employees in the Marketing (66.6%) and all the workers in IT department (100%) further opined that NDGC respects the law against spamming. CAM-SPAM**.** NDGC takes into cognizance the law against spamming. Good e-mail marketing practice as outlined by Ellison (2010) mentions permission as one of the most important success tips of e-mail marketing. The recognition of this fact by NDGC means that they are adhering to best practices of email marketing like other companies in developed countries.

The result further shows that 66.7% of employees in the Marketing department says that NDGC obtains permission from its clients before sending them e-mail messages while 33.3% says the company does not, implying that NDGC gets explicit permission from clients and potential clients before sending them e-mail messages. In accordance with the literature, obtaining permission from a client before sending e mail messages exonerates a marketer from spamming complaints assuming one is made. Ellison (2006)

The result further indicates that NDGC engages in search engine optimization and web analytics as 66.7% of those in marketing and 75% of those in IT respectively responded yes to these two items while 33.6% of those in Marketing and 25% of IT personnel responded in the negative to both items. This implies that NDGC can constantly improve on the quality of its website and the number of hits it receives.

Hundred percent (100%) of employees in the IT Department indicated that NDGC constantly updates its IT infrastructure. This suggests that NDGC is keeping abreast with new and emerging technology.

The advertisement of the existence of website

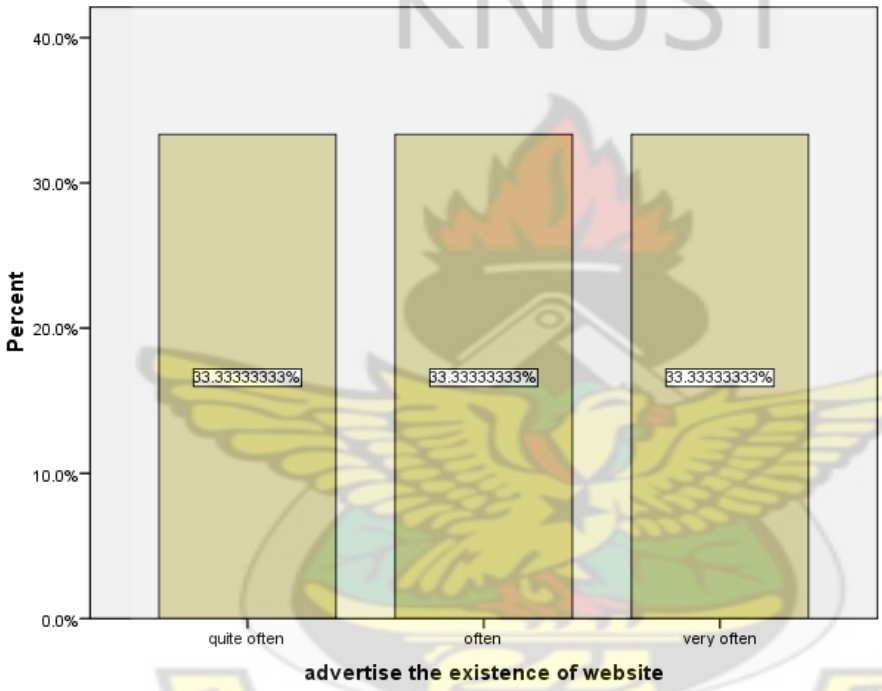

Figure 4.0

Source: field research 2012

Figure 4.0 shows the result obtained from the item, "does your company advertise the existence of your website?" The respondents all varied in the frequency to which they say they advertise the existence of the website. 33.3% responded very often, 33.3% responded often and 33.3% responded quite often. But, they all do admit to advertising its existence.

This finding suggests that there was some advertising going on but the respondents varied in their response to the extent of advertisement the website receives. This may stem from the fact that the respondents have different ideas as to how frequently the existence of the website should be advertised. Reviewed literature suggests constant and persistent website advertisement to drive traffic to the website.

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Method used most in obtaining a mailing list

