A comparative global study of the impact that information and web technologies have on the sustainability and growth potential of nonprofit organisations in developed and developing countries

Candidate:

Naveen Kanithi

KNTNAV001

Supervisor:

Associate Professor Andre de V Smit

A dissertation submitted in fulfillment of the requirements for the award of the degree of Masters of Social Science – Social Planning and Administration

Faculty of the Humanities

University of Cape Town

2010

DECLARATION

This work has not been previously submitted in whole, or in part, for the aware of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and has been cited and referenced.

Signed by candidate

Candidate's Signature Date

Abstract

This study aimed to explore the level and nature of information and web technology usage by nonprofit organisations (NPOs) around the globe and how these related to the operations, sustainability and future growth of these organisations. Utilising a quantitative methodology, an online surveying tool (*Survey Gizmo)* was used to gather information and perspectives from NPO directors from both developing and developed countries. Directors from 147 NPOs provided data from six countries – Australia, Canada, India, Pakistan, South Africa and the United Kingdom. The sample population was derived from the international online network for NPOs, *Idealist.org*. The criteria for inclusion in the survey was that NPOs must have had a profile on *Idealist.org* that had been updated no earlier than 1 January 2007 in addition to having had an organisational website listing on their profile. Data was analysed primarily using *Microsoft Excel* and *Survey Gizmo* and was presented thematically to reflect the diverse constellation of findings. Findings were presented systematically and covered the areas of biographical and organisational information, information technology usage and analysis, web technology usage and analysis, sustainability and future outlook. It was found that overall, NPO directors from around the globe have embraced information and web technologies and deemed these tools to be valuable with regards to organisational operations and sustainability. Furthermore, the future of these technologies is viewed with optimism and excitement. In addition, the findings revealed several fundamental differences between developing and developed countries. Meaningful conclusions were derived from the findings and are presented here within. Based on the conclusions, recommendations were made to a range of stakeholders including NPO directors, *Idealist.org*, *Microsoft* and other relevant populations.

Dedication

This thesis is dedicated to my family,

Usha, Hem, Chandana and Ammamma

Your inspiration, support, wisdom and love I am infinitely grateful for.

Acknowledgements

I wish to express my sincere thanks to my supervisor and mentor, Associate Professor Andre de V Smit. His expertise, insight and fortitude were integral at every step of the research process. I am especially appreciative of his spirit of creativity, relentless patience and remarkable capacity to engage in constructive dialogue. This project is a direct outcome of his guidance and encouragement.

I would also like to thank the Department of Social Development and the University of Cape Town. Staff and fellow students have been sources of great intellectual stimulation and motivation.

A generous thanks must be given to all of the NPO directors who took part in this research. Their time, effort, contribution and enthusiasm are extremely valued.

Additional thanks is given to the *Idealist.org* network whose resources and innovative approach to collaboration have been a great help to me over the past ten years.

I would like to thank *Survey Gizmo* for kindly donating their survey software for this study, as well as their dedicated support and feedback.

A tremendous thank you goes to all friends and family in South Africa, who pushed the borders of my awareness to new frontiers through meaningful interactions, laughter, shared experiences and an expansion of perspective.

A final thank you is given to all my friends and family across the globe. Life and the inspiration to live it is because of you all.

Table of Contents

List of Tables

List of Graphs

List of Images

Chapter 1

Introduction

Contents:

1.1 Introduction

This chapter will introduce the general topic of inquiry. Specifically, this chapter will provide background to the study, outline the study process and briefly delineate the study outcomes.

1.2 Background to Study

It can be argued that the world is currently in the midst of the age of technology. Based on the nature and rate of advances in technology of the 20th Century, it is difficult to fathom what is in store for the 21st Century and beyond. Needless to say, the world is ever changing with technology as a major driver. This change is reflected in greater connectivity and a greater ability to transfer information and ideas. Two primary vehicles of this technological shift have been and currently remain, information technologies (IT) and web technologies. These tools have seamlessly penetrated many aspects of human life. Furthermore, the evolution of technology is a dynamic one, requiring continual reflection and projection to attempt to determine its path.

Social services encompass several sectors – government, public and private. Perhaps the greatest movement in recent years has been the substantial growth of nonprofit organisations (NPOs) worldwide. This fascinating phenomenon is also an area of great interest for humanity, as it has affected many, and will continue to do so through the future.

This study aims to explore the level and nature of information and web technology usage by nonprofit organisations (NPOs) around the globe and how these influence organisational operations, sustainability and future growth in both the developing and developed worlds. NPOs from three developing countries – India, South Africa and Pakistan were chosen along with NPOs from three developed countries – Australia, Canada and the United Kingdom (UK) to take part in the study. The degree to which NPOs in these countries engage with a variety of information and web technologies will be examined in depth and correlations will be identified to determine key relationships between variables. For the purposes of this research, information technologies can be understood as all technologies relating to electronic computers, hardware, software and other related tools. Web technologies can be understood as all technologies relating to the web, websites, social networking sites and other related web-based applications. NPO director perceptions of the value these technologies have in terms of operations and sustainability will also be examined. The future role of these technologies will additionally be explored

in attempts to gain a further understanding of how NPO operations will evolve based on the evolution of technology.

1.3 Study Process

Initially, a wide-ranging literature review was conducted to perform background research onto the topic of inquiry. Online and print journals, in addition to books and other sources were thoroughly examined to form a base of current knowledge around the topic. Next, a list of questions were formulated that best encompassed all areas relevant to the study. Questions were organised thematically and covered key areas such as information and web technology usage, sustainability and future growth. A comprehensive web-based survey was designed for this study using *Survey Gizmo,* an innovative online surveying tool. The survey was then distributed to nearly 1,500 NPO directors in the following countries: Australia, Canada, India, Pakistan, South Africa and the United Kingdom. Thus, both the developing and developed worlds were included in the study. *Idealist.org*, an online global network of NPOs was used to draw the sample from. Data was then collected from respondents and analysed using *Survey Gizmo* and *Microsoft Excel.* Meaningful findings were revealed and these were then systematically presented and discussed. Lastly, thoughtful conclusions and recommendations were offered that best reflected the findings of the study.

1.4 Study Outcomes

The outcomes of the study proved to be insightful and covered many areas. In order to present the outcomes in a clear manner, the findings were presented and discussed thematically. In terms of global usage of information and web technologies, there were some interesting similarities as well as stark differences between the developing and developed worlds. In sum, it was quite apparent that NPOs globally are in fact reliant on information and web technologies for their operations, sustainability and future growth. For the vast majority, these technologies have already proven to be worthwhile for NPOs for a variety of reasons. In terms of the future, NPO directors overall believed that as these technologies continue to evolve, it will be important for NPOs to stay current in order to survive. This study revealed a wide range of findings regarding this area of inquiry, ranging from particular details about current information and web technology usage, perceptions on the utility and benefit of these technologies, the specifics of recent financial information, the role of the recent economic recession on to operations and sustainability and attitudes towards the future with regards to these areas of concern.

1.5 Conclusion

The introduction chapter briefly introduced the general topic of inquiry, background to the study, the study process and study outcomes. Further chapters will methodically explore and analyse all relevant topics in a substantial depth. The following chapter will introduce the study intent and context, examine the problem statement, purpose and significance of the study, present the central research questions, objectives and hypotheses and lastly, will clarify key concepts.

Chapter 2

Study Intent and Context

2.1 Introduction

2.2 Problem statement

2.3 Purpose

2.4 Significance of the Study

2.5 Research Questions

2.6 Research Objectives

2.7 Hypotheses

2.8 Concept clarification

2.9 Conclusion

2.1 Introduction

This chapter will explore the study intent and context. Firstly, the problem statement will be discussed. Next, the purpose and significance of the study will be examined. The central research questions, objectives and hypotheses will then be presented. Finally, key concepts pertinent to the study will be clarified.

2.2 Problem Statement

It could be argued that information and web technology usage is correlated to organisational sustainability in a variety of ways. However, there is a dearth of knowledge in this field. It is the aim of the research to explore this topic in depth and analyse the degrees to which linkages exist between an array of variables. The resultant findings can then be applied to NPOs who are not aware of these linkages in order to improve organisational sustainability.

2.3 Purpose

The central purpose of this research was to determine the nature of the relationships between IT and web technology usage amongst global NPOs and the effect that these had on organisational operations, sustainability and future growth. An additional purpose was to expose the degrees to which any similarities or variances existed amongst NPOs from the developing and developed worlds, along with other variables.

2.4 Significance of the Study

The subjects, NPO directors from around the globe, have not typically been accepted as having a collective type of persona or identity. On the other hand, consider Chief Executive Officers (CEOs) of Fortune 500 companies. It is generally accepted in this day in age that they all share some common characteristics. Most fundamentally, CEOs are typically known to be proficient at mastering the art of business as a whole. They are generally adept at the management of resources to ensure survival. In recent years, there has also been a general mistrust of big business and the leaders who run them. Issues of accountability and a lack of transparency as exemplified through scandals such as the energy company Enron and the insurance giant AIG, which have shifted public opinion. Whether praise or

mistrust, there is a general ethos surrounding CEOs, that shifts as time and society evolves. Furthermore, it is believed that this is not limited by location and hence is a global phenomenon.

Applying this framework to NPO directors, it is believed that at present there is no universal identity that these individuals share. This in turn applies to NPOs as well. NPOs vary vastly in size, scope and methods of management. Nevertheless, by definition they are working for the public good. In other words, they are working towards enriching society in some sort of way, whether it is community development, human rights, environmental sustainability and so forth. In order to more fully understand the perceptions and characteristics of NPO directors, research must be undertaken to explore these areas.

Likewise, the area of technology, specifically the nature and extent of information and web technology usage by the nonprofit world, has not been fully explored. It can be argued that changes happen so rapidly in the world of IT and web technologies that it is virtually impossible to fully comprehend the entire picture. Thus, research is crucial in these areas to develop and understand the complex relationships between both the nonprofit and the technological worlds.

Another area of research relates to developing versus developed nations. Both have a wealth of NPOs and as will be shown in the research, growth rates of these technologies, especially in the developing world, are substantial. It is the opinion of the researcher that the combination of these forces – the nonprofit world, the technological revolution and the disparities between the developing and developed world are all integral areas of research in the attempt to further understand how the world works. By becoming aware of the past and present, it is easier to predict how the future may manifest itself. It is for these key reasons that this research has been undertaken.

In order to adequately gauge the variety of interrelated issues involved in these worlds, first and foremost, a proper research design must be implemented. Though many of these topics can embody a qualitative and not entirely concrete atmosphere, the adopted quantitative methodology best allowed for generalisability, standardisation and further replication and growth of knowledge in this mostly unexplored field. Various prior studies will be presented which shed light on a range of topics covered and provide fascinating trends and key pieces of knowledge. However, much of the research is localised to one specific culture, population or locale and often-times data analysing the same populations is found to be vastly contradictory. This research presents a fuller understanding of NPO usage of IT and

web technologies, NPO director perceptions of the value of these tools and their impact on operations, sustainability and what their future will be.

The study is significant in that it is the first of its kind in terms of global scope of population, diversity of topic areas and methodology towards uncovering trends. The implications for the research would be of interest to NPO directors as well as technology developers. The realm of technology and how these forces can be utilised by NPOs, in addition to new markets that can be created by technology developers, is limitless. Furthermore, the study examines key elements of NPOs – fundraising, finance, marketing, communication and others, with particular emphasis on sustainability as influenced by IT and web technologies. A more comprehensive understanding of these relationships could help NPO directors to strengthen their organisations to better serve beneficiaries, clients, communities and society at large.

2.5 Research Questions

The scope of this research encompassed a wide range of categories and topics. The main research questions of the study addressed these topic areas. One central area included questions regarding the current status and nature of NPO information technology usage across the globe, as exemplified through six countries – Australia, Canada, India, Pakistan, South Africa and the United Kingdom. A related central question concerned the perceived benefits of information technologies, as viewed by NPO directors.

Furthermore, the study asked about the current status and nature of NPO web technology usage across the globe. The perceived benefits of web technologies as viewed by NPO directors, was also a focus of the research. It was important to ask about the major motivations and limitations for NPOs to create a website, as well as to engage in other web technologies.

Questions on issues pertaining to sustainability were also central to the study. These included topics relating to the current status and nature of the sustainability of NPOs around the globe. Further, the study questioned how NPO directors in developing versus developed countries perceived threats against sustainability and how prepared they were to survive in the future.

The current global economic recession was also of significant concern. As such, the study questioned how the 2008 recession had affected the functioning and sustainability of NPOs around the world.

A final central area of questioning regarded how NPO directors viewed the future role of information and web technologies with regards to organisational sustainability and growth.

2.6 Research Objectives

The research objectives are directly related to the research questions. One main research objective was to explore the current status and nature of NPO information technology usage across the globe, as exemplified through six countries – Australia, Canada, India, Pakistan, South Africa and the United Kingdom. Another key objective was to discover the perceived benefits of information technologies, as viewed by NPO directors.

Furthermore, the study examined the current status and nature of NPO web technology usage across the globe. The perceived benefits of web technologies as viewed by NPO directors, was also investigated in this study. It was important to explore the major motivations and limitations for NPOs to create a website, as well as to engage in other web technologies.

A discovery of the issues pertaining to sustainability was also central to the study. These included topics relating to the current status and nature of the sustainability of NPOs around the globe. In addition, the study examined how NPO directors in developing versus developed countries perceived threats against sustainability and how prepared they were to survive in the future.

In addition, the effects of current global economic recession on NPOs were explored. Specifically, the study discovered how the 2008 recession had affected the functioning and sustainability of NPOs around the world.

A final major area of exploration centred on how NPO directors viewed the future role of information and web technologies with regards to organisational sustainability and growth.

2.7 Hypotheses

There were several key hypotheses developed for the purposes of this study. Firstly, it was hypothesised that NPOs were reliant on IT for organisational performance. Further, it was hypothesised that NPOs were reliant on web technologies for organisational performance. It was also hypothesised that NPOs were reliant on both IT and web technologies for sustainability. Regarding the current 2008 economic recession, it was hypothesised that NPOs were increasingly reliant on both IT and web technologies.

2.8 Concept Clarification

This section will present a variety of key concepts that are pertinent to the study.

Annual Report: "A report made each year by the directors to the shareholders [stakeholders]. It contains the directors' report and accounts. It normally contains a statement by the chairman and a range of information on the company's [nonprofit organisation's] activities." (Hartley et al, 2000: 265).

*Antivirus Software: "...*a computer program that can be used to scan files to identify and eliminate computer viruses and other malicious software (malware)." (Antivirusworld 2009).

*Bandwidth: "*The transmission capacity of an electronic pathway such as a communications line, computer bus or computer channel. In a digital line, it is measured in bits per second or bytes per second." (PC Magazine.com 2010).

*Blogs: "...*an abbreviation of 'weblogs' - web sites which contain dated entries in reverse chronological order (most recent first) about a particular topic. Functioning as an online newsletter, blogs can be written by one person or a group of contributors. Entries contain commentary and links to other Web sites, and images as well as a search facility may also be included." (Enterprise Blogs Info).

Branding: "The marketing practice of creating a name, symbol or design that identifies and differentiates a product from other products." (Entrepreneur 2010).

Budget: "A formal quantified plan of action (normally expressed in financial terms)." (Hartley et al, 2000: 266).

*Chat room: "*An online discussion forum for a particular topic via keyboard." (PC Magazine.com).

Cost: "The sacrifice that is entailed in acquiring or using goods or services. There are a number of different bases for measuring cost." (Hartley et al, 2000: 267).

eMarketing: "...refers specifically to marketing using the Internet." (Stokes 2009: 326).

Expenses: "Decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or the incurring of liabilities that result in decreases in equity, other than those relating to distribution to equity participants." (Hartley et al, 2000: 270). "Expenses" is synonymous with "expenditure" for the purpose of this research.

Facebook: "The most popular social networking site. Founded in 2004 by Mark Zuckerberg, the name comes from the paper document often issued to college freshmen to help them get acquainted on campus. Using the search facilities, members can locate other *Facebook* members and "friend" them by sending them an invitation, or they can invite people to join *Facebook*…*Facebook* offers instant messaging and photo sharing, and *Facebook's* e-mail is the only e-mail system many students and young adults ever use." (PC Magazine.com).

Feedback: The "process in which the effect or output of action is 'returned' (fed-back) to modify the next action…In an organizational context, feedback is the information sent to an entity (individual or a group) about its prior behaviour so that the entity may adjust its current and future behaviour to achieve the desired result." (Business Dictionary.com 2010).

Fundraising: The planned and organised process of seeking and obtaining monies for organisational purposes.

Idealist.org: A global online network of NPOs offering news, employment and volunteer information, and other resources for users.

Income: "Increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases in liabilities that result in increases in equity, other than those relating to contributions from equity participants." (Hartley et al, 2000: 272). "Income" is synonymous with "revenue" for the purpose of this research.

Information and Communication Technology (ICT): Any items of technology involved with collecting and disseminating information for communication purposes.

Information Technologies (IT): "Information technology has been defined by the Information Technology Association of America, or the ITAA as being the study, design, development, implementation support and/or management of any computer based information systems. This relates particularly to software applications and computer hardware. Information technology deals with using electronic computers and software to convert, store, protect, process, retrieve with security or transmit any information." (Hill 2010: 1).

Inventory: "An enterprise's holding of raw materials, work in progress and finished goods." (Hartley et al, 2000: 273).

*LinkedIn: "*A business-oriented social networking site that enables users to connect with colleagues, look for a job or business relationships and get answers to industry questions. *LinkedIn* users invite people they know and trust to become "linked in" to them, and the business connections of invited users are in turn linked. However, in order to reach connections down the line, requests for introductions have to be made." (PC Magazine.com).

*Message Board: "*A discussion group on the Web about a particular topic." (PC Magazine.com 2010).

Microsoft Office Suite (MS Office Suite): The package of *Microsoft* products that include word processing (*MS Word*), spreadsheet (*MS Excel*), database (*MS Access*) and presentation (*MS PowerPoint*) software applications.

Mission Statement: "…an explicit statement of the values of an organisation. It generates: the principles in accordance with which the organisation acts; the standards against which it is willing to be judged" (Talbot 2003: 9).

*MySpace: "*A major social networking site on the Web, especially for teenagers and young adults." (PC Magazine.com 2010).

Nonprofit Organisation (NPO): "Associations, charities, cooperatives, and other voluntary organizations formed to further cultural, educational, religious, professional, or public service objectives. Their startup funding is provided by their members, trustees, or others who do not expect repayment, and who do not share in the organization's profits or losses which are retained or absorbed. Approved, incorporated, or registered NPOs are usually granted tax exemptions, and contributions to them are often tax deductible." (Business Dictionary.com 2010). For the purposes of this research, "NPO" or "nonprofit organisation" is synonymous with "NGO" or "nongovernmental organisation".

Online Fundraising: The formalized process of fundraising through online electronic means for organisational purposes.

*Operating System (OS): "*The computer's master control program…The operating system (OS) sets the standards for all application programs that run in the computer. Applications "talk to" the operating system for all user interface and file management operations." (PC Magazine.com 2010).

Ratio Analysis: "An approach to interpreting the information contained in financial statements based on relating significant figures to each other." (Hartley et al, 2000: 276). "Ratio analysis" is synonymous with "ratio" for the purpose of this research.

Recession: A "period of general economic decline, defined usually as a contraction in the GDP [Gross Domestic Product] for six months (two consecutive quarters) or longer. Marked by high unemployment, stagnant wages, and fall in retail sales, a recession generally does not last longer than one year and is much milder than a depression. Although recessions are considered a normal part of a capitalist economy, there is no unanimity of economists on its causes." (Business Dictionary.com 2010).

Response Rate: "…the percentage of survey invitations that result in a response. Response rates vary greatly from survey to survey, affected by almost all aspects of the survey process." (Hamilton 2009: 2).

Social Networking Site (SNS): "...any Web site that enables users to create public profiles within that Web site and form relationships with other users of the same Web site who access their profile. Social

networking sites can be used to describe community-based Web sites, online discussions forums, chat rooms and other social spaces online." (Webopedia 2010).

Sustainability: "…the ability of something living to sustain itself – is about surviving over the long term." (Visser et al. 2002: 57).

Twitter: "A very popular instant messaging system that lets a person send brief text messages up to 140 characters in length to a list of followers. Launched in 2006, *Twitter* was designed as a social network to keep friends and colleagues informed throughout the day. However, it became widely used for commercial and political purposes to keep customers, constituents and fans up-to-date as well as to solicit feedback." (PC Magazine.com 2010).