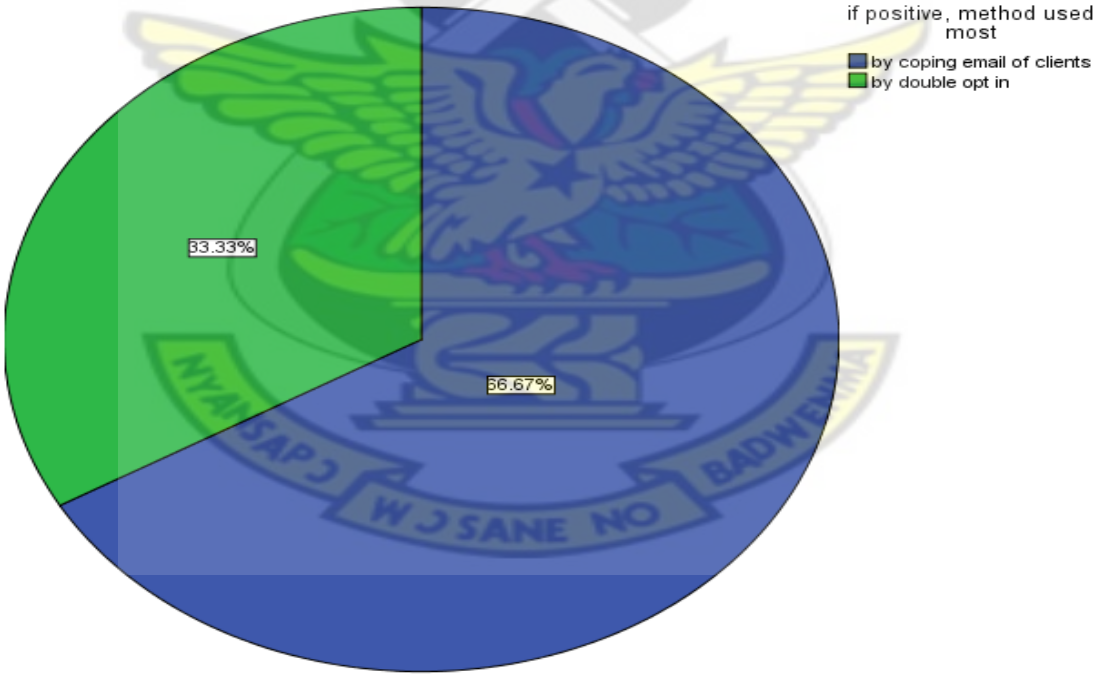


Figure 4.1

Source: field research 2012

Figure 4.1 above shows the distribution of the respondents' response to the method used in obtaining the organization's e-mail mailing list. The distribution shows that 66.7% of the employees responded that they obtain the mailing list through copying the email address of clients and prospective clients. While 33.3% of them responded that they ask the clients to opt in for the service. The result of this finding is contrary to earlier assertion that they observe the law against spamming. The law against spamming makes it illegal to send email marketing messages without permission. By copying the e-mail of clients, rather than allowing them to opt in for the message, NDGC opened itself up for spam complaint as any message sent through those mailing addresses are considered Spam.

Infrastructure Update

	IT	
Item	Annually (%)	Quarterly (%)
How often is the software infrastructure updated?	25	75
How often is the hardware infrastructure updated?	75	25

Table 4.3

Source: field research 2012

Table 4.3 above shows the results of how frequently the company updates its hardware and software infrastructure. The finding indicated that 75% of the respondents say that the

software is quarterly updated while 75% indicate that the hardware is annually updated. On the contrary, 25% said the software is updated annually and the same percentage responded that the hardware is updated quarterly. Meaning that NDGC is keeping abreast with changes in technology. This result is anticipated because similar results were obtained with other empirical research and conforms to the findings of (Tutor2u.net) that "methods and applications involved in ICT are constantly evolving on an almost daily basis. It's difficult to keep up with the changes - they happen so fast" Technology changes at the speed of light. Hardware and software soon become obsolete. There is the need to constantly update them.

Content Update and Staff Update

	IT		
Item	Annually (%)	Biannually (%)	Quarterly (%)
How often is your website content updated?	50	25	25
How often are the staff trained or updated about ICT use?	75	0	25

Table 4.4

Source: field study,2012

Table 4.4 shows the result for how often NDGC updates the content of its website as well as how often the staff are trained or updated about how to use ICT tools in marketing communication.

Fifty percent (50%) of the sample responded that the website content is updated annually, 25% said biannually and 25% said monthly.