*Web 2.0: "…*a category of products and a way of working that is collaborative in nature and provides an open means of sharing information. Products that fall into the Web 2.0 category include blogs, wikis, RSS and social networks." (Donston 2008: 39).

Web Analytics: "…the objective tracking, collection, measurement, reporting, and analysis of quantitative Internet data to optimize websites and web marketing initiatives" (Kaushik 2007: 2).

*Web Browser: "*The application program that serves as the primary method for accessing the World Wide Web" (PC Magazine.com 2010). The term "web browser" is synonymous with "browser" for the purposes of this research.

*Website: "*A presence on the World Wide Web. To qualify as a bona fide Web site, it must be available on the Internet around the clock. A Web site is a collection of Web pages, which are documents coded in HTML that are linked to each other and very often to pages on other Web sites. A Web site is run (hosted) on a Web server by the site's owner, by a hosting provider or by an Internet service provider (ISP)." (PC Magazine.com 2010).

Web Technologies: All technologies associated with the web, including but not limited to the internet, websites, web 2.0 technologies, social networking sites and any other application associated with the web.

2.9 Conclusion

This chapter explored the study intent and context, including a discussion on the problem statement, the purpose and significance of the study, and an examination of the central research questions, objectives and hypothesis. Key concepts were also clarified. The following chapter will present a comprehensive review of literature relevant to this study.

Chapter 3

Literature Review

Contents:

3.1 Introduction

A review of relevant literature provided a number of noteworthy findings. Through an investigation of current sources, various themes and trends emerged. Many findings in the literature proved to be significant. Nonetheless, no past research studies were discovered that paralleled this study. As such, it was important to consider all related literature as it pertained to the study. This section is presented under the following categories: *Background Information, IT Usage and Analysis, Web Usage and Analysis,* and *Sustainability and Future Outlook.*

3.2 Background Information

This section will present general background information including pertinent global statistics and trends in the NPO sector.

3.2.1 General Statistics

An exploration of key human development indicators uncovered noteworthy variances between developed and developing countries. The figures here presented have been derived from various *United Nations*, *World Bank* and other international conglomerates, and has been compiled using the *United Nations Development Programme's* 'Human Development Reports' website. (United Nations Development Programme 2010). Table 3.1 depicts several of these important statistics from countries from the developed world.

TABLE 3.1: HUMAN DEVELOPMENT INDICATORS – DEVELOPED COUNTRIES

Indicator	Year	Australia	Canada	United Kingdom	Developed Countries Average
Life expectancy at birth (years)	2007	81.4	80.6	79.3	80.4
Combined gross enrolment ratio in education (%)	2007	100.0	99.3	89.2	96.2
Public expenditure on education as a percentage of total government expenditure	2000-2007	13.3	12.5	12.5	12.8
Total GDP (PPP US $ billions)	2007	733.9	1,180.9	2,143.0	1,352.6
GDP per capita (PPP US $)	2007	34,923	35,812	35,130	35,288.3
Annual growth rate of GDP per capita (%)	1990-2007	2.4	2.2	2.4	2.3

Urban share of the population (%)	1990	85.4	76.6	88.7	83.6
Ratio of the richest 10% to the poorest 10%	1992-2007	12.5	9.4	13.8	11.9

Source: United Nations Development Programme, 2010: <http://hdr.undp.org/en/statistics/>

An analysis of these figures showed that most statistics were relatively consistent across developed countries. There was one substantial variation however, in total Gross Domestic Product (GDP) represented in total billions of United States Dollars using the Purchasing Power Parity (PPP) method of averaging costs and exchange rates based on lists of commonly purchased goods across nations. In particular, total GDP (PPP) in the UK was substantially higher than the remaining developed countries, with Australia having the lowest. However, when examining the GDP per capita, these figures retain their relative uniformity.

An examination of significant human development indicators pertaining to developing countries unveiled crucial trends. This data is displayed in Table 3.2.

TABLE 3.2: HUMAN DEVELOPMENT INDICATORS – DEVELOPING COUNTRIES

Indicator	Year	South Africa	India	Pakistan	Developing Countries Average
Life expectancy at birth (years)	2007	51.5	63.4	66.2	60.4
Adult literacy rate (% aged 15 and above)	2007	88	66	54.2	69.4
Combined gross enrolment ratio in education (%)	2007	76.8	61	39.3	59.0
Public expenditure on education as a percentage of total government expenditure	2000-2007	17.4	10.7	11.2	13.1
Total GDP (PPP US $ billions)	2007	466.9	3,096.9	405.6	1,323.1
GDP per capita (PPP US $)	2007	9,757	2,753	2,496	5,002.0
Average annual growth rate of GDP per capita (%)	1990-2007	1	4.5	1.6	2.4
Population living below $2 a day (%)	2000-2007	42.9	75.6	60.3	59.6

Urban share of the population (%)	1990	52	25.5	30.6	36.0
Ratio of the richest 10% to the poorest 10%	1992-2007	35.1	8.6	6.7	16.8

Source: United Nations Development Programme, 2010: <http://hdr.undp.org/en/statistics/>

An analysis of the data revealed several major trends. Firstly, figures comparing the developed and developing world in many cases are vastly different, in favour of the developed countries. Hence, it is understandable why each belongs to its respective categorisation. Within the developed countries, there are also some fundamental variances. In terms of education, it is interesting to note that South Africa invested the most public expenditure in education. This could explain South Africa's higher levels of literacy and school enrolment figures compared to that of Pakistan and India. This may likely correlate to a higher per capita income. India reflected a substantial disparity in the rate at which their population lives on under US $ 2 per day.

Furthermore, an exploration of key statistics regarding internet usage revealed fascinating trends with regards to developed and developing countries. The following figures have been derived from the website, 'Internet World Stats' (Internet World Stats 2010).

Table 3.3 depicts internet statistics of countries from the developed world.

TABLE 3.3: INTERNET STATISTICS – DEVELOPED COUNTRIES

Indicator	Australia	Canada	United Kingdom	Developed Country Average
Population (2009 estimate)	21,262,641	33,487,208	61,113,205	38,621,018
Internet Users	17,033,826	25,086,000	46,683,900	29,601,242
Penetration (% of population)	80%	75%	76%	77%
Internet User Growth (2000-2009)	158%	98%	203%	153%

Internet World Stats, 2010: <http://www.internetworldstats.com>

It is evident that penetration rates were remarkably high, implying that these populations in general are knowledgeable about web technologies to some degree. In other words, the internet has, on average, directly penetrated the lives of more than three-quarters of the developed country populations.

Additionally, user growth levels from 2000 to 2009 show that in most cases the number of users in these countries had at least doubled, if not more, over this time period.

An examination of internet statistics in developing countries revealed some remarkable differences. The data is presented in Table 3.4.

TABLE 3.4: INTERNET STATISTICS – DEVELOPING COUNTRIES

Indicators	India	Pakistan	South Africa	Developing Country Average
Population (2009 estimate)	1,156,897,766	174,578,558	49,053,489	460,176,604
Internet Users	81,000,000	18,500,000	5,300,000	34,933,333
Penetration (% of population)	7.0%	10.6%	10.8%	9.5%
User Growth (2000-2009)	1,520%	13,716%	121%	5,119%

Internet World Stats, 2010: <http://www.internetworldstats.com>

A substantial difference is evident between the developed and developing worlds. Firstly, the penetration levels are astoundingly low in the developing world, thus implying that the vast majority of individuals in developing nations have a much more limited knowledge of web technologies. In the past, this could be attributed to the notion that web technologies were both created and implemented to a greater degree in the developed world. Secondly however, there is a striking trend of increased user growth amongst developing nations. This implies that web technologies have been introduced to these areas at a rapid pace over the period of 2000 to 2009. The substantial growth of users in the developing world is evident of the globalisation process whereby the entire world is experiencing greater connectivity. Specifically, web connectivity is growing at a rapid pace in areas where it previously was nonexistent or existing at much lower levels.

3.2.2 Nonprofit Sector

Hall-Jones (2006) claimed that the nonprofit sector is growing globally and at a rapid rate. Hall-Jones (2006: 1) draws upon research conducted by *SustainAbility* and the *United Nations* and reported that the eighth largest economy in the world is the nonprofit sector, valued at over one trillion United States Dollars a year worldwide. It further reported that the nonprofit sector employs a paid workforce of 19 million people in addition to innumerable volunteers. One reason for the growth of this sector is

explained by Makoba (2002). Makoba, with reference to the work of Edwards and Hume, states that, "...the phenomenal growth of nongovernmental organizations (NGOs) at both international and national levels is due to the changing attitude of donor agencies about development assistance and the increased demand for NGO services in Third World Countries" (2002: 1). Makoba further explains that as governments cannot provide all of the necessary services to citizens, the nonprofit sector serves an integral role in offering support where needed. Makoba additionally argues that failed economic development schemes in developing countries demands the integration of a nonprofit sector to provide essential services for society.

3.3 IT Research

This section presents information on recent topics and trends pertaining to computers, operating systems, software applications and viruses.

3.3.1 Computer Trends

Hunt (2009:1) commented on recent trends in the consumer and producer costs for computers by stating:

> In the most recent months computer prices have declined much faster than the typical 5 % per year. During the 2008 fourth quarter the average price of a personal computer dropped about 14.3 % according to IDC. In the past 15 years computer prices have only declined at a rate such as this or faster once, and that was during the .com burst, in the fourth quarter of 2001. At that time, IDC says prices dropped 14.5 %.

It is interesting to note this trend and Hunt continued her discussion in saying that manufacturers such as *Microsoft, Dell* and *HP* are trying to create cheaper computing products that still provide desirable features such as wireless internet capabilities and webcams. Netbooks, she asserted, are rising in popularity due to their lower prices and improved capabilities. Hunt claimed that manufacturers are experiencing lower profit margins, but can also create market demand by providing efficient and powerful products at a reasonable prices. In essence, these trends indicate that computers are becoming more accessible to the general public. With greater accessibility comes greater usage, or in other words, greater integration of these technologies in the day-to-day lives of the general public.

3.3.2 Operating Systems

There are numerous operating systems available for computer users. In essence, an operating system controls all of the functions of a computer. Operating systems include *Microsoft, Apple, Linux*, and a variety of other lesser-known yet functional systems. According to Shapiro (2003:1), "Microsoft's Windows has no doubt been the towering force in the consumer operating system market for quite some time: primarily due to its newbie-friendly ease of installation and its simplicity of use among the average person" . Shapiro (2003:1) continued to discuss the future by stating, "The future for both our operating systems and processors look bright: with endless possibilities and a plethora of brilliant minds: creating brilliant technology to influence it all. Technology on this earth sure has its stones to walk and its sunsets to see, but it is emerging at an enormous rate: overestimated by too many." .

These assertions indicated that though *Microsoft* currently is the dominant player in the realm of operating systems, the future may see other operating systems developed and used by the general public in greater degrees.

3.3.3 Software Applications

Computers furthermore utilise a variety of software applications and packages. The *Microsoft (MS) Office Suite* is one such package that contains word processing, spreadsheet, presentation and database software. *Microsoft Access* is a database application found in the *MS Office Suite*. Harkins (2008) commented on negative perceptions towards this application, yet offers a defence of its functionality and utility. Harkins (2008:1) stated, "Access has the reputation of being a toy and not a real database. It's undeserved, but a lot of IT professionals simply won't use it". The author continues to remark, "Despite the snub, Access is the most popular desktop database on the market" (Harkins 2008: 1).

3.3.4 Viruses

Electronic viruses are unwanted programmes or other pieces of code that enter a computer system, generally creating harm by way of reducing the functionality of a computer or even causing the entire unit to stop operating properly. *AntivirusWorld.com* (2009:1) presented an article on what anti-virus software is and how it works as follows:

> An anti-virus software program is a computer program that can be used to scan files to identify and eliminate computer viruses and other malicious software (malware). Anti-virus software typically uses two different techniques to accomplish this:
>
> - Examining files to look for known viruses by means of a virus dictionary
> - Identifying suspicious behavior from any computer program which might indicate infection.

The article further elaborated that a virus dictionary contains all current viruses known by the software and upon identification, the software works to delete or quarantine the files to prevent damage to the computer system. The article continued to discuss viruses and claims that several faults with *Microsoft Office Suite* and the *Microsoft* operating system lend themselves to a greater risk of viruses. Furthermore, it was recommended that user education on how to access the web safely and an avoidance of downloading suspicious or un-trusted files is the best defence against contracting an electronic virus.

Rebbapragada (2006) provided a list of the best anti-virus software available for customers based on programme features, options, costs and ease of use. The highest ranked software was *BitDefender*, followed by *McAfee*, *Kaspersky, F-Secure* and *Symantec Norton*.

3.4 Web Technologies Research

This section presents relevant information concerning information and communication technologies (ICT), nonprofit web trends, eMarketing, branding, advocacy, website creation, website features, feedback, web analytics, web 2.0, social networking sites and blogs.

3.4.1 Information and Communication Technology (ICT) and NPOs.

There are numerous examples of how organisations around the globe have utilised web and communication technologies to strengthen their capacity and provide a higher quality service. James (2004) explored the role of ICT in the developing world. According to a chapter by Isaacs et al in James (2004: 1-2):

> Dizzying changes in the scope and reach of information infrastructures were the hallmark of the 1990s and have continued until present. Information technology and networking use have reached both developed and many developing economies, albeit to varying degrees and levels of intensity. The ubiquity of these changes has manifested

> itself through the extraordinary expansion of the Internet and the World Wide Web, as well as the rapid deployment of wireless networks, giving rise to the term 'networking revolution'. Developed societies have taken advantage of these changes with astonishing rapidity, gaining broad access to modern digital networks and significant economic and social spin-offs for their communications and business sectors…There is little doubt that sub-Saharan Africa's underserved populations are missing out on the boons of information and communication technology (ICT). As a region lagging behind in adoption, use and innovation in the ICT sectors, its populations are missing out on a better education, well-paying ICT jobs, investment possibilities and opportunities to use information technology to facilitate the delivery of basic serves, such as health and education.

This fascinating account of the status of ICT in the developed and developing world, as exemplified through sub-Saharan Africa, implies that social services in terms of IT usage may be substantially different between developing and developed countries. Though the source is not entirely current, the principles remain the same to this day.

Accessibility to ICT infrastructure is an integral factor in the field of global nonprofit internet usage. Custard (2008) claimed that a disparity exists that favoured the Western world, in that the internet is based primarily in the English language, with most browsers, keyboards and systems designed in this fashion. It was also mentioned that education and literacy levels are substantially lower in developing nations versus developed nations, which are indicators linked to the higher levels of poverty in developing nations. These claims are substantiated by the following:

> ...the 942 million people living in the world's developed economies enjoy five times better access to fixed and mobile phone services, nine times better access to Internet services and own 13 times more personal computers than the 85 percent of the world's population living in low- and middle-income countries. It is estimated that 800,000 villages still lack connection by telephone line, the Internet or any other modern communications technology (Custard 2008: 15).

Pillsbury et al (2005) explored trends in ICT. Specifically, nonprofit organisations working with women in Africa were studied. The researchers hypothesised that "...it is only by strengthening a broad range of communications capacities that an organization will be able to maximize its impact." (Pillsbury et al 2005: 1). The article presented several case studies from NPOs in various African countries and found that there was a positive link between the development and usage of the internet and other communication technologies and the success of their programmes. Several examples provide anecdotal evidence, including an organisation based in Uganda who had set up a website and received an unsolicited grant directly due to a funder seeing the organisation's website. Email access also enabled

the local Ugandan Director of the NPO to converse with the overseas donor. Another example involved a Zimbabwean NPO that developed online and offline newsletters to disseminate information on nutrition, food, health and other topics. It was revealed that much of the information was downloaded from other global websites and then translated into the local language. The web enabled the organisation to reach audiences in both rural and urban areas.

Pillsbury et al (2005) also suggested that access to an internet line or basic communications infrastructure will not on its own maximise capacity. It is integral how these technologies are incorporated into the organisation. The authors propose that resources, time and support must be allocated to ICT and even advised that an organisation has a dedicated staff member to oversee all of these specific functions. It was stated that organisations must actually change how people work in order to be successful with ICT.

Connectivity, in terms of access, equipment and infrastructure, varies by country. It is generally believed that developed countries have more reliable and accessible technologies than developing countries in this regard. Furthermore, it can be argued that the knowledge and expertise exists in greater levels in the developed world. Nevertheless, it is worthwhile to examine the work of various organisations working to strengthen these systems in the developing world.

One point of interest is the surge of open source technologies in the developing world. Open source technologies are characterised by low or nonexistent costs, transparency in coding techniques and freedom to distribute and share amongst the general public. One example to defend this claim is South Africa and an initiative to introduce Open Educational Resources (OER). Kinuthia (2008) explored this new trend. It is reported that OER was born of a *United Nations* project aimed at promoting knowledge and information sharing, in addition to strengthening human capacity for nonprofit organisations. OER is characterised by low costs and short development cycles. In South Africa, the *Open Source Centre* has been a model on the continent for OER initiatives. These included culturally adaptive software, open source school management systems, cultural preservation projects, computer literacy programmes and other schemes in the fields of education and technology (Kinuthia 2008:22). This provided evidence that non-traditional forms of communications development may be occurring at higher rates in the developing world. Additionally, NPOs in developing countries may be utilising open source software at greater levels.

Kinuthia (2008) also discussed the *One Laptop Per Child* initiative that had been introduced in parts of Africa, including South Africa. The project provided children with low cost computers (approximately US $100 per computer), which aimed at promoting digital literacy at a young age. The computers are powered by a wind up crank mechanism and are internet ready. Furthermore, they operate on open source software, custom designed to suit the location where they are being introduced. Projects such as this one are aimed specifically at the developing world and help to bridge the global digital divide.

Websites are a primary point of contact for many organisations. Al-Qirim (2007) examined the role of the web for a NPO in the developing country of Jordan. Al-Qirim (2007: 117) presented a discussion on the value of the web for NPOs as follows:

1. No one owns the Internet: The Internet in general and the Web specifically are highly decentralized (Warby, 1999) and this makes them a very powerful social tool in the hand of individuals and the poor.

2. Social power: The value of the Internet as an information portal is quite apparent. The Internet has raised living standards, strengthened grass-roots democracy, empowered women, and improved the health and well-being of individuals (Hall, 2002).

3. Political power: Technology has broken the government monopoly over information and has forced governments to realign their relationships with the nongovernmental sector, including NGOs (Johnstone, 2003). NGOs were able to use technology in general and the Internet specifically to reach beyond their national borders and forced governments to become more responsive to international public opinion.

It is evident that the web is a powerful tool for NPOs for a variety of reasons. In addition to those listed above, the researcher discussed the time and cost saving element that the web can provide. One interviewee in the study stated that:

> The updated online business directory represents one of the greatest advantages to us; you would not believe the amount of manual work involved in responding to faxes from international exporters and importers. Earlier, international businesses used to send us faxes or visit Jordan in person to enquire about products or an opportunity. A faxed letter could take more than a week to process and cost money. Now, anybody from different parts in the world could access the bilingual (Arabic/English) Web site and locate the needed information quickly. Businesses can search the business directory section in the Web site using different criterions e.g., capital, profession, product, company name, etc. Complete details about members and non-members businesses are provided in the Web site and if a member has a Web site, a hyperlink is shown in the listing which could lead to the merchant's Web site. The Web site introduced

> considerable savings to international businesses interested in the Jordanian market and at the same time, increased the exposure of local business to international opportunities. (Al-Qirim 2007: 117)

Al-Qirim (2007) also revealed that employees and other stakeholders had limited knowledge of the specific web technologies of this particular NPO, thus presenting a challenge. He suggested that individuals and organisations must adopt these technology systems in order to survive .

Security and threat concerns were also reported by Al-Qirim (2007) with regards to setting up online financial systems.

3.4.2 Nonprofit Web Trends

Kenix (2007:71) drew upon previous research to reveal NPO web usage trends by stating the following:

> While [nonprofit organisations] initially slow to adopt new technologies in the past (Jamieson 2000), non-profit organizations have increasingly adopted new technological modes of action (Anon 2001b). It was difficult to even find non-profits online before 1999 (Boeder 2002), but they have been turning to the Internet at a faster rate – particularly larger non-profits (Anon 2001b). In 2001, almost 85 per cent of non-profits sampled reported engaging with new technologies (Burt & Taylor 2001).