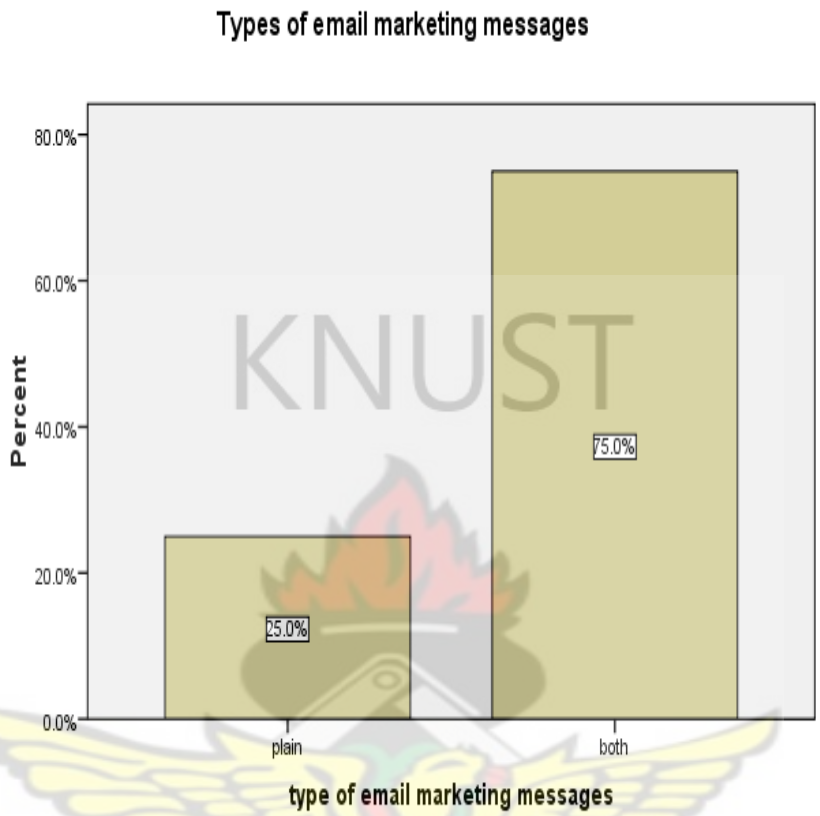
Furthermore, 75% of the sample responded that the staff are trained or updated about ICT use annually while 25% responded that it is done monthly.

Thus NDGC ensures that the website is updated with new information and the staff constantly equipped with skills required to use this technology. Puranjay (2012) insisted that a website should be updated very often. This he says has a huge impact on how it ranks on search engine and will constantly give readers something to come to frequently.

4.2.3 Research question 3: *What is the quality of NDGC's website?*

Research question three (3) sought to find out the quality of the website of NDGC. Several areas of website quality were considered and respondents were asked to indicate what kind of website the organization has. The results are presented below.The results are presented below. The findings in the figure below indicate that 75% of the respondents said that the e-mail marketing messages are both plain and html while 25% said the messages are only plain.

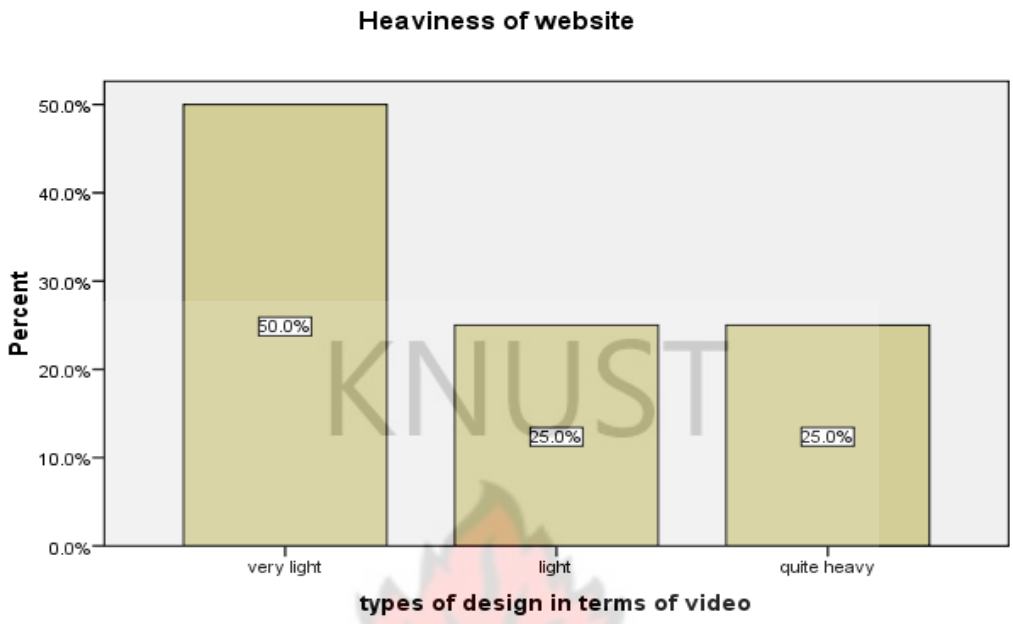
It is expected that NDGC use both plain text and HTML. This is standard practice in e-mail marketing communications as HTML allows the use of colour, pictures, boxes and sizes with words. This makes the email message more compelling while ranking high on search engines due to the text content. Premick (2007).



Source: Field data, 2012

Figure 4. 2

Furthermore, 50% of the sample responded that the website design was very light, 25% responded that it was light and 25% responded that it was quite heavy (figure 4.3). This question item sought to find out if NDGC has incorporated picture, music, and graphics in its web design. It does not come as a surprise therefore that the above findings indicate that the website is very light. This is in line with literature reviewed so far that has clearly shown that there is a huge gap between how organizations in developed and emerging markets like Ghana use ICT in marketing communication

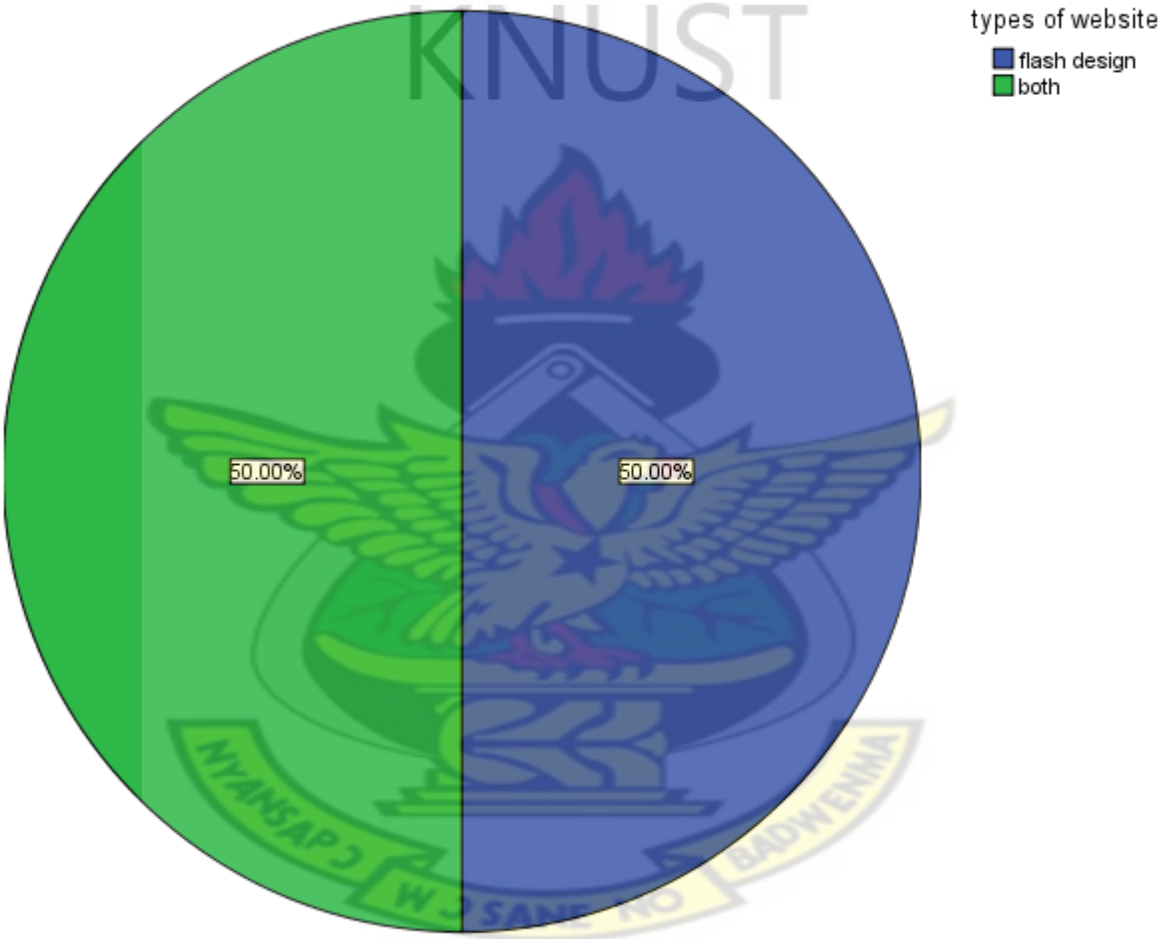


Source: Field data, 2012

Figure 4.3

Respondents were tied on their response to the type of design the website has (figure 4.4) 50% said it has a flash design while 50% said it has both static and flash design. Though tied, it can still be deduced that the NDGC website has test (static) design. This is expected as this particular feature is critical for SEO. The added feature of a flash design makes the website more vibrant and will keep driving traffic to the website.