It is apparent that NPOs have been becoming more adaptive to web technologies. Kenix (2007:72) commented on the benefits of web technologies for NPOs as follows:

> It has been argued that non-profits could improve their public education, fundraising, volunteer recruitment, publicity, advocacy, service delivery, research and communication through an effective Internet presence (Landesmann 1995; Spencer 2002). National non-profits could communicate with greater ease with their local branches (Barndt 1998). With the advent of the Internet, non-profits could reshape their internal organization and redefine their business scope (Burt & Taylor 2001). Third-sector organizations could also expand training, media relations, community building, knowledge sharing and opinion sampling (Spencer 2002). Governmental organizations and businesses with a commercial interest certainly have many of these shared concerns. Yet non-profit organizations, with their particular emphasis on advocacy, volunteerism, fundraising and relationship building (Johnson 1999), appear to have a unique opportunity to utilize the Internet as a Habermasian public sphere n the way that many early scholars predicted.

It appears that web technologies have a multitude of possible benefits that can be utilised by NPOs.

3.4.3 eMarketing

The term eMarketing, "...refers specifically to marketing using the Internet" (Stokes 2009: 326). It is argued that a thoughtful and creative eMarketing strategy can result in great gains for an organisation. Barack Obama's recent presidential campaign is a recent example of a successful eMarketing strategy. Stokes (2009:328) claims that, "...the Web was seen as an emerging channel in politics" during this campaign. Stokes further outlined the ways in which Obama was able to use web technologies to market himself and subsequently win the election.

One such strategy was the creation of a social networking platform, 'www.my.barackobama.com' which enabled users to communicate with each other, receive feedback and information from the campaign and to brainstorm other avenues of support for Obama. It was reported by *Quantcast* (Stokes 2009: 329) that the network hosted between one and two million visitors per month. Additionally, the Obama campaign made use of other existing sites such as *Facebook*, *YouTube* and *Twitter*. Interestingly, Stokes stated that the top viewed videos on the Obama channel on *YouTube* had received in excess of five million views each. As a result of these and other eMarketing tactics, Obama was able to obtain substantial amounts of funding. It was reported that Hillary Clinton, Obama's Democratic competitor, had raised US $13.5 million in January 2008 primarily using traditional means, whereas Obama had raised US $36 million, of which US $28 million was raised online. Furthermore, 90 percent of the online revenue came from donors giving online gifts of US $100 or less. Stokes (2009: 330) also reported that the Obama campaign had generated databases of supporters, and when Obama decided to choose Joe Biden as his running mate, the campaign sent approximately 2.9 million mobile phone text messages to supporters. This creative use of eMarketing strategies was successful and exemplifies how organisations can utilise these tools to promote their cause.

A recent example of the power of online fundraising is presented by Ellis (2010: 1). It was reported that as of January 2010, donations towards relief efforts due to the recent devastating earthquake in Haiti were reported at US $350 million. Ellis specifically looked at online donations and their impact. The *American Red Cross* had raised the most of any NPO, with funds totalling US $137 million. Of these donations, 60 percent were made online and another 15-20 percent were received through text messaging. Ellis (2010:1) further provided commentary from key individuals on the value of online fundraising:

> Stacy Palmer, editor of the Chronicle of Philanthropy, estimated that about half of all donations have been online contributions. "That's the fastest way of getting money in," she said. "And most people feel comfortable giving online at this point."… "Technology is making it easier for resources to flow to smaller charities with direct ongoing projects in Haiti..." said Stacie Mann, spokeswoman for online donation system Network for Good, "..organizations that can have a big impact as emergency response turns into rebuilding."

The ease of use and speed with which individuals can donate funds online makes it a viable option for fundraising for NPOs.

At its fundamental root, web media is a form of communication. Websites communicate ideas and beliefs about an entity and in this case, about an organisation. The world of the web has permeated most facets of everyday life and is currently being used by organisations to communicate their mission, objectives and directions for achieving their goals. This trend of using the internet as a primary means of communication only appears to be growing as technology and society evolves. Rheingold (2000: 170) explored this notion in greater detail and stated:

> The global economy depends upon a rapidly self-innovating technological infrastructure. Superheated economic competition requires the biggest players to concentrate massive resources on technology development. For these reasons, the only thing we can know with any degree of certainty about tomorrow's world is that technologies will be more powerful than they are today. And communication technologies, because of their ability to influence human perceptions and beliefs as well as their power to command and control automatic machinery, will continue to grow more powerful and persuasive, if not more true, authentic and humane.

Based on Rheingold's assumptions, organisations will have to use the web as a marketing and communication tool in order to better serve their beneficiary populations and to grow as an organisation.

3.4.4 Branding

Typically a marketing tactic used by for-profit organisations, the nonprofit world has also adopted promotional branding strategies for the purpose of marketing themselves to the public. Vestergaard (2008) discussed the commercialisation of the nonprofit sector, with particular focus on how nonprofit organisations have integrated branding into their marketing strategies. She argued that the use of visual and verbal cues can in fact promote awareness in the public. This awareness can be in the form of spreading a message, a value that the organisation brings, or for attracting potential funders. She

further claimed that branding via the channels of the media is essential for organisational sustainability. She stated that, "…humanitarian organizations cannot function without relying on the media for the promotion of their cause. Humanitarian organizations must find new ways of using the media to create visibility and compel to the public to act." (Vestergaard 2008: 490). Vestergaard analysed branding techniques used by the global humanitarian organisation *Amnesty International* to substantiate these claims. She also explored the visual and verbal cues of each scene of an unconventional *Amnesty International* media advertisement. The advertisement focused not specifically on the work of the organisation, but rather was used to promote the organisation's website. The goal was for viewers to visit the website, explore the work of the agency and ultimately to donate money via their online form. The use of ambiguous, broad and even artistic elements in the television advertisement was effective according to the researcher. An emotional and intellectual message was communicated through this medium, and Vestergaard felt that this type of creative branding is essential, yet challenging, for nonprofit organisations. The effect of branding for nonprofit organisations is further explained as follows:

> Charities with a strong recognizable brand attract more voluntary donations than those without.[…] Increasingly, charity brand status is being used to communicate meaning through a unique set of values or associations that define the charity not only in terms of what it does (its cause) but more importantly in terms of the value it represents. Transforming charity into brands allows donors to identify more precisely what the charity does and the values it represents. This in turn allows donors to identify and select those charities whose values most closely match their own (Hankinson 2000: 1 in Vestergaard 2008: 472).

3.4.5 Advocacy

It is evident that NPOs are using web technologies for the purposes of advocacy and mobilising individuals. Li (2001: 12) claimed that through the use of web technologies, NPOs had a greater ability to mobilise people and advocate for a particular cause. This form of grassroots communication is a vital tool for NPOs and due to the very nature of the technologies, information can be spread worldwide at just a click of a button. An example of the international NPO *Greenpeace*, is given as follows:

> NGOs are very skilled in getting their messages heard and extending the reach of their communications. As Pete Engardio (1999) points out, "Labor and environmental groups have been especially adept at expanding local disputes into global causes". He points to the example of Greenpeace, one of the savviest manipulators of public opinion. The international environmental group has an email list of over 5,000 activists who are

> prepared to protest against any number of issues, such as the use of toxic chemicals in children's toys to the export of harmful minerals. (Engardio 1999 in Li 2001: 12).

Researchers Desouza and Dutta (2008) investigated the role of the internet for the purpose of networking local and global nonprofit organisations working with HIV/AIDS issues. The India-based nonprofit organisation *Saathi* was explored and in particular email messages between *Saathi* forum members were documented and analysed. The researchers found that this e-forum provided four central services for its global network of stakeholders. Firstly, the e-forum provided news to members. News included local and international newspaper articles, online news articles, reports on HIV/AIDS prevention and research, and press releases from government and nongovernmental agencies. Secondly, the e-forum served as an informational resource providing information on job openings, training opportunities and as a forum for members to ask questions. Thirdly, the e-forum was used to promote political action. Advocacy and activism opportunities both online and offline were presented. Lastly, it was discovered that the e-forum was used to express emotions. This indicated that the members used the forum to develop emotional bonds and to serve as a source of community. The use of the internet for these functions has proved to be effective and it is hypothesised that nonprofit organisations create websites and e-forums for these reasons. The web is being used by nonprofit organisations for the purpose of mobilising individuals. Thirumal and Robins (2008) explored the use of the internet and other forms of media by marginalised groups in society. Particularly, rural "Dalits" of southern India were investigated. This "untouchable" class of citizens is arguably the most oppressed in Indian society. With an estimated 160 million Dalits, this group was characterised by being segregated from the rest of society resulting in a lack of adequate educational opportunities and other socio-economic disadvantages. As such, it would appear that this segment of the population would typically be precluded from use and knowledge of the internet. However, it was found in this study that Dalits who had indeed become educated, along with other Dalit activists, were successful in conducting a three month online campaign to highlight an alleged 2003 beating of a Dalit by a member of a higher caste in India's southern state of Andhra Pradesh. An aggressive email campaign was spearheaded by a local organisation and resulted in an official investigation into the case as well as government sanctions. Though this was a major victory for the proponents of the campaign, another outcome of this online effort was that other issues were introduced and discussed by members of the society at all levels. In addition, it was shown that the Dalits had discovered a new medium for communication and

involvement. Thus, the web here can be seen as a tool for mobilising individuals for some common purpose.

3.4.6 Website Creation

In her analysis of 70 nonprofit websites, Kenix (2007) claimed that NPOs have more of an incentive to engage with web technologies, but assumes that many strategies cannot be pursued due to financial constraints. She advised that it would be worthwhile to examine motivations and limitations when NPOs created their content online.

The web is a dynamic and ever-changing landscape. To help organisations survive online, *Businessweek.com* provided a list of digital "do's and don'ts" in an article entitled, *The 10 Commandments of Web Design,* by Matt Vella (2008). Included in the list are tips on avoiding clutter, hidden content and other abuses. He also advised that organisations should adopt only proven technologies. Specifically he claims that many Web 2.0 technologies such as social networking sites should be incorporated into a website in order to attract users who are familiar with these technologies. This also relates to another piece of advice – organisations should ensure that users are immersed when visiting a particular site. Vella gave the example of how *Facebook* has been able to achieve this with its multi-faceted functionality and content. Vella also argued that content is of the utmost importance and a flashy design on its own will not be sufficient enough to sustain viewership.

3.4.7 Website Features

Kenix (2007: 81) found that 98 percent of NPO websites did not provide content in an alternative language. Ingenhoff and Koelling (2008: 69) revealed contradicting evidence with 65 percent of NPO websites in their study having an option for an alternate language. This perhaps can be attributed by the countries in which these studies took place.

It was revealed that 85 percent of NPOs did in fact post a mission statement on their website, according to Kenix (2007: 83). Ingenhoff and Koelling (2008: 69) however, found that only 50 percent of NPOs in their study presented a mission statement on their site.

Kenix (2007: 82) discovered that 83 percent of NPOs presented content using low bandwidth technology. She suggested that this could be due to financial constraints or to allow greater access to the site.

It was also found that nearly 80 percent of NPOs did not present employment opportunities on their site (Kenix 2007: 84).

The researcher also drew upon previous research in a discussion on the value of providing contact information on a nonprofit website by stating that:

> Research has found that contact information is one of the major predictors of online credibility (Fogg *et al.* 2002). Without this contact information, non-profit organizations may be doing themselves a great disservice. Others have agreed and argued that only by examining a site for authority can one make a thorough estimation of source credibility (Glantz 2000 in Kenix 2007: 86).

She further reported that NPOs typically did not supply financial information or an annual report on their website. In fact, 90 percent did not post any financial information and 88.5 percent did not provide their annual report online (Kenix 2007: 80).

3.4.8 Feedback

Feedback on websites can be received from both internal and external sources. According to Reynolds (2008: 7), "...the secrets to patron-centered web design are to talk to your patrons and staff members and test, test, test." Feedback is important in terms of web design as well as in terms of making updates and changes to a web site.

3.4.9 Web Analytics

Avinash Kaushik (2007: 1) stated, "On March 20, 2007, a search on Google for "web analytics" + definition returns 642,000 results in 0.11 seconds. It is a testament to the complexity and long history of this wonderful topic (and to how fast Google can return results)". He also presented a definition of the term "web analytics" from the *Web Analytics Association*. Web analytics, "is the objective tracking, collection, measurement, reporting, and analysis of quantitative Internet data to optimize websites and web marketing initiatives" (Kaushik 2007: 2).

Heck (2006) discussed the functions and benefits of web analytics instruments. He stated that by using tools such as *ClickTracks, HitsLink* and *Google Analytics*, users can understand various complexities about the viewers of their website. Heck claimed that the use of web analytics tools can help with the marketing of an organisation, namely by understanding more about the viewers of the site, how they got there, and what they are doing on the site, in addition to optimising search engine traffic.

Mathews (2009: 25) elaborated further on the value of web analytics as follows:

> Web design is organic and requires constant cultivation. One of the best things you can do is install Google Analytics in order to observe how your site is being used. With this free tool, you can measure the effectiveness of advertising, gauge the popularity of specific pages, observe click patterns, and identify common stumbling blocks. While you can learn a lot from usability testing, analyzing actual online behaviour is also quite valuable. This type of data enables you to streamline wording, rearrange content, and find out what areas you need to focus on next.

3.4.10 Web 2.0

Ziff Davis Enterprise Research conducted a survey of 282 IT professionals to determine views on Web 2.0 technologies (Donston 2008). Respondents were asked to name the two principal drivers for Web 2.0 at their respective companies. Seventy-one percent reported, "...improved communication and collaboration among internal staff," (Donston 2008: 39) and 46 percent reported "...improved communication and collaboration with customers" (Donston 2008: 39). It is hypothesised that there is a parallel with the nonprofit sector, in which case customers could be replaced by clients and other stakeholders.

Rhoades, Friedel and Morgan (2009) discussed the potential for Web 2.0 technologies to improve people's ability to collaborate. Collaboration, in simple terms, is a process where two or more people come together to create something. The web by nature is a collaborative medium, connecting individuals by common interests, curiosities and other purposes, virtually with no physical barriers. The authors elaborated on these technologies further by stating that:

> A key characteristic of Web 2.0 technology is the ability of the end user to edit or create information provided by another user. These second generation Internet technologies have opened new doors for educators, researchers and scientists to share information, ideas and even data to further our understanding of specific topics. The use of open access Web sites, blogs, podcasts and virtual realities can offer new opportunities to further CTE [career and technical education] more than at any other time in our history...Old tools like e-mail and face-to-face collaboration do not allow ideas to be fully shared and explored by multiple people. (Rhoades et al 2009: 25-26).

Partnership and collaboration are important elements in the nonprofit sector.

According to Donston (2008), the speed and ease of use is another benefit of Web 2.0 technologies. As such, it is worthwhile to examine the degree to which NPO directors find them to be time saving. Regarding the ease of use, Baumbach (2009: 13) elaborated further by stating, "These applications, collectively called Web 2.0 tools, enable interactivity and easily created content by contributors with no knowledge of programming. Using such tools, anyone can read *and* write on the Web, consuming *and* producing information".

A report by *Forrester Research* suggested a future growth trend for Web 2.0 technologies. The researchers claimed that, "...by 2013, investment in customer-facing Web 2.0 technologies will outstrip spending on internal collaboration software by nearly a billion dollars." (Donston 2008: 39).

3.4.11 Social Networking Sites

Social networking, a Web 2.0 technology, has been gaining popularity in recent years. Wasley (2009) explored the usage of social networking sites by NPOs. A study sponsored by the *Nonprofit Technology Network,* along with other companies, surveyed 980 nonprofit officials from organisations with annual budgets less than US $5 million. It was found that 75 percent of respondents reported that their organisations used *Facebook* -- this was the most popular of the social networking sites. Though it appears that there is a growing trend of users using *Facebook* to donate money, less than 2 percent of organisations have raised US $10,000 or more through this method. With a reported 350 million users worldwide (Whitcomb 2010: 1), *Facebook* is a global online phenomenon and NPOs are trying to utilise this large platform to communicate their message and to raise funds. One application within *Facebook* called "Causes", allows users to donate online to various causes and NPOs. In the two years of its existence, "Causes" had reported a total of US $8 million raised. What is fascinating is the rate at which it is growing. It was reported that between year one and year two, the average amount of daily donations received through the application had risen from US $3,000 per day to an estimated US $30,000-$45,000 in donations per day. The growth trend is quite substantial. Nevertheless, it was reported that at this stage most NPOs value the ability to form online relationships with volunteers and prospective donors, rather than immediately seeking funds (Wasley 2009: 13).

Amongst three of the major Web 2.0 giants – *Facebook, Twitter* and *MySpace*, data reported by *Comscore*, a web marketing research company, revealed some interesting statistics (Whitcomb 2010). *Comscore* reported that in December of 2009, *Facebook* had approximately 112 million unique visitors

to the site from the United States, whereas *MySpace* recorded 57 million and *Twitter* 20 million unique visitors (Whitcomb 2010: 1). Alyssa Ravasio commented on this trend further by stating that:

> I think Facebook is the most valuable internet commodity in existence, more so than Google, because they are positioning themselves to be our online identity via Facebook connect...It's your real name, it's your real friends, and assuming they manage to navigate the privacy quagmire, they're poised to become your universal login...I would almost argue that Facebook is the new mobile phone. It's the new thing you need to keep in touch, almost a requirement of modern social life. (Whitcomb 2010: 1)

Wasley (2009: 13) reported that in 2009, 41 percent of NPOs were using blogging, text messaging and other new technologies to raise funds, whereas in 2006, it was a mere 7 percent.

Web 2.0 technologies are not without their concerns. According to a study by *Ziff Davis Enterprises*, 41 percent of respondents reported that security problems were of serious concern and 35 percent were concerned with the potential leaking of sensitive information. Legal liabilities, protection of intellectual property, lack of management controls, potential to reduce end-user productivity, lack of technical controls and socially engineered viruses, were also listed as major concerns (Donston 2008: 40).

3.4.12 Blogs

The first definition of the term "blog" from the *New Statesman* (a British publication) in 1999 described it as, "...a web page, something like a public commonplace book, which is added to each day…If there is any log they resemble it is the captain's log on a voyage of discovery." (Perlmutter 2008: 11). In essence, blogging is a new form of human interaction and communication. Each day, more bloggers are using their blogs as a medium for news generation and communication with vastly varying degrees of formality. Blogging itself is an under-researched topic and as it is a relatively new phenomenon, the true impact of it is hard to measure accurately. Nevertheless, it is understood that blogs do provide internet users with information. This information may or may not be factually sound and in many cases is just pure opinion, but regardless, it is a source of information which many web users rely on for knowledge accumulation. Lowrey and Latta (2008) explored the topic of blogging via research conducted with six high-profile political bloggers in 2006. Through the use of an open-ended semi-structured interview the researchers found that specialisation of the scope of topic proved to be effective in maintaining a successful blog. The researchers found that developing this niche, in addition to regular postings consistent with the style and persona of the blogger, proved to be successful. Understanding readership and following web traffic closely was also shown to be useful.

3.5 Sustainability and Future Outlook

This section presents pertinent information relating to sustainability and future outlook. It includes topics of fundraising, finance and financial reporting, the 2008-2010 recession and the evolution of technology.

3.5.1 Fundraising

Smit (2005) conducted research on 216 South African NPOs and funding patterns, with particular attention to sustainability. In terms of projected outlook, more than two-thirds of NPOs felt that the organisation's future was not very secure (Smit 2005: 353). A further examination found that 75 percent of these organisations of questionable sustainability claimed that a lack of funds was the cause. Additionally, funding for operational costs was found to be difficult to secure, with a substantial 94 percent of organisations having reported that these particular costs were the most difficult to secure (Smit 2005: 354).

One form of online fundraising is sending donation requests via email to potential donors. An example of one such successful campaign was conducted by *Dartmouth University* in the United States as reported in the article, *Email Fundraising Still Works,* by Ann McClure (2009). The April 2009 e-mail campaign was aimed at donors who had not donated any funds in the past fiscal year. The campaign generated a significant US $200,000 (McClure 2009: 18). She argues that email campaigns can be successful if creative means are used. In this case, incentives were introduced – a weekly raffle of various prizes for contributing donors.

M.H. (2000) examined the topic of online and offline fundraising. A survey conducted by *Primary Research Group* focused on higher education institutions and their methods of fundraising. It was found that the average college in the study focused more on direct mail and phone campaigns than on online methods. However, it was found that schools also relied on campaign specific websites, office websites and e-newsletters to promote their cause. M.H. (2000: 18) reported that only 22 percent used listservs (email mailing lists) and 13 percent used banner ads. Interestingly, 83 percent of high endowment colleges used emails to request funds. Seventy percent of all respondents had general fundraising information available on their website. This data revealed that for this particular population, traditional offline methods were preferred over online ones. However, online methods are indeed being utilised by some. As there are substantial differences between the operations of higher education institutions and

NPOs, namely that NPOs tend to be smaller in size in addition to generally having a greater focus on fundraising, more online methods will be utilised.

Though research in the field is growing, there are some compelling statistics about internet fundraising. Kenix (2007: 79) draws upon research conducted by others in the field by stating the following:

> In a national survey of more than 1,000 non-profit professionals, nine out of 10 said that the Internet is an absolutely critical fundraising tool (Anon 2005c). In 1999, the estimated volume of fundraising achieved over the Internet was 24 per cent of non-profit funding (Stewart 1999). Only four years later, Internet fundraising increased to 48 per cent of total funds raised n the non-profit sector (Wallace 2004). Recent research shows that non-profit organizations are implementing e-commerce at a rapid pace (Boeder 2002).

Compelling statistics show clear signs that the role of the web for NPO fundraising has been growing. According to Dyrli (2006: 72), "The Internet is becoming the most powerful fundraising vehicle and offers countless opportunities". There is evidence however, that many NPOs are not using these tools to their fullest potential. Ingenhoff and Koelling (2008) studied 134 Swiss NPOs to determine to what extent they NPOs were utilising web technologies to interact with what they believed were the two biggest stakeholders – potential donors and the media. It was found that 96 percent of NPO websites offered information to users on how to donate money (Ingenhoff et al 2008: 69). However, only 16 percent provided information on how those contributions were spent. It was found that 27 percent of websites had an option for users to donate funds online. Additionally, 82 percent of websites had hyperlinks or headlines on the front page aimed at attracting donors. Interestingly, it was revealed that NPOs that were more dependent on donations provided more donor-related information on their websites than NPOs that were not as dependent on contributions from the public. The researchers concluded that NPOs overall are using the web for fundraising purposes effectively, but not to their fullest capacity. They advise that NPOs integrate various Web 2.0 functions as well, such as blogs, forums and chat rooms to further create a dialogue with the public. Furthermore, the researchers determined that NPOs suffered weaknesses with regards to providing resources for the media via their websites.

Kenix (2007) claimed that most NPOs in her study were able to receive donations via their website. She suggests that future research focuses on the perceived value of online fundraising methods.

For the purposes of this research, text messaging is categorised as an offline fundraising strategy. Though the nature of communication via a mobile phone could be construed as being online, the aim of the research is to distinguish between online sources involving the use of IT and web technologies, versus all other methods. The use of mobile phones in the NPO world was explored in a *Vodafone Group Foundation* and *UN Foundation* partnership research project, presented in the article, *Wireless Technology for Social Change: Trends in Mobile Use by NGOs*, by Kinkade and Verclas (2008). Case studies in South Africa, Kenya, Argentina and Syria, amongst other countries, were discussed. The research mainly focused on the communication and information elements of mobile phone usage amongst NPOs, including NPOs in South Africa delivering patient HIV/AIDS care using cellular devices, and facilitating communication in emergency situations in Peru and Indonesia. It was found in sum that the benefits of mobile technology usage for NPOs are numerous. A substantial 95 percent of NPOs found that it saved time (Kinkade et al 2008: 6). Additionally, 91 percent found that individuals could be quickly mobilised and organised using this technology. Applying these findings to the world of fundraising, it is assumed that organisations can use these mobile devices for the purposes of raising funds, which essentially is a communicative and information based endeavour.

Waters (2008) emphasised the need for NPOs to be transparent and accountable, particularly with regards to funders. The researcher discussed the promotion of digitising financial records by stating that:

> Fundraising organisations, such as the Association for Fundraising Professionals and Association for Healthcare Philanthropy, are encouraging its members to digitise their financial information to make it available to the general public. Additionally, this is becoming significantly easier as beginning in 2006 the IRS [Internal Revenue Service of the United States] is mandating that non-profit organisations use e-file [electronic tax filing system] to submit their fiscal information to the government; this file could easily be uploaded to the non-profit's web site as well. (Waters 2008: 83)

Currently there are no global statistics on how much money is being raised by NPOs via online methods. There are studies, however, which provide some. Laituri and Kodrich (2008) focused on natural disasters and how the online community has used online methods to respond to such disasters. The researchers stated that:

> The on-line disaster response community includes several key characteristics: the ability to donate money quickly and efficiently due to improved Internet security and reliable donation sites; a computer-savvy segment of the public that creates blogs, uploads pictures, and disseminates information – oftentimes faster than government agencies,

> and message boards to create interactive information exchange in seeking family members and identifying shelters. A critical and novel occurrence is the development of networks of government, NGOs, private companies, and the public to build rapid response databases of the disaster area for various aspects of disaster relief and response using geospatial technologies. (Laituri et al 2008: 3037).

The researchers reported that organisations are using web and other communication technologies to respond to such disasters as the 2004 Asian tsunami and the 2005 Hurricane Katrina in the United States. It is proposed that these types of technologies have strengthened the ability to serve victims of such disasters. However, the authors revealed some noteworthy topics of concern as follows:

> The disaster digital divide is evident; the Internet has uneven coverage worldwide. Accessibility to a reliable computer network and internet connections is dependent upon an overall, well-developed infrastructure. Most developing countries are technologically vulnerable and have problems with technical security. Developing countries lag behind in technical expertise. More fundamentally, most developing countries lag behind in computer literacy, if not basic literacy. Most Internet GIS [Geographic Information System] is in English. (Laituri et al 2008: 3045)

The above indicates that perhaps the NPOs surveyed from developed countries may have higher levels of IT and web sophistication than their counterparts. Online fundraising, blogging and other such web applications may not be integrated into the operations and strategies of NPOs from developing countries as much as those from developed countries.

3.5.2 Finance and Financial Reporting

It was worthwhile to examine the differences between nonprofit and for-profit organisations, with particular regards to finances and financial reporting. Granof (2001: 3-4) elaborated on these differences by stating that:

> Governments and not-for-profits differ significantly from businesses in ways that have profound implications for financial reporting. For the most part, governments and not-for-profits provide services targeted to groups of constituents, advocating a political or social cause, or carrying out research or other activities for the betterment of society. The objectives of governments and not-for-profits cannot generally be expressed in dollars and cents, and they are often ambiguous and not easily quantifiable…As implied by the designation *not-for-profits,* the goal of governments and similar organizations is something other than earning a profit. A key objective of financial reporting is to provide information about an entity's performance during a period.

Granof (2001: 3) further explained, based on this crucial difference, why simple measures of financial profitability are not as relevant in the nonprofit world by claiming that:

> The financial reports of governments and not-for-profits can provide information about an organization's inflows (revenues) and outflows (expenditures) of cash and other resources. As a general rule, an excess of expenditures over revenues, particularly for an extended period of time, signals financial distress or poor managerial performance. However, an excess of revenues over expenditures is not necessarily commendable…If the financial statements of a government or not-for-profit incorporate only monetary measures, such as dollars and cents, they cannot possibly provide the information necessary to assess the organization's performance.

Granof (2001) elucidated some very interesting points. In sum, when dealing with NPOs, a purely profit based analysis will not provide the necessary indicators for performance. Nevertheless, it is worthwhile to examine income and expenditure streams in order to understand the level of financial resources that NPOs are working with.

Meckin (2009: 11-12) commented on this difference between nonprofit and for-profit enterprises and the implications this has on financial analysis by stating that:

> Not every organization is created with the explicit intention of making a profit, for example government agencies and charities. Even in these cases, though, there is an implied profit target. Government agencies receive revenue from the government and are expected to use this money to provide services. This means that they want to balance their revenue and costs, so they do have a profit target: it just happens to be nil. Charities are often perceived as operating on similar principles, inasmuch as they also want to balance their revenue and costs…In fact, some charities like their revenue to exceed their expenditure so they have funds that can be used to develop the charity in the future.

Egan (2009: 1) additionally supports Meckin's (2009) views through her discussion on income to expense ratios as they pertain to NPOs by stating the following:

> An overall analysis of income to expenses will show whether or not the organization is on sound financial footing. Generally speaking, the income to expense ratio should be at least even (1.0)… As an organization grows, its expenses often outweigh the income, even during times when the income is growing. This often requires raising more capital than initially expected to handle the growth. Organizations may need to slow the growth rate to meet the rate of income growth.

In addition to the ratio of income to expense, Egan (2009) claimed that the ratio of income to the expense by programme, the ratio of income reserves to deferred expenses and the donor to budget ratios should be examined to assess the sustainability of NPOs.

Granof (2001), Meckin (2009) and Egan (2009) presented important ideas. Essentially, when analysing the financial information of NPOs, a purely quantitative approach applicable to typical businesses is not appropriate.

Crutchfield and Grant (2008) examine six practices of high-impact NPOs. The authors strongly affirmed that financial information can be deceptive in performance evaluation. High-impact NPOs are, "...not about the groups with the highest revenues or the lowest overhead ratios- those misleading metrics too often [are] used as a proxy for real accomplishment in the social sector." (Crutchfield & Grant 2008: 11).

Fitz-enz (2009) elaborated further on the weaknesses of using financial measures alone to evaluate performance. The author argued that accounting practices only examine the past financial status and history of an organisation and suggested that a *balanced scorecard* or *economic value added* approach would enable a more forward-looking approach to understanding performance and future trends. A projected financial return was proposed as being more valuable to organisations, which he believed must integrate a customer-centred approach. In the case of NPOs, the customers can be seen as any external stakeholders including, but not limited to, beneficiaries and funders. He contended that an analysis of human interaction as it pertains to the organisation should be conducted and understood and coupled with analytic software, can result in greater gains for an organisation. Furthermore, he claimed that though financial measures have a level of global standardisation, there is no standard measure for the value of human capital. As a solution, he proposed the concept of developing, "...generally accepted human resources practices" (Fitz-enz 2009: 14), in order to more adequately gauge performance.

3.5.3 2008 – 2010 Recession

Maria Di Mento (2010: 1) reported that 28 percent of wealthy Americans have reduced the amount they typically give to NPOs due to the financial recession, according to a survey conducted by *PNC Wealth Management*. Nevertheless, 55 percent of respondents reported that they still have a responsibility to donate funds to NPOs. Additionally, she referenced a report created by the online philanthropy portal, *The Chronicle*, which listed the total donations given per year by America's top donors. In 2008, US

$15.5 billion was given by these donors, with a dramatic decline to US $4.1 billion given in 2009 (Di Mento 2010: 1). These statistics revealed that although the recession has indeed affected the amount of total giving to NPOs, the desire to give remains.

The importance of social psychology on the future of the current economic recession was explored by Shiller (2010). He claimed that if individuals collectively view the recession as getting better, it tends to do so, and likewise for the converse. Shiller (2010: 1) reported in May 2010 that there has been three consecutive quarters of growth in the gross domestic product, which is a positive sign that economic conditions should get better in time. Nevertheless, the author made note of the influence of mass psychology, and stated that in times of a delicate economy, it is important to examine overall confidence, versus purely statistical measures.

Barton and Wallace (2010) argue that online giving benefits NPOs, especially during a recession. In an annual survey conducted by *The Chronicle on Philanthropy,* it was reported that online giving in the United States had grown by 5 percent (Barton et al 2010: 1).

A study conducted by *Charities Aid Foundation* (2009) examined the effect of the current economic recession on 440 nonprofit organisations in Russia. The survey found (Charities Aid Foundation 2009: 9) that NPOs felt that income reduction, growth of service demand, increase of expenses, reduction in staff remuneration and reduction of staff members were all either currently being faced or would potentially be faced in the next year due to the recession. Interestingly, 56 percent (Charities Aid Foundation 2009: 11) of NPO respondents stated that their organisations would "open up new technologies" in attempts to promote themselves further.

3.5.4 Evolution of Technology

Yourdon (2002) provided a clever narrative about how technology has transformed society over the years. Yourdon (2002: 198) stated:

> I was staggered at the thought of anyone getting a hundred email messages a day [pre-1992]; in 1992, I was deliriously happy if I got two or three email messages a day. But as you can imagine, if the same question about the most important tool was raised today, the answer might well be "World Wide Web" rather than email; by contrast, the answer might have been "Fax machine" in 1987, "PC workstation" in 1983, "Online terminal" in 1976, and "My own telephone on my desk" in 1965.

He further explained that when managing high-intensity internet projects, it is generally never just one piece of technology that is the driver, rather it is a mixture of various technologies. In addition, typically it is a heterogeneous work team that works on a project, and thus there are many factors to consider in order to achieve success. It is fascinating to examine how technology has evolved, and how humans have evolved in relation to the shifts in technology.

3.6 Conclusion

Noteworthy trends and themes emerged through this comprehensive review of relevant literature. A comparison to either confirm or negate these findings will be presented in the "Findings and Discussion" chapter. It is worthwhile to reiterate that this study is the first of its kind in the sense that it did not emulate any past research that has been conducted. As such, this review of literature was worthwhile in gaining a deeper understanding of related topics, while simultaneously paving a new way forward to gain new knowledge.

The following chapter will present the research methodology for this study, and will discuss methodological elements including research design, sampling, data collection, data analysis, assumptions and limitations.

Chapter 4

Research Methodology

Contents:

4.1 Introduction

The Research Methodology chapter will explore key features pertaining to the design of the research. The study population, sampling technique and sampling size will also be presented. This will be followed by a description of the data collection process. Next, the methods involved in the analysis of the data will be examined. The central assumptions related to the study will be portrayed. Fundamental limitations involved with the overall methods of research will also be discussed. Lastly, key ethical considerations will be presented.

4.2 Research Design

The research utilised a quantitative research methodology. This type of methodology is born out of the positivist epistemology. According to Babbie and Mouton (2001: 27), positivism is rooted in three central theses – "…an empiricist theory or conception of knowledge; a naturalist interpretation of objectivity; and a Humean conception of causality." Empiricist theory essentially states that all knowledge is experiential and hence can be experienced through observation. Knowledge must be observed through the senses in order for it to be validated as being real or true. Secondly, a naturalist interpretation of objectivity refers to the notion that knowledge is accumulated in an objective fashion, and hence true knowledge is universal and not merely subjective. The natural sciences are characterised through the discovery of knowledge through neutral experiments, as is the case here. Lastly, a Humean conception of causality relates to the causal relationship between variables that are observable and have been repeated in nature. This sense of regularity is a cornerstone of this conception. The aforementioned tenets of the positivist epistemology strongly correlate to a methodology that emphasises "…experimental control, structured and replicable observation and measurement, quantification, generalization, and objectivity (understood as the objectifying and neutral attitude of an outsider)." (Babbie & Mouton 2001: 27).

Based on the aims and objectives of this type of social science research, a quantitative research methodology was the most suitable. The quantitative paradigm is appropriate in that constructs can be quantified. Furthermore, variables can be measured and analysed quantifiably. Lastly, control can be exercised to limit extraneous variables and to minimise the possibility for error in the design phase of the research.

Another key point of relevance concerns the nature of the object of inquiry. The status and evolution of technology, coupled with the varied nature of NPOs throughout the globe, along with other areas of related research, can be considered to be difficult to easily theorise about. This is mainly due to their dynamic nature and relatively short history, as it pertains to this study. As prior research is minimal, and thus, prior theoretical frameworks virtually nonexistent, it is valuable to examine these topics and associated relationships using a controlled and calculated method. Social research investigates topics that are often times difficult to study through quantitative means. Nevertheless, it is aimed that through the adoption of a quantitative research methodology, significant relationships, trends and theories can be discovered. This is the preferred method, versus a qualitative approach that would have likely resulted in the discovery of evidence that cannot be easily generalised.

There are numerous other benefits of a quantitative research methodology. One is that larger samples can be obtained at a relatively low cost. Questions are standardized and thus can be analysed more objectively. This method is also ideal for succinctly asking about opinions and attitudes. Quantitative methods guarantee anonymity. Additionally, it is more suitable for probability sampling and thus findings can be generalised. It is easier to code close-ended items and respondents can answer at their own pace when it is convenient for them. A quantitative study is also easier to replicate and multiple topics can be addressed in one survey. (Nardi 2006).

Furthermore, quantitative research is both exploratory and descriptive in nature. In terms of the exploratory nature, a quantitative design allows for questions to be investigated with regards to key factors and variables. In other words, this type of research focuses on identifying factors that contribute to a given reality, hence answering the question of why something is the way it is. This detailed and scientific approach was deemed to be most valuable for this topic of inquiry. In terms of the descriptive nature, a quantitative design is characterised by its ability to clearly portray or describe a given situation in concrete, numerical terms. For these key reasons, it was important and valuable to employ a quantitative methodology for this study.

4.3 Population and Sampling

4.3.1 Population

As the study intended to be a global exploration, both developed and developing countries were chosen to participate. One major criterion was that the country must be English speaking (English as one of the official languages). Additionally, countries were chosen which span the globe on various continents to reflect the global regions where they are found, in addition to other characteristics they may share which are representative of the entire world as a whole. The following three developed and three developing countries were chosen specifically:

Australia (developed);

Canada (developed);

United Kingdom (developed);

India (developing);

Pakistan (developing); and

South Africa (developing).

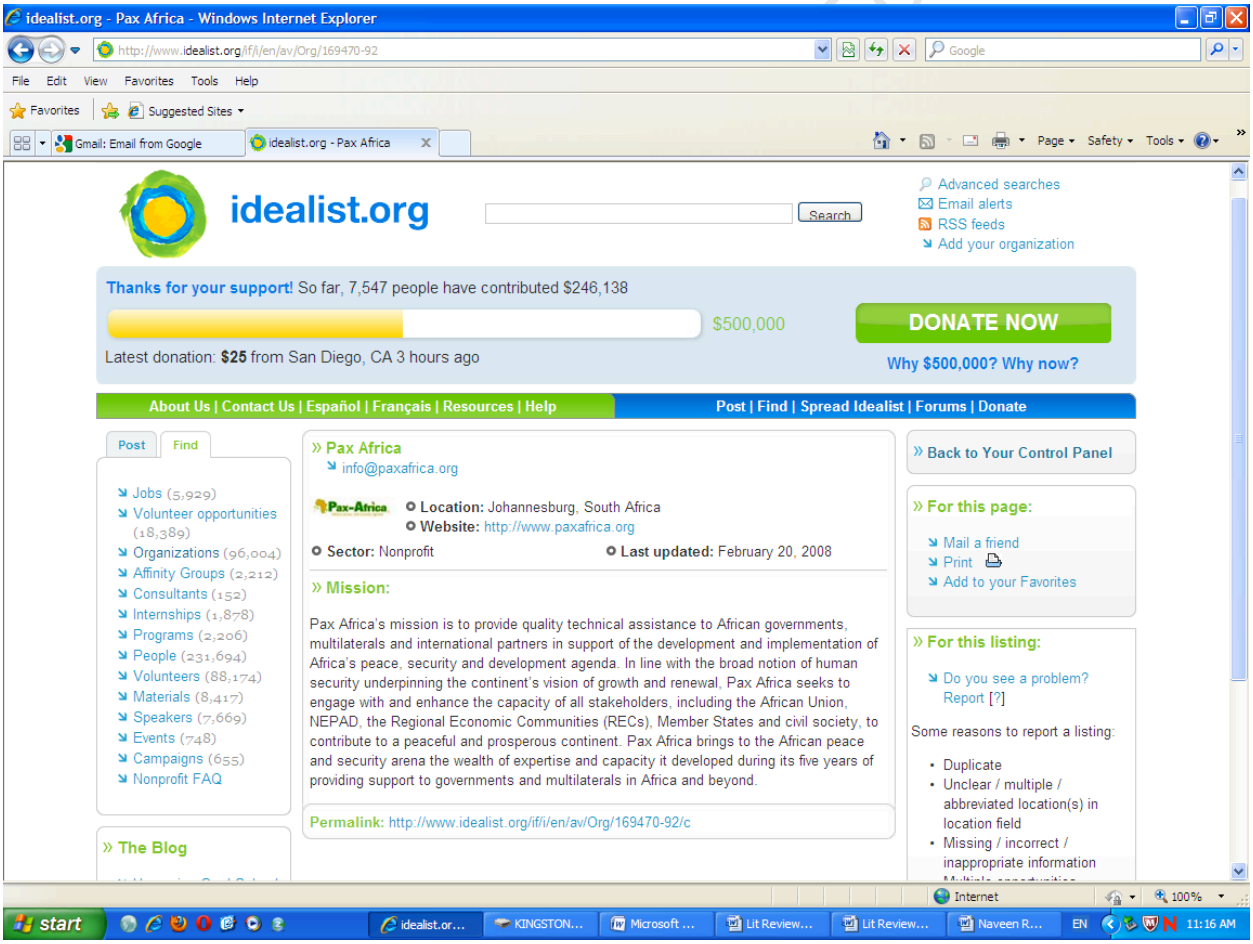
Idealist.org was chosen to provide a suitable population of NPOs as it is arguably the most comprehensive global network of NPOs online. According to their website (www.idealist.org), more than 95,000 NPOs from over 180 countries have established profiles on *Idealist.org*. There is no cost to join the network, hence making it an ideal choice in terms of inclusivity and open access for NPOs of various financial capacities. Furthermore, *Idealist.org* claims to have over 500,000 members with an additional 50,000 unique visitors to its site per day.