TYPE OF WEBSITE DESIGN



Source: Field research, 2012

Figure 4.4

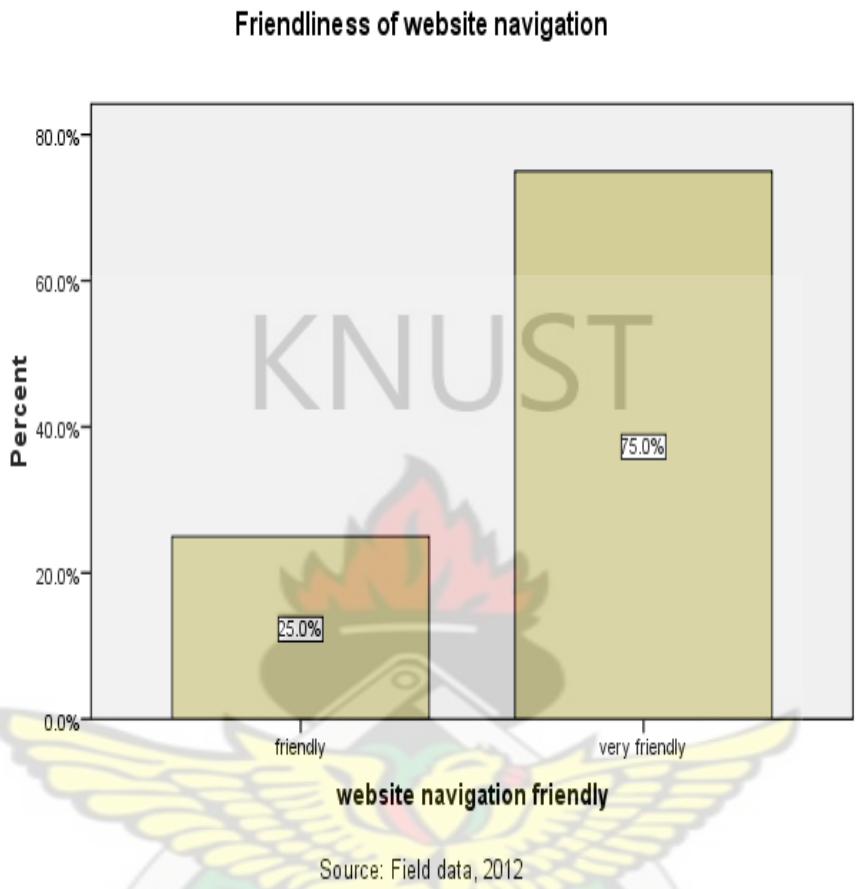
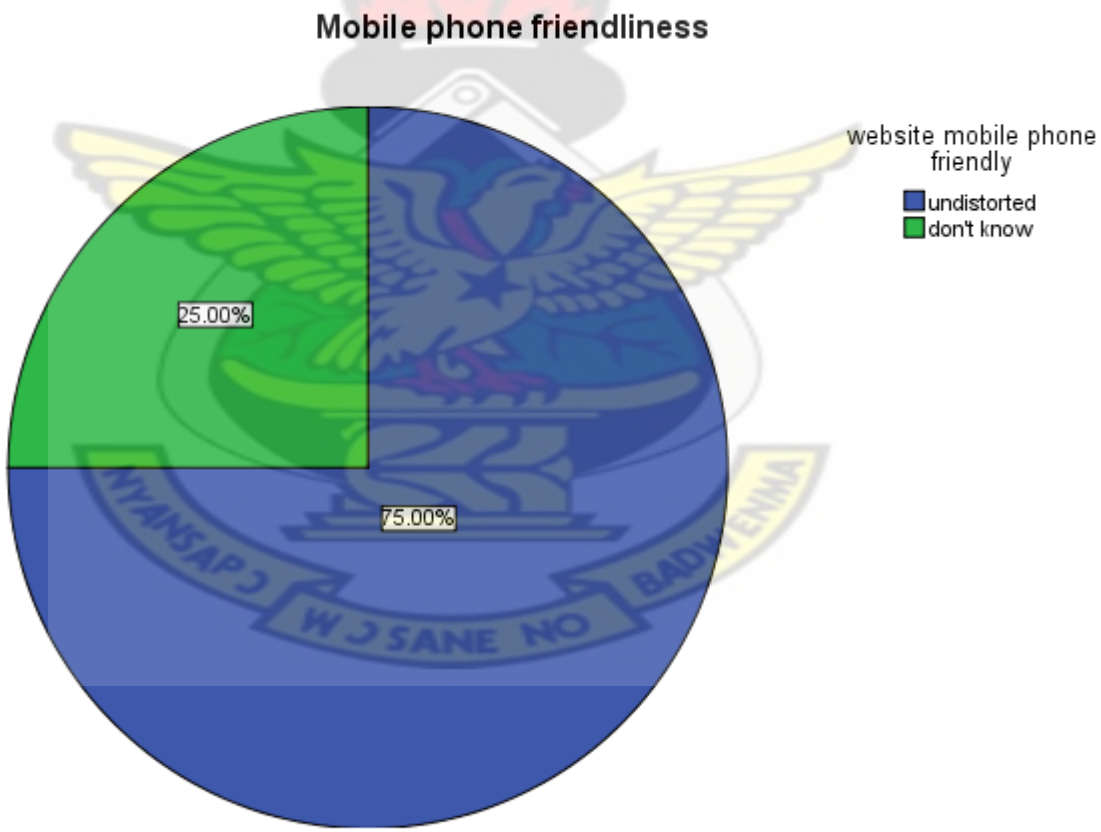