With 14 years of operation, *Idealist.org* is the longest standing and likely the most interactive network of NPOs around the world. The site provides resources for NPOs, NPO managers, job seekers, volunteers and other parties. Monson (2009) reported that *Idealist.org* had made PC Magazine's top 100 websites of 2009. Over the course of the years 2000 to 2006, Ami Dar, *Idealist.org's* Executive Director, was named on five occasions by the *NonProfit Times* as one of the top 50 people of power and influence in the nonprofit world. According to the *Idealist.org* website, the site has won awards and has been given recognition for its work in building communities, offering volunteer and job opportunities and the promotion of public service amongst many other works, by such entities as *Forbes Magazine*, *CNET.com*

and the *Webby awards*. Additionally, press coverage for *Idealist.org* has been featured in the *Wall Street Journal, the New York Post, the New York Times, Reader's Digest* and Oprah Winfrey's *O* magazine, along with several others. In sum, the far-reaching global online network that *Idealist.org* provides, coupled with its reputation as being in the top of its field were strong motivating factors for deciding to use the website to draw the research population from.

In order to obtain a relevant population, only NPOs that had updated their *Idealist.org* profile since 1 January 2007 were included in this study. Furthermore, NPOs had to have had an organisational website listed on their *Idealist.org* profile page. An example of an organisational profile can be seen in Image 4.1.

IMAGE 4.1: IDEALIST.ORG SCREENSHOT – NPO PROFILE EXAMPLE



The population thus consisted of the directors of NPOs from the six countries mentioned and who were currently listed on *Idealist.org.* This numbered 2, 016 organisations.

4.3.2 Sampling Technique

A probability sampling technique was employed for this research. It was important for the sample to be representative of the total population. It was determined that an appropriate sample would be drawn from various countries that represented a cross section of continental location and stages of development. Furthermore, all members of the population must have had an equal chance of being chosen for the sample. In order to satisfy all key elements, a sampling technique was utilised to maximise results and minimise errors.

4.3.3 Sampling Size

The entire 2,016 organisations that constituted the study population also initially also constituted the sample. However, not all such organisations were surveyed for reasons that will follow.

As can be seen in Image 4.1, *Idealist.org* organisational profiles provide a contact email address, location, website and mission, amongst other variables. Thus, every NPO that had provided a website listing and had updated their profile at least once since 1 January 2007 were included, with every one having had an equal chance of being selected for the study.

A database was created that contained the details (name, email address and website) of the 2,016 NPOs. While this was a tedious and time-consuming exercise, it proved to be crucial in ensuring the accuracy of the data obtained from *Idealist.org*. Of the total 2,016 organisations, a considerable 287 email messages that were sent out were initially rejected. In other words, these email addresses provided on the *Idealist.org* profiles were no longer active. Organisations in this category were likely to be inoperable, for instance, if they had to close operations due to the 2008 recession. Some may have evolved into other organisations without indicating this information on *Idealist.org*. This high number of email rejections was interesting in that it reflected a notion that the NPO sector is ever-changing with regards to organisational continuity. Of the initial 2,016 emails sent, another 267 were also unable to reach a NPO director. This was due to various reasons. Either the email address provided belonged to a person who was "out of the office" during that time, or the person responded that they are no longer affiliated with the organisation and no longer maintained contact with the organisation, if it did still exist. As this segment of 554 NPOs was immediately unable to have any chance of selection for the population, they were removed from the sample, reducing the final sample size by 27 percent to 1,462 NPOs.

Despite this reduction, the sample provided a good representation of developing and developed countries, 518 and 944 NPOs respectively. Table 4.1 displays the number of NPOs that formed the study sample by country.

TABLE 4.1: NUMBER OF STUDY SAMPLE BY COUNTRY

	Australia	Canada	UK	India	Pakistan	South Africa	TOTAL
Number of Requests	112	412	420	361	39	118	1,462

4.4 Data Collection

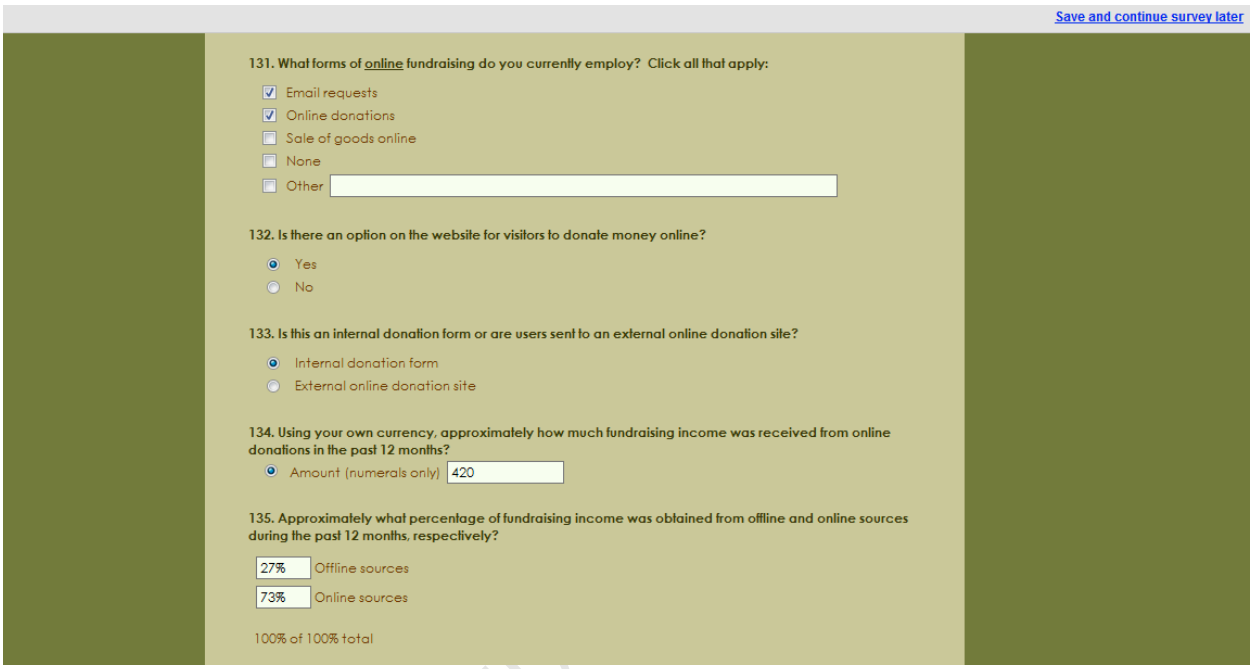
4.4.1 Surveying Tool

Survey Gizmo, an online surveying tool was used to create the survey and to collect information. *Survey Gizmo* was chosen due to its flexibility in question types and styles, its ability to export collected data directly into *Microsoft Excel* and its excellent reputation as a leader in the online survey field. According to their website (www.surveygizmo.com), *Survey Gizmo* boasted a worldwide presence, with members in 64 countries and surveys being conducted through their site in 129 countries. Customers range from all sectors and sizes, and include *Disney*, the *American Cancer Society*, *Adobe, Apple* and dozens of other world-class universities, NPOs and *Fortune 500* companies. Furthermore, an analysis of other online survey software revealed that *Survey Gizmo* had the most available features. Additionally, *Survey Gizmo* was applauded through reviews as having a friendly and knowledgeable support staff and even offered a US $159 per month account for free due to the fact that this research was for academic purposes.

The ease of use and the multi-functional capacity of *Survey Gizmo* made it the ideal choice for this study. First, questions were individually entered into the software. Numerous question types were available with various presentation styles as well. This enabled questions to be portrayed appropriately, in addition to having data captured in the best possible way. Questions were then linked systematically to ensure that respondents would not have to answer redundant or inapplicable questions. Possible answers were also coded in such a way that the data could be captured neatly and clearly, therefore resulting in a more fluid analysis process. Further, validations were set up on the entire survey so that answers would remain consistent and legitimate. Once the framework had been designed in full, the survey was published to the web, thus producing a web link that could be copied into any web browser.

All data entered into the system was stored online centrally with *Survey Gizmo.* At any time, this data could be examined, saved or exported into various formats for download. Another benefit of *Survey Gizmo* was that it allowed respondents to save progress and continue at a later time if they so desired. Image 4.2 portrays a screenshot of *Survey Gizmo*.

IMAGE 4.2: SURVEY GIZMO SCREENSHOT



It is evident through Image 4.2 that the *Survey Gizmo* interface is easy to use, logical and aesthetically pleasing.

4.4.2 Survey Instrument

A multi-section web-based survey was employed to collect data from NPO directors. The majority of questions were close-ended with some offering a small space for directors to add additional comments or to offer alternatives to available responses. Most of the questions and statements simply required the ticking of an appropriate box or adding numerical values. The survey had the following sections: *Biographical Information, Organisational Information, Information Technology (IT) Usage and Analysis, Web Technology Usage and Analysis, Sustainability,* and *Future.* The survey can be found in Appendix IV. Furthermore, the link to the survey online is still active at present. To view the online survey directly

and to better understand the intricacies of the process, please visit the following link: **http://www.surveygizmo.com/s/237267/global-nonprofit-research**

4.4.3 Venue

As this study was conducted online via a web-based survey, there was no particular venue in which the data was collected. NPO directors simply completed and submitted the survey via the web. This allowed barriers of location to be removed and allowed for research on the global level. In considering the entire globe as the "venue" of sorts, it was worthwhile to examine from a pictorial perspective, where respondents were completing the survey from. Each blue dot on the image represented where a respondent, or more than one if it is the same city or general area, had completed the survey. It is interesting that five blue dots were found in the United States and one in South America. In these cases, the respondents were likely in that particular area for either personal or professional reasons at the time of survey completion. For example, one respondent from South Africa communicated via email that she was visiting the United States on a work related fundraising project at the time of survey completion. Typically however, it is assumed that the area in which the dot appears is likely where the organisation's office is based. The representation is portrayed in Image 4.3.

IMAGE 4.3: GLOBAL REPRESENTATION OF SURVEY RESPONDENT LOCATIONS

4.4.4 Survey process

A web-based survey was employed via email for NPO directors to complete and submit. The email contained a link directing respondents to the survey online. The original text of the email message sent between 10 March and 12 March 2010 can be seen in Appendix I. A follow-up reminder email was then sent on 25 March 2010. This email reminded NPO directors to complete the survey, in addition to extending the original deadline by two weeks. This can be seen in Appendix II. A second follow-up email was sent on 15 April 2010, extending the previous close date by two weeks. The second follow-up email can be seen in Appendix III. The first follow-up email was found to be the most effective, generating an improvement of 40 percent more responses after the email was sent. The second follow up was less effective, but still valued. The second follow-up resulted in approximately five percent more completed submissions. Due to the time-consuming nature of sending individual requests, the follow-up emails were sent out in bulk. However, the initial email requests sent out to NPO directors were personalised with the name of each NPO both in the email subject line, as well as in the body of the message. Due to demands on NPO directors, an online survey was believed to be the most effective tool to utilise.

4.4.5 Issues Related to Web-based Surveys

There were several issues to consider with regards to web-based surveying. Gaiser and Shreiner (2009: 70) assess some of the benefits of this method and surrounding issues:

> Web technologies make it possible to publish surveys with a potentially very large target audience. Other advantages of web-based surveys are reduced time and costs for data collection, reduction in transcription errors, and the possibility of more sophisticated interactions…One of the major benefits of going online to conduct your survey research is access to a very broad population. Given the need for large samples, researchers often look to the internet with its possibility of access to a very large population. Be warned, however, that this promise of accessing a large population can be illusive. Many researchers find that response rates can be lower than expected (Witmer, Colman & Katzman, 1999), even though the ease of taking the survey may lead to an expectation of higher return rates. Some suspect that question and instrument length may contribute to low return rates, mindful that attention spans online have a tendency to be short due to the nature of the environment.

Furthermore, Sheehan (2001: 1) discussed the time and cost reduction benefit of email and web-based surveying in greater detail:

> E-mail surveys have demonstrated superiority over postal surveys in terms of response speed and cost efficiency. Sheehan and McMillan (1999) estimated that, in studies where both mail and e-mail were used to deliver surveys, mail surveys took 11.8 days to return and e-mail surveys were returned in 7.6 days. E-mail provides an easier and more immediate means of response (Flaherty, et al., 1998). The cost benefits of e-mail have also been highlighted by researchers, with the cost of an e-mail survey estimated to be between 5% and 20% of a paper survey (Sheehan & Hoy, 1999; Weible & Wallace, 1998). The cost savings are derived primarily from the reduction and/or elimination of paper and mailing costs in an e-mail survey. Watt (1999) provided evidence that the costs of e-mail and WWW surveys decrease significantly as the sample sizes increase.

The ease of use, time and cost saving benefits, and ability to access large global populations were all reasons for employing a web-based survey.

Regarding the generally low response rates expected from web-based surveying, Sheehan (2001) argued that there are various factors to consider, in addition to ways to maximise response rates. These include survey length, respondent contacts, issue salience, design issues and compensation.

Sheehan (2001) claimed that as the length of surveys increases, response rates decrease. Due to the nature of this research and the numerous areas examined, it was difficult to maintain a relatively short survey. Nevertheless, careful time and consideration was taken to only include questions that would be relevant for the study. The general time constraints on directors of NPOs was taken into consideration, and as such, it was expected that the response rate overall would be relatively low. Therefore, the sampling size was designed to be large enough to ensure that appropriate data could be collected.

It was argued that respondent contacts influence response rates for both mail and web-based surveys. Namely, Sheehan (2001: 1) referenced research conducted by Sheehan and Hoy (1997) that found that response rates increased by 25 percent after a reminder message was sent via email. Hence, it was worthwhile to follow this finding and send follow-up reminders.

She also contended that issue salience furthermore influenced response rates. Specifically, it was asserted that if the topic of the survey has a noticeable correlation to the means of executing the survey, there would be greater responses received. It was believed that NPOs with websites would be keen to participate in the study in part due to the implementation of a web-based survey.

An additional point of consideration was the length of the title of the email request in the subject line. PeoplePulse (2010: 1) commented on research conducted by the email monitoring company Return Path. This research found that by utilising 49 or less characters in the subject line resulted in 12.5 percent greater returns than those with 50 or more characters. Furthermore, it was noted that click-through rates were 75 percent higher for subject lines of 49 or fewer characters than those that had 50 or more characters. This finding was implemented by only writing "Research Request for…" and the NPO name in the subject line. It was felt that by including just a few words and the organisational name, potential respondents would be more likely to firstly click through to actually open the email, and then to click on the link to the survey and complete it.

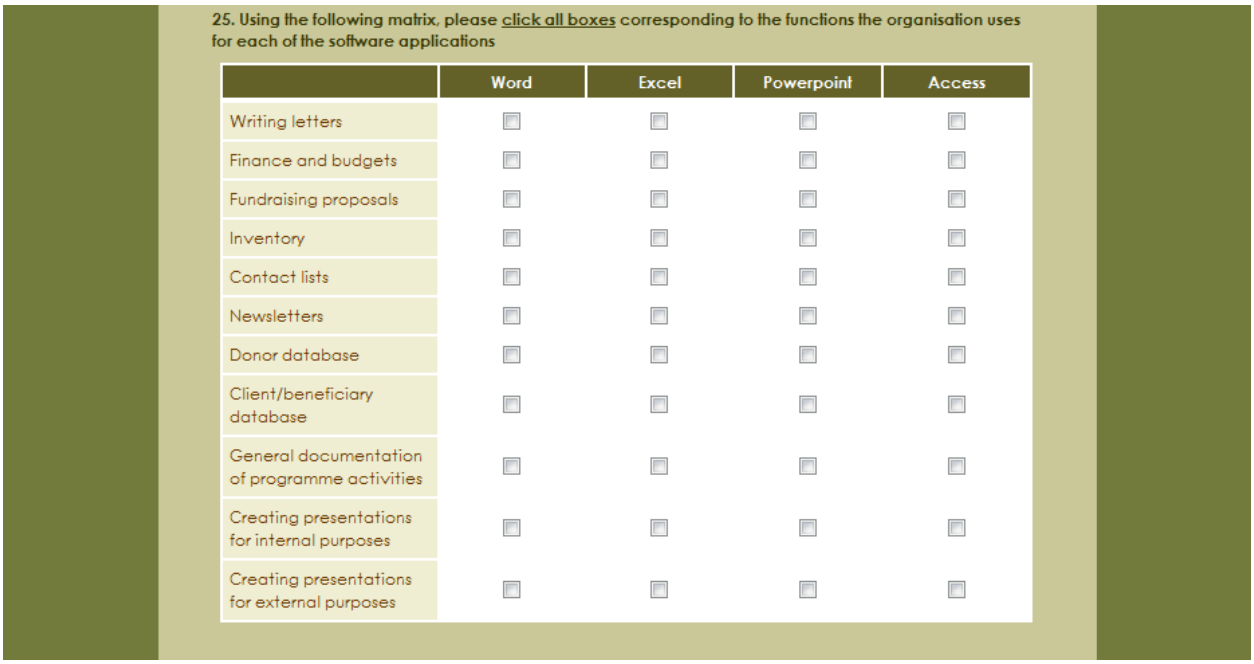
Marcussen (2001) found that low response rates were usually unavoidable when dealing with international audiences and when the researcher has never met the potential respondent. Specifically, in Marcussen's (2001: 1) study, nearly 8,000 requests were sent to an international email listserv, and received a response rate of just 2.2 percent. He argued that this did not indicate a poor study, but rather reflected the fact that no personal invitations were sent, there was no previous meetings with potential respondents, the scope was global and that there was no incentive given. He further revealed that a response rate of 11.8 percent should be expected if a personal request is given. As it was not possible to get all of the names of directors for NPOs in this study, only the organisational name was included to add some level of personalisation. An additional two percent could be added to total responses received if an incentive is given, and by using a web-based survey versus an email attachment would yield a 0.4 percent improvement in response rates. He additionally presented research by Dillman et al (2001) who reported a 13 percent response rate for a web-based survey, only after a personal phone call was made to potential respondents. Due to the high volume of potential respondents and the costs associated with making international phone calls, it was not possible to contact potential participants via phone calls prior to sending out the participation requests.

PeoplePulse (2010) presented a case study by the computer giant IBM, which assessed business-to-business web-based surveys conducted by IBM between 2000 and 2001. The findings revealed that by reducing the number of questions, response rates improved. Furthermore, sending the survey mid-week and mid-afternoon was advised to maximise response rates. For the most part this was attempted, along with coordinating the local time of the particular country in which the NPO was located. Additionally, IBM had found that sending one reminder email resulted in 15 percent more

responses. Lastly, it was discovered that allowing some open-ended questions or options is more appealing to the respondents. The example was given of allowing respondents to type in an alternative answer, instead of simply indicating "other". This technique was utilised in all cases where there was an "other" option, and several of the typed answers to these questions revealed discoveries that would not have been made if this option was unavailable.

Design issues additionally contribute to the level of response an online survey will receive (Sheehan 2001). The design of the survey was made in a way that it was believed to be appealing for potential respondents. This included the utilisation of a neutral yet attractive colour scheme, font style and size, page layout, and question styles. For example, when asking about the nature of *Microsoft Office Suite* usage, a question matrix was presented. Image 4.4 provides a screenshot of this particular question.

IMAGE 4.4: MICROSOFT OFFICE SUITE QUESTION MATRIX



25. Using the following matrix, please click all boxes corresponding to the functions the organisation uses for each of the software applications

	Word	Excel	Powerpoint	Access
Writing letters	☐	☐	☐	☐
Finance and budgets	☐	☐	☐	☐
Fundraising proposals	☐	☐	☐	☐
Inventory	☐	☐	☐	☐
Contact lists	☐	☐	☐	☐
Newsletters	☐	☐	☐	☐
Donor database	☐	☐	☐	☐
Client/beneficiary database	☐	☐	☐	☐
General documentation of programme activities	☐	☐	☐	☐
Creating presentations for internal purposes	☐	☐	☐	☐
Creating presentations for external purposes	☐	☐	☐	☐

Through the employment of easy to use and visually pleasant question styles such as this, it was believed that respondents could provide data more quickly and easily.