Figure 4.5

The findings in figure 4.5 above on how friendly it is to navigate the website indicate that 75% believe that the website is very friendly to navigate and 25% believe it was merely friendly. Website users want to be able to move through the website to find what they want. A user friendly website provides simple and intuitive navigation. Major areas of navigation are located consistently on all pages. That NDGC has a user friendly website is keeping with literature reviewed. All organizations with internet presence seek to achieve this. Snell (blog). A navigation friendly website provides visitors with a pleasant and fulfilling

experience. Visitors who have positive experiences will be much more likely to come back later, refer friends, sign up for a newsletter and purchase a product.

The findings on the speed of download indicate that the website downloads at 30kb/s. This speed was chosen by all respondents (100%). Site download speed reflects how quickly a website responds to web requests. Speeding up websites is important, as faster sites create happy users. Visitors spend less time on a site that responds slowly Google (2010). Empirical research has also shown that faster sites do not just improve user experience but also reduce operating cost. Hence this result is expected and in keeping with literature.



Source: Field Research, 2012

Figure 4.6

The findings in figure 4.6 indicate that 75% of the respondents said the website rendered undistorted on a mobile phone while 25% said it rendered distorted. Empirical evidence suggest that the sales of smartphones and tablet are starting to skyrocket, there is far greater access to more robust mobile data networks, the internet is now being accessed by users in a multitude of new ways.

50The huge range of mobile devices used to browse the web now means that organizations take seriously the responsibility of making their site mobile-compatible. It is therefore in line with literature that NDGC should have a website that renders undistorted on a mobile network.

4.3 Related Findings:

Related findings from the study further revealed the extent to which NDGC use ICT in marketing communications. The findings revealed that NDGC use ICT in marketing communications quite often and send out on the average a new email message daily.

Furthermore, it was determined from the respondents that's NDGC started using ICT in marketing communication in 2001.

CHAPTER FIVE

SUMMARY,CONCLUSIONS AND RECOMMENDATION

This chapter offers a summary of the main findings, draws conclusions and offers recommendation for further studies.

5.1 Summary

This study was conducted to find out how Timber companies in Ghana use ICT in marketing communication. NDGC was used as a case study. ICT (internet) has become intertwined with life. It is ubiquitous and its impact on all aspects of life cannot be overemphasized. Organisations have found creative ways of using ICT tools to reach their customer and boost their position in the market.

Empirical evidence has shown that the internet and e-mail offers organization the cheapest and fastest way to reach a targeted audience. The cost of communicating with a targeted audience via email is a mere fraction of a telemarketing cost. The internet lends itself to various interactive uses. Marketers all over the world have tried to exploit this unique ability that ICT offers.

A very high percentage of people in developed countries have access to the internet. This high penetration rate has motivated organizations in these parts of the world to look to the internet as a very viable option to reach a targeted audience. Most of the research that has been conducted so far has been on ICT usage in developed countries in America and Europe. These studies have shown that people are moving away from print to electronic medium. The advent of social network has given rise to new forms of marketing like gorilla marketing and viral marketing. These are tools that can be exploited by marketers to their advantage at very little cost.

An extensive literature review was undertaken in this study. The review showed that there are different levels of ICT usage in marketing communication. They range from very basic uses like a mere presence on the web and very sophisticated uses like on line purchase and payment, CRM, SFA and product design and customization. Organizations found creative ways to exploit these uses.

It became necessary therefore to find out if organizations in emerging economies are also using this technology to their benefit. This was necessitated by the fact that there is little literature available on the use of ICT tools in marketing communication by organizations in emerging markets like Ghana. The focus of the research was on the Timber industry. NDGC was used as a case study. NDGC is the biggest timber company in Ghana with three subsidiaries. The researcher believes that a company of that size whose revenue is mostly through export will be one of the first to adopt these tools and try to exploit its most sophisticated uses.

The study was designed to be a survey. Primary empirical data was gathered through the use of questionnaire targeted at the Marketing and IT Department. Data collected was analysed using SPSS and simple percentages in a descriptive manner. The findings of the research showed that NDGC commenced the use of ICT in marketing communication in 2001. The company has a working website and has over the years built a mailing list. The website is a basic website with light graphics and offers opportunity for clients to sign up on line to receive correspondence from the company.