4.5 Data Analysis

Data was collected using the tools of *Survey Gizmo* and was exported into *Microsoft Excel* format. Questions and responses were coded and organised in various ways as to draw meaningful correlations

between topics. Specifically, spreadsheets were created to compare data by country, by financial indicators and in other relevant ways. Statistical analysis, cross-tabular analysis, graphs, tables and other methods were employed to further analyse and display the data. The utilisation of graphic and verbal descriptions allowed for a more complete understanding of the findings. Through a comprehensive data analysis process, a wide range of meaningful discoveries were made.

As the study was quantitative in nature, a significant portion of the data is numerical. Typically, figures are expressed rounded off to the nearest whole number. A method of rounding up numbers equal to or greater than .5 was implemented. In some cases, when it seemed appropriate to provide a more specific figure, the tenth decimal place was displayed. This was primarily in instances when figures were quite small and it was more revealing to present the information to the tenth decimal place. In these cases, a rounding up method was also employed. Thus, a number equal to or greater than .05 was rounded up.

All financial information is presented in United States Dollars, as this seemed the most universal currency for the six countries that participated in the study. In order to have balanced conversion rates, exchange rates from the date of the first survey submission on 10 March 2010 were averaged with exchange rates from the date of the final survey submission on 1 May 2010. These figures were then used to convert all financial information provided by respondents, based on their reported currency used.

A variety of key trends emerged through the analysis process, and findings were presented and discussed thematically. From the findings, valuable conclusions were drawn and appropriate recommendations were provided.

4.6 Assumptions

There were several key assumptions that were relevant to the study. First, it was assumed that NPO directors had the technological ability to complete the survey without any major difficulties. Furthermore, it was assumed that NPO directors had the ability to answer most if not all of the questions with minimal external help from co-workers if needed. It was also assumed that there were links between the level of IT and web usage and sophistication to organisational sustainability. Lastly, it was assumed that most NPO directors would be willing to share key pieces of financial information.

4.7 Limitations

There were several limitations to the study. Firstly, the research was limited in that it only included NPOs from English speaking countries. It would have been fascinating to examine NPOs in countries that do not have English as an official language, yet still fit the other criteria for acceptance to the study.

Secondly, The research was limited by including only NPOs from the *Idealist.org* network. However, the integration of other networks of NPOs could have created some bias amongst the data, particularly if other networks required a paid subscription for their membership.

Thirdly, the research was limited by the use of a web-based survey, in that response rates with this medium tended to be low.

A fourth limitation was the relatively impersonal nature of interaction between the researcher and the researched subjects. However, opportunities to contact the researcher were provided and several respondents did in fact engage in dialogue with the researcher in order to ask questions, give feedback and otherwise communicate. Furthermore, attempts were made to include the organisational name when possible when making initial contact with NPOs, in an effort to establish a somewhat more personal greeting. The benefit of the typically impersonal nature of quantitative research is that biases are minimised.

Next, the research was limited by the inability for respondents to skip questions, which may have deterred some participants from completing the entire survey and submitting it. In many instances, respondents did have the opportunity to either type in an alternative option or to report that none of the available options were applicable to them and/or their organisations.

The research was limited by including organisations who had last updated information on *Idealist.org* no earlier than 1 January 2007, in that some of the organisations who had perhaps updated their profile last in 2007 or 2008 may not longer be in existence anymore, or the individual responsible for creating the profile and/or making updates to *Idealist.org* may not have be associated with the organisation anymore. This may be reflected in the rates of response, but there was no feasible way of determining this before sending out the research requests. Furthermore, some organisations may have updated their information prior to 1 January 2007 and though not as active on the *Idealist.org* network, still are in operation and have an active website. This segment of the *Idealist.org* population is not represented

in the study. It was assumed, however, that most NPOs belonging to *Ideaslit.org* would have updated their information at least once since 1 January 2007.

Finally, the research was limited by the potential inaccuracy of financial data being reported. Respondents were asked to report these figures, and either intentionally or unintentionally, these figures may be inaccurate, resulting in misrepresented data.

4.8 Ethical Considerations

Several ethical issues were important to consider. Firstly, confidentiality of responses was a significant ethical concern and all steps were taken to ensure that responses would not be accessible to any parties not directly involved in the research. Furthermore, only the researcher had password-protected access to all data.

Next, anonymity of respondents was a significant ethical concern and all steps were taken to ensure that respondents remained anonymous. No respondent names were requested or disclosed. Additionally, no respondent organisational names were requested or disclosed.

Lastly, the researcher maintained high ethical standards both personally and academically for the purposes of this research. All information including email lists, financial information, personal details and all other sensitive items were especially treated extremely carefully. Furthermore, no attempts to corrupt or misrepresent data were taken by the researcher in order to ensure a meaningful piece of research.

4.9 Conclusion

The Research Methodology chapter examined key features pertaining to the design of the research. These included the study population, sampling technique, sampling size, data collection and analysis process, central assumptions, limitations and ethical considerations. All of these elements were integral to the overall design and implementation of the study. The next chapter will focus on the findings of the study and will discuss their implications.

Chapter 5

Findings and Discussion

Contents:

5.1 Introduction

This chapter will present and analyse the study findings. Data will be presented thematically, both in written and visual forms. The discussion will serve to integrate the findings of this study with that of others in order to contribute to the body of knowledge in this field. As many of the research questions have never been examined on the global level before, it is aimed that the information contained in this chapter will better inform the reader's understanding of the relationships between information and web technologies and NPO operations, their sustainability and growth.

Findings will be discussed in terms of total responses (*N*), responses from developed countries (n_1) and responses from developing countries (n_2). The values are as follows: N=147, n_1 = 78 and n_2 = 69. For ease of presentation, the term "developed countries" was chosen to represent n_1 and the term "developing countries" was chosen to represent n_2.

5.2 Response Rates

The total response rate was just over ten percent. Interestingly, South Africa had the highest response rate, perhaps due to the fact that the research was being conducted from the University of Cape Town, based in South Africa. It was also noteworthy that although more requests were sent to countries from the developed world, the response rate amongst them (8.2%) was significantly lower than the response rate amongst countries from the developing world (12.8%). These rates, though seemingly low, concurred with findings by Sheehan (2001), Gaiser and Shreiner (2009) and Marcussen (2001), who all detailed various factors that contribute to typically low response rates for web-based surveys. Hence, the response rate of approximately ten percent is in alignment with the norm. Table 5.1 portrays the data on response rates for this study.

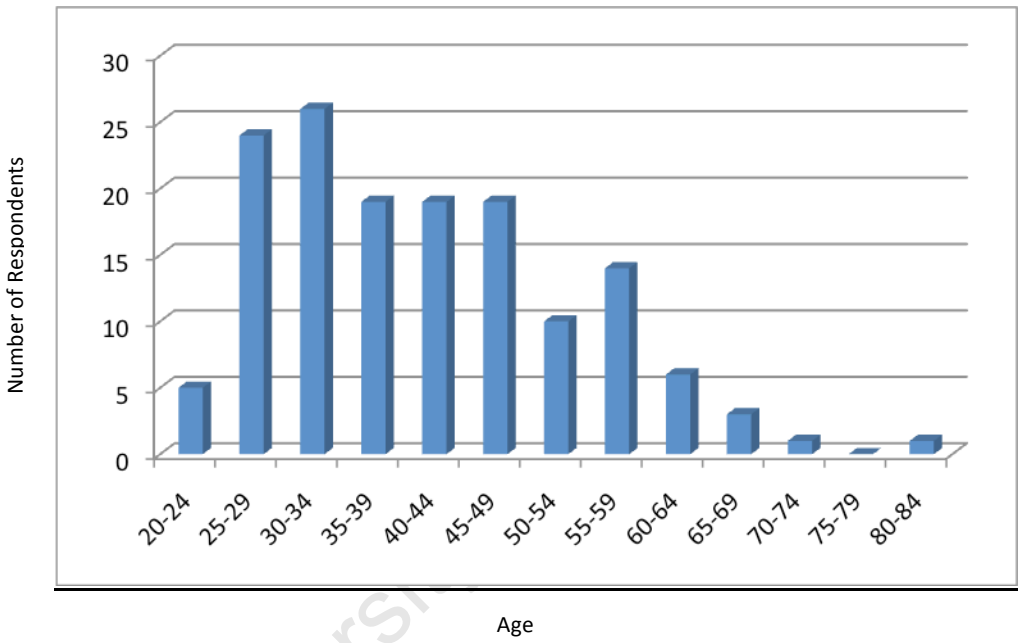
TABLE 5.1: RESPONSE RATES

	Australia	Canada	UK	India	Pakistan	South Africa	TOTAL
Number of Responses	9	30	39	47	4	18	147
Number of Requests	112	412	420	361	39	118	1,462
Response Rate	8.04%	7.28%	9.29%	13.02%	10.26%	15.25%	10.05%

5.3 Biographical Information

The average age of respondents was 41 years old. Interestingly, there was a wide range of 20 to 80 years of age for NPO directors. This reflects that the NPO sector was not isolated to a single age group. Furthermore, 50 percent (74) of respondents were under the age of 40. Graph 5.1 displays the age ranges of the respondents.

GRAPH 5.1: RESPONDENT AGE RANGES

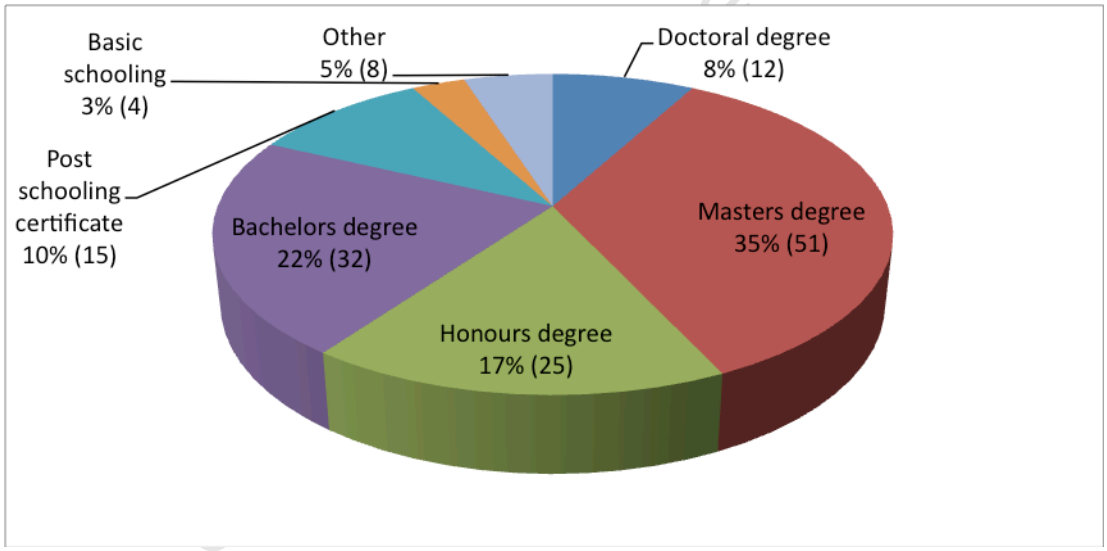


Approximately 60 percent of respondents were male and 40 percent were female. It is interesting to note that amongst the developed countries there was an even breakdown of 50 percent male and 50 percent female NPO directors, whereas in the developing countries, 71 percent were male and just 29 percent were female. Further analysis indicated that South Africa had nearly an even match of male and female NPO director respondents, while India and Pakistan showed the biggest disparities. In India, 21 percent of NPO directors were female whereas in Pakistan there were zero female respondents. This perhaps can be attributed to a cultural phenomenon, in that the developing world may be more male dominated in positions of higher authority or power.

On average, respondents served as director for 6.3 years. Figures ranged from new directors having served less than one year to seasoned directors having served up to 26 years in their current role.

In terms of educational background, respondents reported a wide range of academic qualifications. It should be noted that several respondents left comments detailing supplementary education such as business courses and management training, in addition to one respondent who reported having an aircraft engineer's licence. The data revealed that the NPO sector is fluid in terms of formal education requirements or standards, versus such fields as law, medicine or education. With 82 percent of respondents having at least a Bachelor's degree, and roughly 43 percent having either a Master's or Doctoral degree, it is evident that formal education is indeed valued by NPO directors. . Furthermore, respondents indicated degrees in a variety of subjects including management, social work and law. This indicates that NPO directors are indeed not homogenous in terms of educational background. This can be attributed perhaps to the varied nature of services offered by NPOs. The educational background of NPO directors is displayed in Graph 5.2.

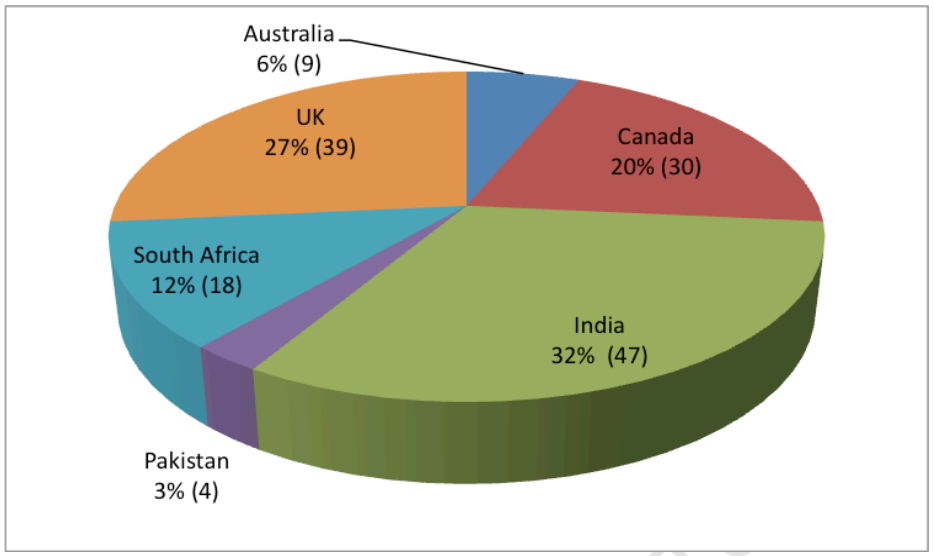
GRAPH 5.2: EDUCATIONAL BACKGROUND OF NPO DIRECTORS



5.4 Organisational Information

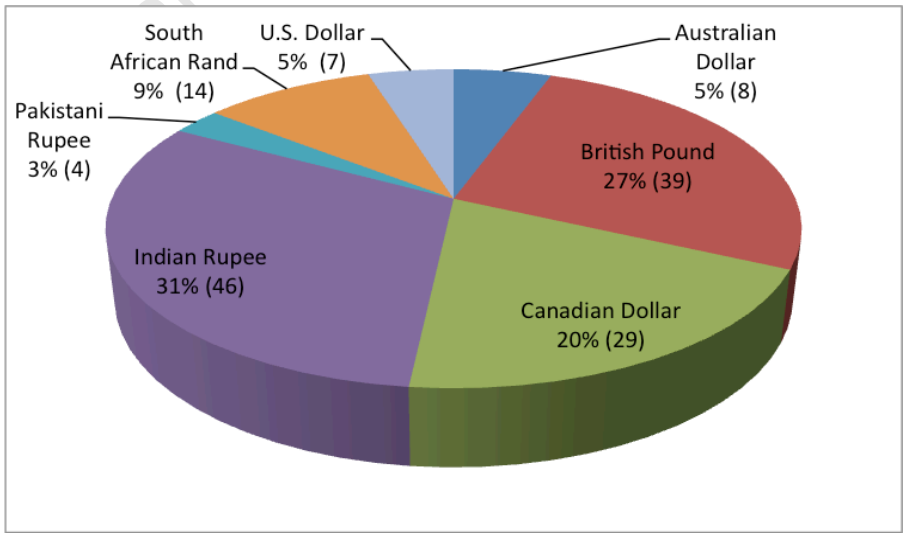
Respondents reported on the countries in which their NPO were based. Respondent countries are presented in Graph 5.3.

GRAPH 5.3: NPO BASE COUNTRIES



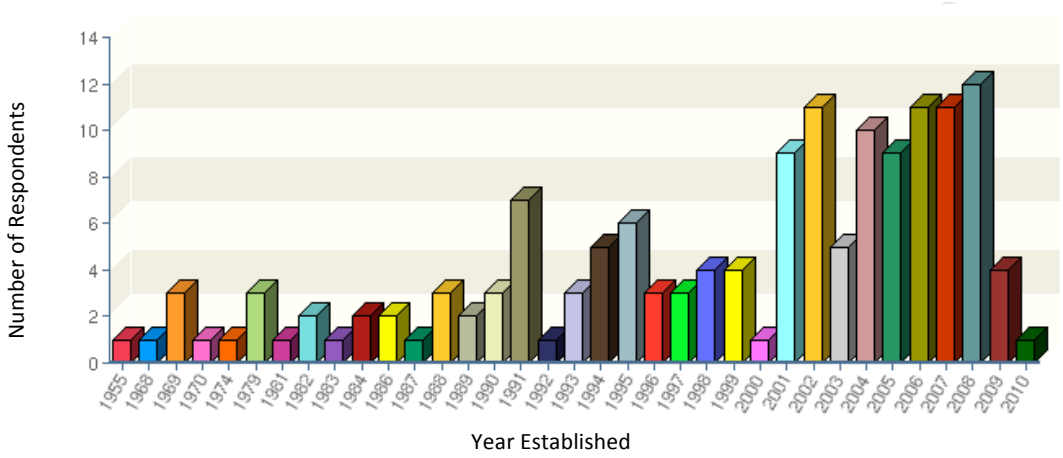
Respondents chose the currency they use and all subsequent financial information provided was based on this. For ease of comparison, these currencies and values given were converted to U.S. Dollars. It is interesting to note that some organisations, though not based in the United States, still opted to use the U.S. Dollar as their currency when reporting financial information. This may reflect the work of an organisation operating in various parts of the globe, or perhaps could represent a desire to use what is generally known as the standard for global currency. However, as global financial markets shift, the U.S. Dollar may no longer be considered the global standard. Graph 5.4 reflects the currencies in use.

GRAPH 5.4: CURRENCY USED



NPOs ranged from having been established as early as 1955, up to the present year, 2010. It was evident that from 1990 to 2010 a growing number of NPOs were established. This trend was most pronounced from 2000 to 2010. This agrees with both Hall-Jones (2006) and Makoba (2002) in their assertions that there has been a substantial growth of the nonprofit sector in recent years. It is also interesting to note that 53 percent of NPOs in developed countries were formed in 2000 or later, while 62 percent of NPOs in developing countries were formed in 2000 or later. The mode for this data set is the year 2008. Graph 5.5 shows the specifics of NPO establishment by year.

GRAPH 5.5: YEAR OF NPO ESTABLISHMENT



An examination of organisation location revealed that approximately 32 percent of NPOs in the study were based in rural areas, with 68 percent based in urban areas. Though the definitions of rural and urban may vary amongst respondents, it is important to outline some of the trends. In the developed countries, nearly 72 percent of NPOs were based in urban areas and 28 percent were based in rural areas. In the developing countries, nearly 58 percent of NPOs were based in urban areas, whereas 42 percent were based in rural areas. All of the Pakistani respondents reported their organisations as being based in a rural area. This data suggests that in developing countries there is a slightly greater centralisation of NPOs in rural areas than in developed countries.

The study was inclusive of all types of nonprofit service work. The listing of all service areas included on the *Idealist.org* website was presented to respondents, in addition to an "other" field, which allowed respondents to provide their own response if they felt they could not choose one from the list. With a large listing of 57 service areas, an analysis by service area was not feasible. However, 17 percent of all

NPOs in the study focused on children and youth services while nearly 11 percent focused on education and academia. Over eight percent of NPOs focused on community development and some seven percent of NPOs focused on disability issues. Just over six percent of NPOs focused on the environment and ecology and 5.5 percent of NPOs focused on health and medicine. The remainder are spread throughout the other various service areas.

It is important to distinguish some key characteristics in comparing the major service areas of developing versus developed countries. Over 13 percent of NPOs in developing countries focused on community development, whereas less than four percent of NPOs in developed countries focused on this area. Regarding disability issues, ten percent of NPOs in developing countries focused on this area, while less than four percent of NPOs in developed countries provide these types of services. This may be attributed to a greater prevalence of persons with disabilities in the developing world, due to a variety of nutrition and environmental issues, in addition to possibly fewer government resources being available for this segment of the population in the developing world. Social enterprise and economic development also was found at a rate of three to four times higher in developing countries than in developed ones. Additionally, the service areas of foundations, fundraising and philanthropy, international cooperation and relations, and law and legal advices, were found in developed countries, but not in developing countries. This data reflected differences in service foci for NPOs in developed versus developing countries – likely due to the differences in perceived needs and available resources.

The average number of full-time employees employed by NPOs numbered some 18 employees. A closer examination of the data revealed that nearly 76 percent of NPOs surveyed had ten or less employees and just over four percent of NPOs had 100 or more employees. An NPO from the UK had the highest number of employees, 450.

The study found that NPOs utilised approximately 110 volunteers on average. One third of NPOs in both developed and developing countries made use of 25 or less volunteers. Nearly 81 percent of NPOs in developed countries utilised 50 or less volunteers. Roughly 87 percent of NPOs in developing countries utilised 50 or less volunteers. Approximately nine percent of NPOs in developed countries made use of 250 or more volunteers, compared to just over seven percent in the developing world. This data concurred with Hall-Jones (2006) in his assertion that NPOs regularly utilise the unpaid work of volunteers.

Forty three percent of respondents could not realistically estimate the number of people their organisation served. Due to the varied nature of NPO services provided and the wide range of estimates received by the 57 percent of respondents who felt confident in providing this data, an examination of averages is not that meaningful. What is noteworthy however, is that NPOs serve both large and small populations and in many cases, serve entire communities.

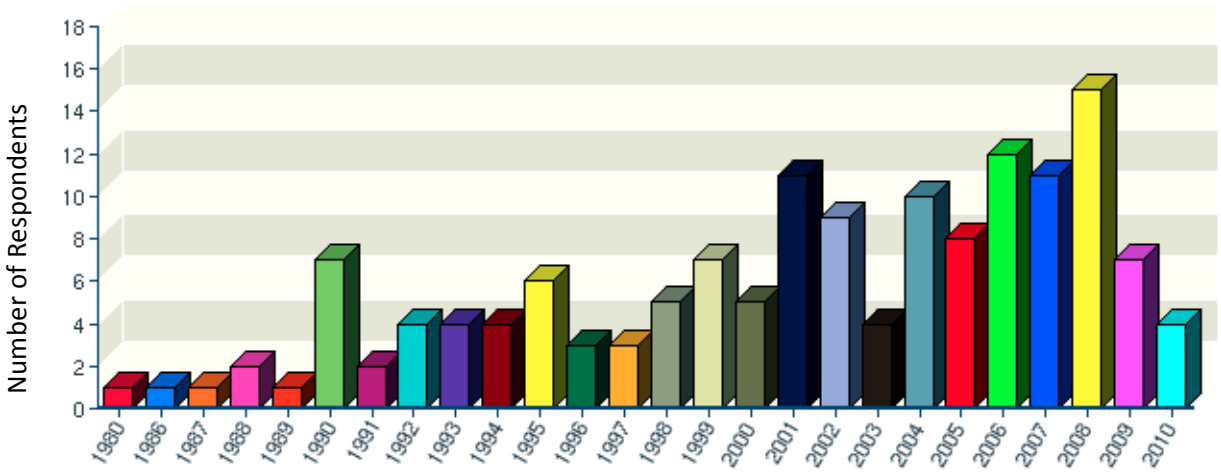
5.5 IT Usage and Analysis

This section covers information on the nature and extent of IT usage and the perceived value of these technologies. The following areas were examined: *computers, operating systems, Microsoft Office Suite, data backup and loss, viruses* and *perceptions on IT*.

5.5.1 Computers

Respondents reported on the year that their organisation first obtained computers. The mode was 2008. However, this figure in isolation did not reveal any substantial trend. An examination of the data holistically painted a more important picture. It was evident that the majority of NPOs obtained computers in the late 1990s up until 2010, with particular surges from 2001 and 2008. This coincided with the rate at which NPOs were established as presented earlier in the study. Additionally, this agreed with the assertions by Hunt (2009) in the falling prices of computers in the past 15 years, with particular mention of the "dot com" burst at the end of the fourth quarter of 2001. Another noteworthy finding was that approximately 17 percent of NPOs from developed countries had first obtained computers in 1990 or earlier, whereas it was reported that NPOs in developing countries first obtained computers only from 1991 onwards. In developing countries, the biggest surge in obtaining computers was between 1999 and 2008, with approximately 72 percent of NPOs getting computers during this period. Graph 5.6 shows when NPOs in the study first obtained computers by year.

GRAPH 5.6: YEAR FIRST OBTAINED COMPUTERS



Year NPO First Obtained Computers

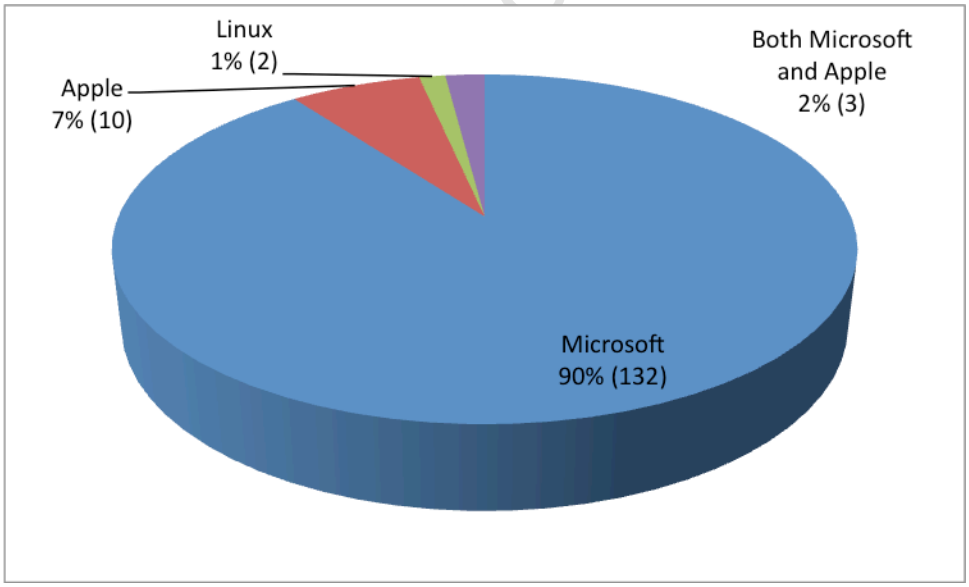
Respondents then reported on the number of desktop computers owned by the organisation. On average, NPOs owned between seven and eight desktop computers. However, a closer examination of the data revealed some revealing trends. Just over 20 percent of NPOs in the study did not own any desktop computers. Approximately 59 percent of NPOs owned three or less desktop computers and nearly 66 percent owned five or less desktop computers. Roughly six percent of NPOs owned 30 or more desktop computers. These figures may have been attributed to the size of staff of an organisation in addition to the scope of service work being conducted.

NPOs owned three to four portable computers on average. Portable computers for the purposes of this research were defined as laptops, notebooks, netbooks or other transportable computers. A deeper examination of the data revealed that both in developing and developed countries, approximately 15 percent of NPOs reported having owned zero portable computers. Eighty six percent of NPOs from developed countries reported having owned five or less portable computers and in developing countries this figure was slightly lower at 83 percent. Just over five percent of NPOs from developed countries owned 20 or more portable computers while in developing countries this figure was slightly lower at just over four percent. It is hypothesised that as the cost of portable computers goes down (Hunt 2009), there may be a greater shift from desktop to portable computers.

5.5.2 Operating System

An overwhelming 90 percent of respondents reported the use of the *Microsoft* operating system. Interestingly, 83 percent of NPOs in developed countries used the *Microsoft* operating system, compared to over 97 percent of NPOs in developing countries. Twelve percent of respondents from developed countries used the *Apple* operating system, while this figure was just one percent in the developing countries. Three percent of respondents from developed countries used the *Linux* operating system, whereas no respondents from developing countries used *Linux*. The data agreed with Shapiro's (2003) assertion that *Microsoft* was the dominant player when it comes to operating systems. However, the data may have disagreed with implications from Kinuthia's (2008) reporting of the One Laptop Per Child Initiative in Africa that promoted low cost computers using open source software. As *Linux* is an open source operating system, it would have been expected that it would have been found at least to some degree amongst NPOs from the developing world. The data on operating systems used can be seen in Graph 5.7.

GRAPH 5.7: OPERATING SYSTEM USED



5.5.3 Microsoft Office Suite

A resounding 94 percent of respondents reported having used *MS Office Suite*, with just slightly more users amongst NPOs from developing countries versus developed ones.

Four of the main applications of *MS Office Suite – Word, Excel, PowerPoint* and *Access* were examined in greater detail. The 138 respondents (94%) who reported using *MS Office Suite* were asked which tasks they used each respective application for. It was reported that the most common uses of *MS Word* were for writing letters, fundraising proposals, general documentation of programme activities and newsletters, with the vast majority of respondents having indicated using *MS Word* for these tasks. *Excel* was mostly used for finance and budgets and appeared to be the preferred application for these tasks. Sixty one percent of respondents indicated that *Excel* was also used for inventory control and around half also used this application for contact lists, donor databases and client/beneficiary databases. Around three quarters of respondents indicated having used *PowerPoint* for presentations both within the organisation and for external purposes. In addition, 30 percent used this application for fundraising proposals. *Access*, the database application, was used by just under a quarter of respondents for contact lists and client/beneficiary databases with over a quarter of NPO directors reported having used it for donor databases. *Access* is arguably the most complex of these applications which may have resulted in its limited use compared to the other three. Furthermore, as stated by Harkins (2008), many people in the IT field presume that *Access* is not a professional database application. NPOs may be using other databases that are either more sophisticated or more customised for their purposes. Table 5.2 displays *MS Office* application usage by function.

TABLE 5.2: MICROSOFT OFFICE APPLICATION USAGE BY FUNCTION

Function	Word	Excel	PowerPoint	Access
Writing letters	98.6%	3.6%	3.6%	1.4%
Finance and budgets	10.1%	92.0%	1.4%	2.9%
Fundraising proposals	89.1%	34.1%	29.7%	2.2%
Inventory	22.5%	60.9%	2.2%	8.0%
Contact lists	31.9%	54.3%	2.2%	22.5%
Newsletters	76.1%	2.2%	8.7%	2.2%
Donor database	18.1%	49.3%	2.9%	25.4%
Client/beneficiary database	23.2%	46.4%	1.4%	23.2%
General documentation of programme activities	89.1%	23.9%	10.1%	3.6%
Creating presentations for internal purposes	34.8%	15.2%	70.3%	1.4%
Creating presentations for external purposes	27.5%	11.6%	76.8%	2.2%

The perceived value of the four *MS Office Suite* applications ranged from "not valued" to "highly valued", and a "not applicable" signified that a respondent did not use a particular application at all. It was evident through this data that *Word* and *Excel* were the most highly valued. It is interesting to note that no respondents found *Word* to be of no value and all 138 *MS Office* users used *Word* for various tasks. More than 99% of respondents used *Excel* and just over one percent responded that it was not valued. *PowerPoint* was either highly valued or valued by approximately 88 percent of users, although those who highly valued this application did so at a lower rate than both the applications of *Word* and *Excel*. *Access* was used by around 64 percent of respondents. This coincides with Harkins' (2008) assertion that *Access* is the most widely used desktop database on the current market. Of those that do use it, more than two thirds found it to be either valued or highly valued. Twenty two percent, found *Access* to be little value, perhaps reflecting Harkins' (2008) claim that many IT professionals believe that *Access* is a more amateur database application than others. Table 5.3 depicts the rating given by NPO directors for each of the applications.

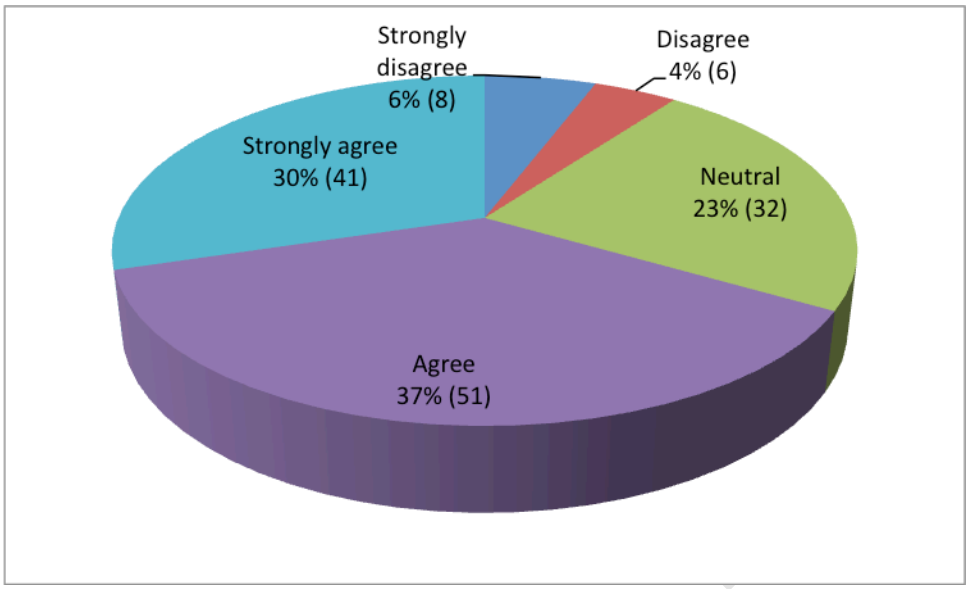
TABLE 5.3: PERCEIVED VALUE OF MICROSOFT OFFICE SUITE APPLICATIONS

MS Office Application	Not valued	Valued	Highly valued	Not applicable
Word	0.0%	15.9%	84.1%	0.0%
Excel	1.4%	17.4%	80.4%	0.7%
PowerPoint	6.5%	28.3%	59.4%	5.8%
Access	21.7%	18.1%	23.9%	36.2%

Of the 47 respondents (32%) that paid for *MS Office Suite*, the average cost per NPO was US $420. A substantial 85 participants (58%) reported that they received *MS Office Suite* for free. The remaining 6 respondents (10%) either did not use *MS Office Suite* or did not know how much the organisation had paid for it.

Respondents were asked about the cost effectiveness of *MS Office Suite*. Thirty percent of respondents strongly agreed and 37 percent agreed that the use of *MS Office Suite* had been cost effective for the organisation. Only 10 percent disagreed or strongly disagreed that it was cost effective. Lastly, 23 percent were neutral on the cost effectiveness of *MS Office Suite*. This data indicated that most NPO directors did believe that the use of *MS Office Suite* had saved them costs. Thus, it can be expected that many will continue to use *MS Office Suite* in the future. Graph 5.8 depicts this information.

GRAPH 5.8: COST EFFECTIVENESS OF MICROSOFT OFFICE SUITE



5.5.4 Data Backup and Loss

Respondents reported on the different ways, if any, that they backed up data. External hard drives such as flash sticks or thumb drives were the most popular forms of data backup, with over two thirds of respondents having indicated that they backed up data in this way. Nearly one third of NPOs had a physical server at the office while one quarter used a web server to backup data. Offsite data backup was used by fewer of the participants, with just over 14 percent having used this method. NPO directors were also given a chance to provide other ways data was backed up. The most popular alternative response was backing up data on either a CD or a DVD. Two respondents also indicated that they backed up data having used online websites that allowed them to store information. It is interesting to note that six percent did not do any form of data backup. Table 5.4 reflects the data backup methods employed.

TABLE 5.4: DATA BACKUP METHODS

Backup Method	Percent
External hard drives (i.e. flash stick or thumb drive)	68.7%
Physical server at the office	31.3%
On a web server	23.1%
Electronic backup offsite	14.3%
None	6.1%

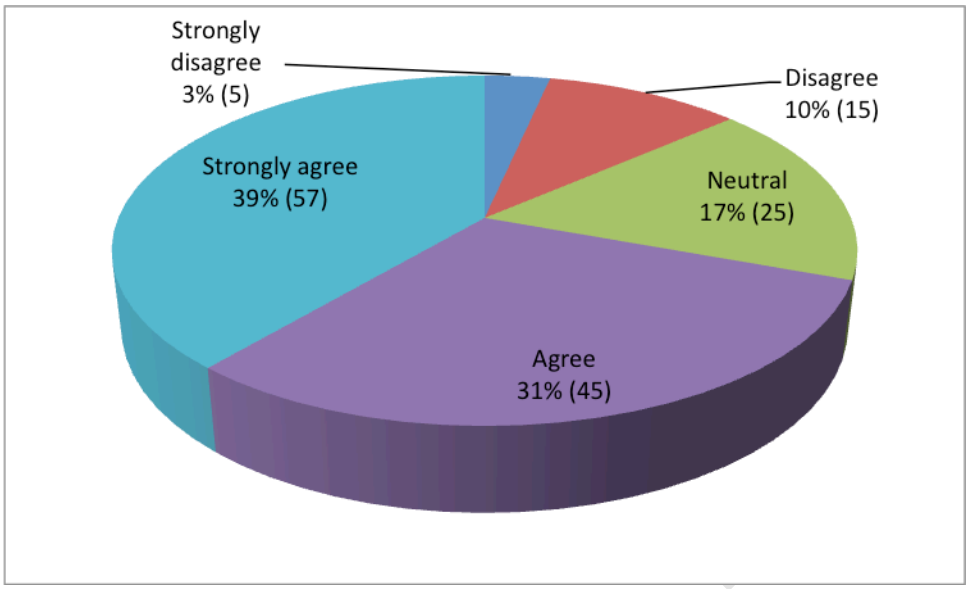
It was also noteworthy to examine differences between developing and developed countries with regards to data backup. It was evident that physical servers at the office were employed at greater rates amongst NPOs in developed countries than developing ones. Additionally, a significant difference was evident with regards to having used a web server, with 33 percent of NPOs in developed countries having used this method, versus 12 percent of NPOs in developing countries. Furthermore, NPOs in developing countries utilised external hard drives at a rate of 74 percent, whereas NPOs in developed countries did so at a lower rate, 64 percent. These differences may have been attributed to the costs of these methods. As physical servers at the office and web servers are assumed to be more costly than external hard drives, it makes sense that they are employed more by NPOs in developed countries. The lower cost of external hard drives may provide the reason why developing countries utilised them to a greater degree than developed countries. Table 5.5 displays some of these differences.

TABLE 5.5: DATA BACKUP METHODS – DEVELOPED VS. DEVELOPING COUNTRIES

Data Backup Method	Developed Countries	Developing Countries
Physical server at the office	34.6%	27.5%
On a web server	33.3%	11.6%
Electronic backup offsite	14.1%	14.5%
External hard drives (i.e. flash stick or thumb drive)	64.1%	73.9%
None	6.4%	5.8%

It is generally believed that the reason data is backed up is so that if any unforeseen occurrences such as a crash of the electronic systems or the advent of an unwanted electronic virus were to occur, there would be an alternate way to retrieve the lost data. Over 69 percent of respondents either agreed or strongly agreed that electronic data loss was a significant concern for the organisation. Graph 5.9 presents their responses.