Unfortunately, it seems that this particular feature has not been used by clients as NDGC resorts to coping e-mails. This violates the CAM-SPAM law and could open up NDGC to spamming complaints. A complaint like that by a client could cause all ISPs to block all mails coming from the domain of NDGC.

Findings also indicate that the organization has made effort to maximize the use of e-mail marketing. They often change the e-mail marketing message, update the content of the website and constantly update software and hardware. This will keep vibrant its communication and offer clients something to come back to and perhaps motivate them to refer others to the company. There was a two hundred percent increase in the revenue earned by NDGC when revenue earned before the company started using ICT is compared with revenue earned in 2009. This may be attributed to greater reach and efficiency due to ICT usage.

5.2 Conclusions

ICT is a very viable tool in marketing communication. Effective and proper use of this tool has become very vital for an organization to gain competitive advantage. Any organization that ignores this fact is handing the edge over to its competitors.

The survey results and analysis show that the company under study use ICT in marketing communication. The company makes every effort to maximize the use of this channel as they communicate with clients and potential clients. Unfortunately the full potential of this medium is not beinn exploited. The website is very light. NDGC is a timber company involved in manufacture of timber products and furniture. The company could use all their products to create heavy graphics that woul showcase the products in very advantageous points and add a spin to the site making it the destination of choice.

The site however ranks very high on search engines. The organization performs web analytics and incorporates their finding into their text. This brings up the site every time the words are typed into search engines. In every endeavour of man there are acceptable and unacceptable practices. In the case of using ICT in marketing communication that law is to respect the privacy of others. But, in this case that law has somewhat been violated. Copying e- mail of clients violates their privacy.

5.3 Recommendation For Future Practice

ICT in marketing must be brought to a new paradigm, where the tools of ICT will be used maximally, effectively and efficiently to gain business value and competitive advantage. Countries already advanced in ICT usage have been able to achieve this and companies in emerging economies like Ghana can also aspire to achieve the same. NDGC is using ICT in

various ways in marketing communication. But, there are more ways to apply it and best practices to be adhered to.

It is recommended that NDGC build a website that is heavier in pictures and graphics while not reducing the text. This will show the products off better and be interesting enough to keep bringing traffic to the website.

The method the company used to build a mailing list is not the right method. The company must protect itself from spam complaints by ensuring that only consented clients are sent e-mail. They should advertise their website and encourage people to sign up to receive e-mail from the company.

However, when all is considered NDGC is using ICT tools in marketing communication and it does appear that its use is impacting positively on its performance.

5.4 Recommendation For Future Research

Based on this study, further inferential studies should be carried out where hypothesis will be tested on a larger sample size with focus on quantitative techniques of data analysis. Studies should be conducted into other industries, other uses of ICT tools like short message services and multimedia media message services can also be investigated.

This research is in no way exhaustive and it opens a window into various areas in which further researches into how companies in emerging economies can use ICT tools in marketing communication cold be carried out.

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APPENDIX A

SURVEY QUESTIONNAIRE FOR MARKETING PERSONNEL

AN INVESTIGATION INTO THE USE OF ICT TOOLS IN MARKETING COMMUNICATION BY TIMBER INDUSTRIES IN GHANA. A CASE STUDY OF NAJA DAVID GROUP OF COMPANIES

Kwame Nkrumah University of Science and technology, Kumasi

CEMBA Research Thesis Questionnaire.

This will take only a few minutes of your time. Your response will be much appreciated as it will throw more light into this area of study. Thank you.

Confidentiality statement: the information you provide in this questionnaire will be kept strictly confidential. Your responses shall be processed in a manner which prevents identification and will be used solely for academic purposes.

Please provide frank responses to the items below by simply ticking in the box that represents your choice.

(1) Please indicate your department:

[ ]Marketing [ ] IT

(2)Which of the following media does your company use **most** in marketing your products?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
Email/Web	TV	News Paper/Mag.	Snail Mail	Other (specify)

(3) Do you have an email mailing list?

[ ] Yes [ ] No [ ] Don't know

(4) If your response to question number three above is positive, please tick the method you used **most** for building your mailing list?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
By double opt in	By single opt in	By coping email of clients	By compiling list from a trade show	By purchasing the email list

(5) How often do you advertise your products with email?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
Very often	Often	Quite Often	Seldom	Never

(6) What is the frequency of your email marketing to customers/clients per week?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
5 times	4 times	3 times	Twice	Once

(7) Do you change the email marketing message?

[ ] Yes [ ] No [ ] Don't know

(8) How often do you change the email marketing message?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
Daily	Weekly	Bi Weekly	Monthly	Quarterly

(9) Does your website have the facility for visitors/customers to sign-up for your newsletter by their names, email and gender?

[ ]Yes [ ] No [ ] Don't know

(10) How often do you advertise the existence of your website?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]

Very often	Often	Quite Often	Seldom	Never

(11) When did you start using email and internet marketing? (please specify year)……..

(12)What was your revenue before you started using email and internet marketing?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
Less than 1 million Ghana cedis	GHc 1million-GHc 2 million	GHc 3million-GHc 4 million	GHc 5million-GHc 6million	GHc 7million-GHc 8million

(13) What is your revenue now?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
GHc 7 million – GHc 8million	GHc 5million-GHc 6 million	GHc 3million-GHc 4 million	GHc 1million-GHc 2million	Less than GHc 1million

(14) Does your company take into cognizance the laws against spamming?

[ ] Yes [ ] No [ ] Don't know

(15) Do you obtain permission from clients and prospective clients before sending them email marketing messages?

[ ] Yes [ ] No [ ] Don't know

(16) Does your company undertake web search engine optimization (SEO), search

engine marketing (SEM), link popularity and general monitoring?

[ ] Yes [ ] No [ ] Don't know

(17) Does your company undertake web analytics (finding out the effect of your web presence – in terms of site/page views and conversion rates)?

[ ] Yes [ ] No [ ] Don't know

(18) If you have answered most of the questions above positively, then indicate your believe in

the importance of ICT in marketing, data mining, and electronic customer relationship management(e-CRM) on the following scale:

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
Strongly believe	Believe	Undecided	Disbelieve	Strongly disbelieve

(19) Please give other information about your ICT use in marketing below that you otherwise cannot give above.

……

……

Thank you for your patience and time taken to answer the above questions.

APPENDIX B

SURVEY QUESTIONNAIRE FOR IT PERSONNEL

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AN INVESTIGATION INTO THE USE OF ICT TOOLS IN MARKETING COMMUNICATION BY TIMBER INDUSTRIES IN GHANA. A CASE STUDY OF NAJA DAVID GROUP OF COMPANIES

Kwame Nkrumah University of Science and technology, Kumasi

CEMBA Research Thesis Questionnaire.

This will take only a few minutes of your time. Your response will be much appreciated as it will throw more light into this area of study. Thank you.

Confidentiality statement: the information you provide in this questionnaire will be kept strictly confidential. Your responses shall be processed in a manner which prevents identification and will be used solely for academic purposes.

Please provide frank responses to the items below by simply ticking in the box that represents your choice.

(1) Please indicate your department:

[ ]Marketing [ ] IT Dept

……..

(2) Are your organizations email marketing messages plain, html or both?

[ ]plain [ ]html [ ]both

(3) What type of design does your website have – in terms of video, graphics, sound etc?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
Very heavy	Heavy	Quite heavy	Light	Very light

(4) Does your website have a flash design, a static design or both?

[ ] Flash design [ ]Static design [ ]Both

(5) Is your website navigation friendly (the ease at which visitors can move around, click and find what they want)?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
Very Friendly	Friendly	Quite Friendly	Unfriendly	Very Unfriendly

(6) Does your website have the facility for visitors/customers to sign-up for your newsletter by their names, email and gender?

[ ]Yes [ ] No [ ] Don't know

(7) How often is your website content updated?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
Fortnightly	Monthly	Quarterly	Biannually	annually

(8) How fast does your website download on an average?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
30kb/s	25kb/s	20kb/s	15kb/s	10kb/s

(9) Is your website mobile phone friendly? How does it render on a mobile phone browser.

[ ]Undistorted [ ] Distorted [ ] Don't know

(10) How often is the staff trained or updated about ICT use?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
Fortnightly	monthly	Quarterly	Biannually	annually

(11) Do your company update their ICT infrastructure (software and hardware)?

[ ] Yes [ ] No [ ] Don't know

(12) How often is the software infrastructure updated?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]

Monthly	Quarterly	Biannually	Annually	Never

(13) How often is the hardware infrastructure updated?

5[ ]	4[ ]	3[ ]	2[ ]	1[ ]
Monthly	Quarterly	Biannually	Annually	Never

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(14) When did you start using email and internet marketing? (please specify year)……..

(15) Does your company take into cognizance the laws against spamming?

[ ] Yes [ ] No [ ] Don't know

(16) Does your company undertake web search engine optimization (SEO), search engine marketing (SEM), link popularity and general monitoring?

[ ] Yes [ ] No [ ] Don't know

(17) Does your company undertake web analytics (finding out the effect of your web presence – in terms of site/page views and conversion rates)?

[ ] Yes [ ] No [ ] Don't know

Thank you for your patience and time taken to answer the above questions.

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