GRAPH 5.9: ELECTRONIC DATA LOSS AS A SIGNIFICANT CONCERN

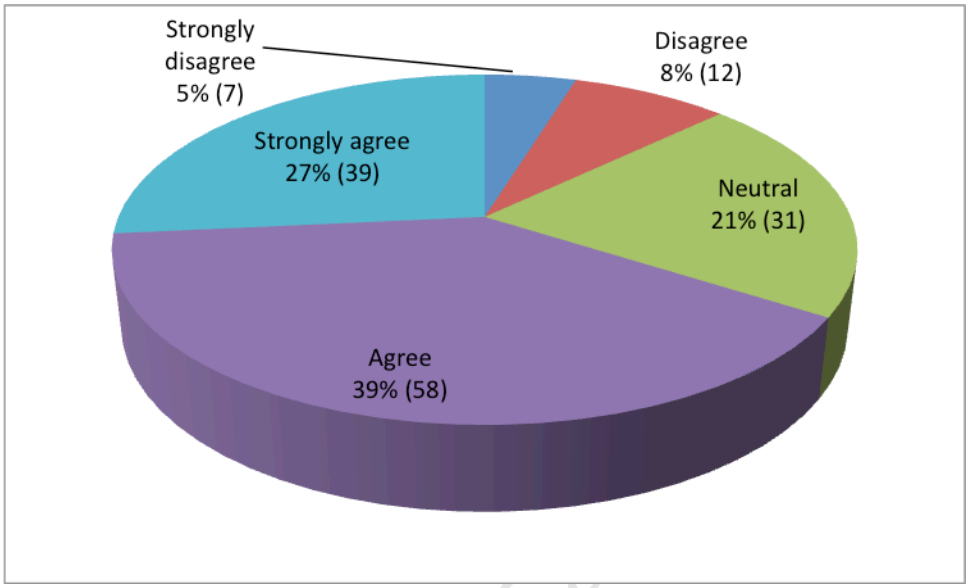


Sixty seven percent of respondents indicated that they had experienced some sort of electronic data loss. In order to gain a better understanding, participants were allowed to write one to two sentences describing their particular experiences with losing data. More than 20 respondents described having experienced some sort of computer hard drive or operating system crash. One respondent claimed that it was not uncommon for the *Microsoft* operating system to crash. This statement agreed with Antivirusworld's (2009) assertion that the *Microsoft* operating system is riddled with problems that make it susceptible to viruses and hence, crashes. It is interesting to note that some respondents had experienced the loss of data, but indicated that they had it backed up, so it was not a serious concern. On the other hand, some respondents indicated that they had not backed up data and had thus lost critical pieces of financial information, client-related databases and other data. Additionally, respondents provided other reasons for the loss of data. One respondent claimed to have lost data due to a thunderstorm, another stated that an office fire had resulted in data loss and one participant indicated that a laptop had been stolen while on a trip to Nepal. Thus, it seems that though most data loss was due to failures of the actual systems, external forces also contributed to electronic data loss.

Approximately two-thirds of NPO directors either agreed or strongly agreed that electronic viruses were indeed a significant concern. Thirteen percent either disagreed or strongly disagreed. It is interesting to note that NPO directors in developing countries were more concerned over electronic viruses, 78

percent and 55 percent for developing and developed countries, respectively. The overall results can be seen in Graph 5.10.

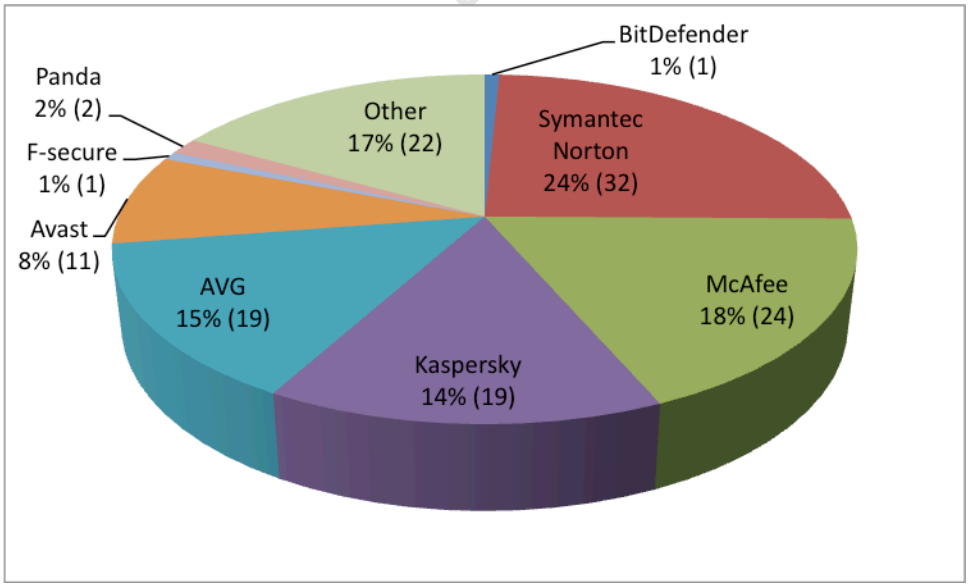
GRAPH 5.10: ELECTRONIC VIRUSES AS A SIGNIFICANT CONCERN



Sixty three percent of NPOs had experienced an electronic virus. Respondents were allowed to write one to two sentences about any notable experiences in this regard. Responses ranged in frequency and severity, but several noteworthy trends did emerge. The *Trojan Virus* was most frequently listed as having done damage to computer systems. Several participants indicated that e-mail viruses and misuses of the internet had resulted in viruses. One respondent attributed this to unaware or inexperienced staff and clients who mistakenly allowed a virus to enter the computer systems. Another respondent implied that it was blatant improper use of the organisation's internet system by saying, "people accessing dodgy sites", had resulted in a virus. Interestingly, several respondents also claimed that the use of a "pen drive" or external hard drive had carried viruses from other computers to their own. The range of responses varied greatly, with one respondent who indicated that an experienced IT staff member was able to detect and delete viruses before they became of concern, whereas another respondent claimed that systems were shut down for two days while an IT professional came to fix the problem. A final respondent when asked if the organisation had experienced a virus jovially responded, "you bet!"

The use of anti-virus software is one method for reducing the chance of contracting an electronic virus, in addition to removing any viruses that are on a computer's system. A considerable 93 percent of NPO directors reported that they did use some type of anti-virus software. *Symantec Norton* was the most widely used anti-virus software, followed by *McAfee.* *Kaspersky* and *AVG* were used in equal numbers, followed by *Avast*. While *BitDefender* and *F-Secure* were ranked highly on Rebbapragada's (2006) listing of top anti-virus software, few respondents reported their usage. This could be attributed to a higher cost for these packages. *Symantec Norton, McAfee* and *Kaspersky* all made Rebbapragada's (2006) top five list of anti-virus software, which indicated that NPOs overall were seemingly equipped to handle most virus threats. In an examination of NPOs in developed versus developing countries, it was found that NPOs in developing countries use *Kaspersky* at a rate of 17 percent, versus just 9 percent in developed countries, whereas NPOs in developed countries use *Symantec Norton* at a rate of 28 percent, in comparison to 13 percent in developing countries. Several respondents reported the use of free anti-virus tools available via download from the web. Graph 5.11 shows the various anti-virus software used.

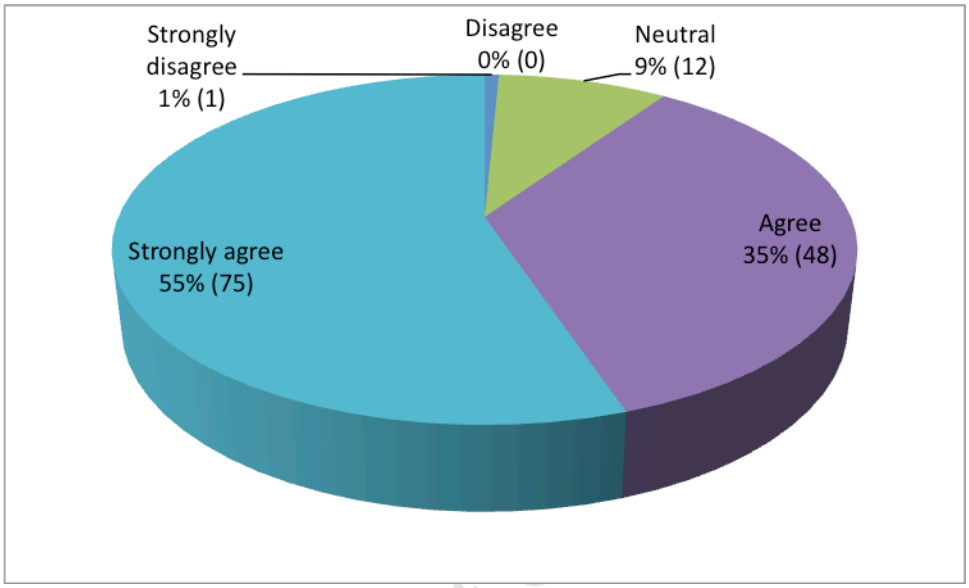
GRAPH 5.11: ANTI-VIRUS SOFTWARE USED



Based on the data it was evident that the overwhelming majority of NPO directors who used anti-virus software valued it, with 90 percent either having agreed or having strongly agreed that it was a valuable tool. It was worthwhile to examine the difference in perceptions between NPO directors in developing versus developed countries. Most striking, it was reported that 62 percent of NPO directors from

developing countries strongly agreed that anti-virus software was a valuable tool for the organisation, versus an approximate 41 percent of NPO directors from developed countries. The overall results can be seen in Graph 5.12.

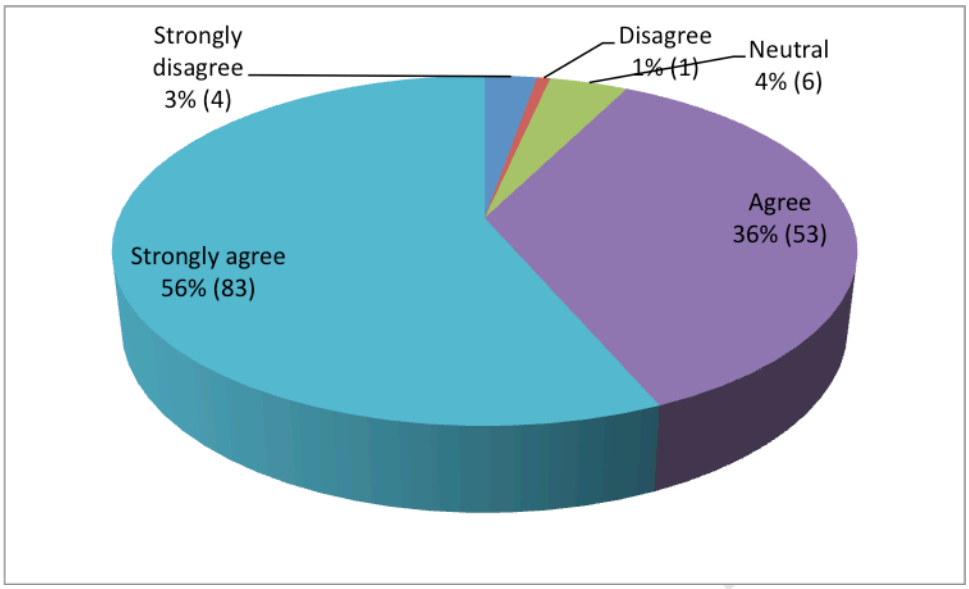
GRAPH 5.12: ANTI-VIRUS SOFTWARE AS VALUABLE TO THE ORGANISATION



5.5.5 Overall Perceptions on IT

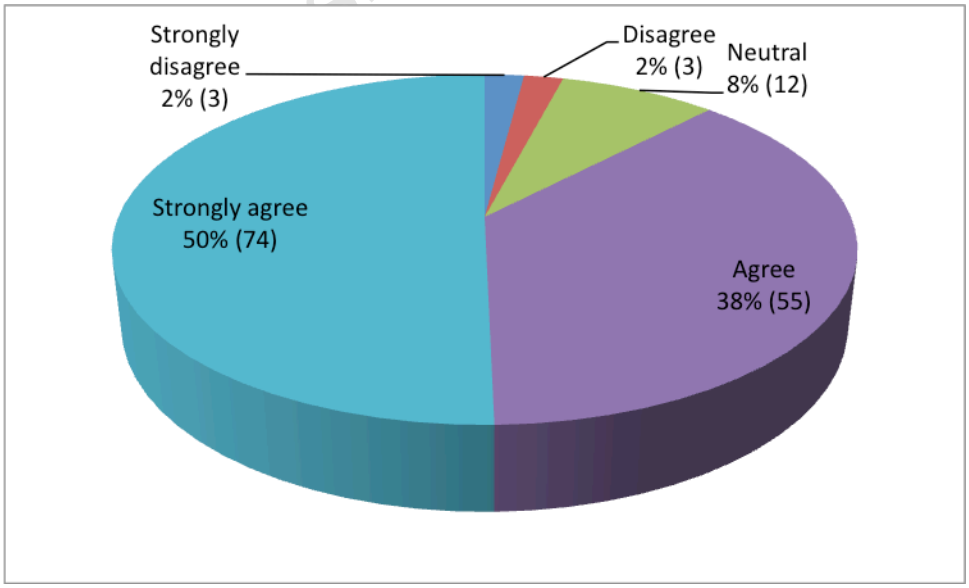
A significant majority of respondents, 92 percent, either agreed or strongly agreed that IT had improved the performance output of the organisation. This clearly illustrated the effect that IT has had on NPOs. Interestingly, 63 percent of participants from NPOs based in developed countries strongly agreed with this notion whereas 49 percent of participants from NPO based in developing countries strongly agreed. Perhaps this can be attributed to the presumed higher level of IT sophistication found in developed countries versus the developing ones. This hypothesis is supported by the fact that according to the data presented previously, the range and extent of use of electronic backup systems by NPOs in developed countries superseded that of those in developing countries. With greater failures of systems, it is proposed that IT with regards to increased performance output would be viewed as slightly less favourable by NPOs from developing countries. Nevertheless it is unmistakable that NPOs around the globe perceive IT tools as valuable to performance output. Data on performance output can be seen in Graph 5.13.

GRAPH 5.13: IT AS HAVING IMPROVED PERFORMANCE OUTPUT



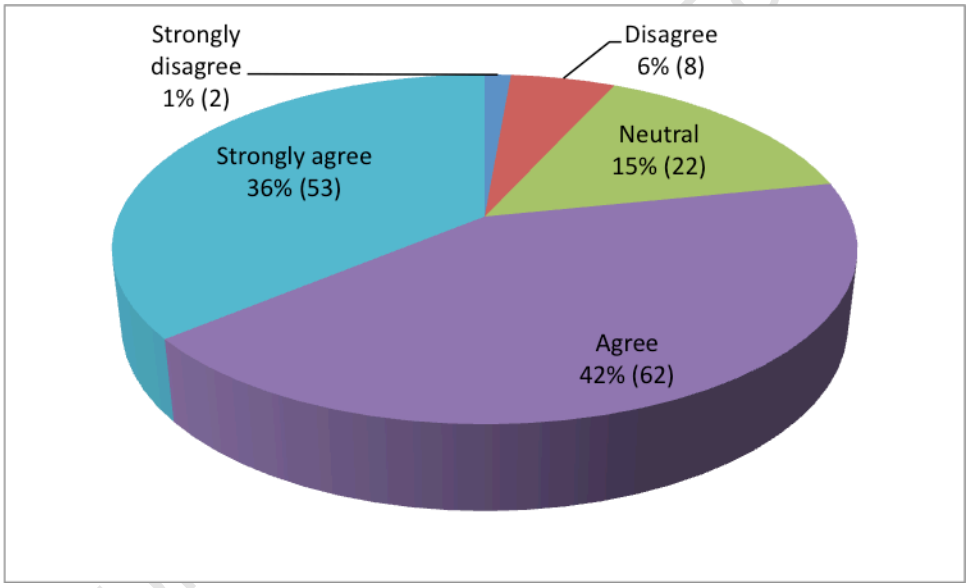
Eighty eight percent of respondents either strongly agreed or agreed that IT has had a cost saving effect on the organisation. Figures were virtually even between NPOs in developing and developed countries. Hence, this signified a global perception shared by the vast majority of NPO directors. Director perceptions are depicted in Graph 5.14.

GRAPH 5.14: IT AS HAVING HAD A COST SAVING EFFECT ON THE ORGANISATION



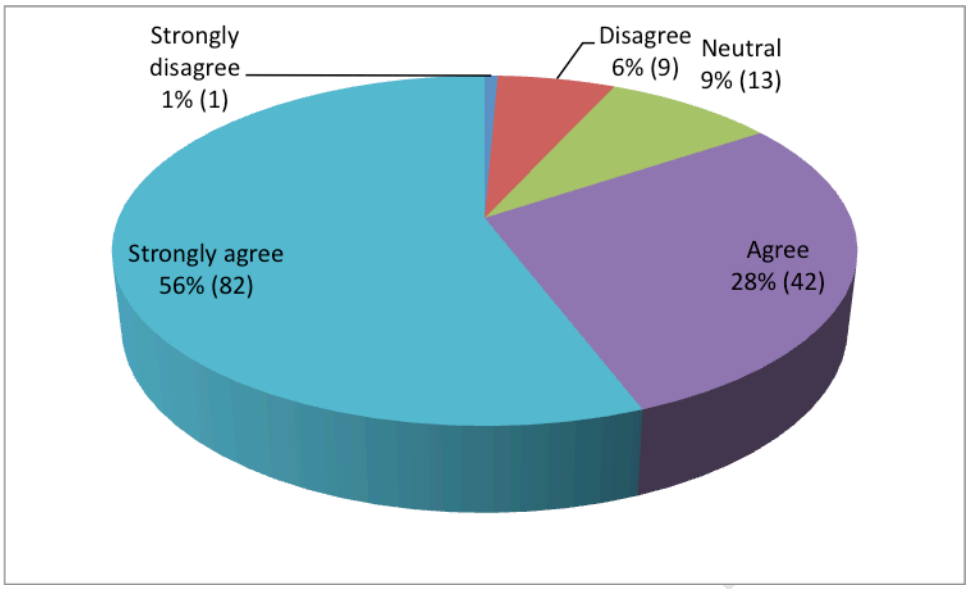
A substantial 78 percent of respondents believed that IT had in fact revolutionised the way the organisation operated. This is significant in that it implied that the entire nature of NPO operations would be different for the majority of NPOs if IT were not involved in some capacity. Investigating the data more closely, approximately 22 percent of NPO directors from developed countries were neutral with regards to this notion, whereas just over seven percent of NPO directors from developing countries felt this way. Furthermore, roughly 46 percent of respondents from developing countries strongly agreed with this statement, whereas only 27 percent of respondents from developed countries strongly agreed. NPO director views are presented in Graph 5.15.

GRAPH 5.15: IT AS HAVING REVOLUTIONISED THE WAY IN WHICH THE ORGANISATION OPERATES



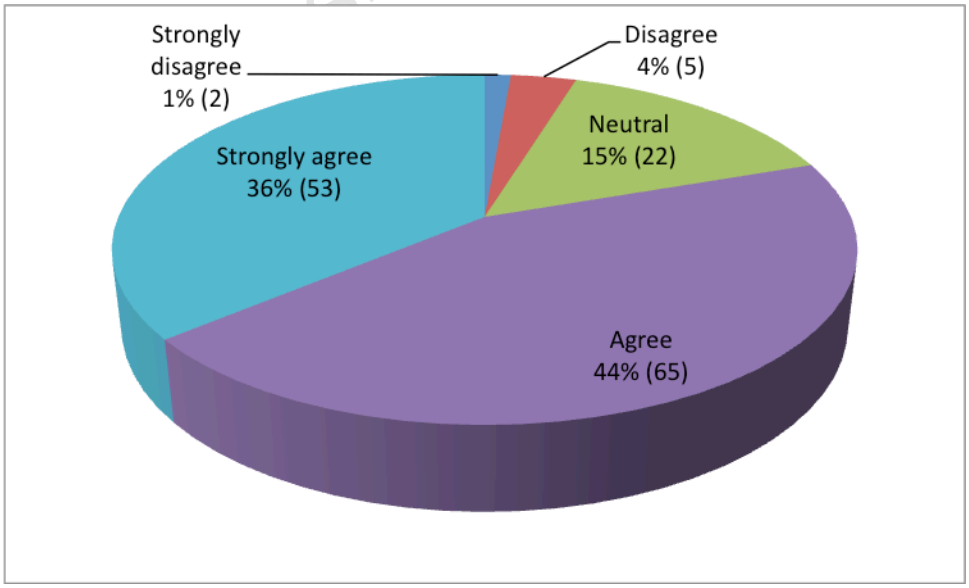
Respondents reported on the idea that if money were no object, they would invest more in IT development. With 56 percent of respondents having strongly agreed and an additional 28 percent having agreed, it is evident that NPO directors not only valued IT, but also welcomed greater IT application. The seven percent who either disagreed or strongly disagreed likely had not felt the positive performance output, cost-saving and/or revolutionising effect of IT. The results are presented in Graph 5.16.

GRAPH 5.16: DESIRE TO INVEST MORE IN IT IF MONEY WERE NO OBJECT



Eighty percent of NPO directors either strongly agreed or agreed that IT literacy was of importance when hiring direct service staff. This implied that staff members were expected to interact with IT at some capacity in order to function efficiently within the organisation. Graph 5.17 portrays the data on IT literacy.

GRAPH 5.17: IT LITERACY AS VALUABE IN THE HIRING OF DIRECT SERVICE STAFF



5.5.6 IT Landscape in Local Area

It was worthwhile to examine data pertaining to the level at which IT was taught locally. This data simply showed that there is some level of prevalence of IT being taught at all levels of schooling. Table 5.6 depicts the prevalence of IT taught in schools.

TABLE 5.6: PREVELANCE OF IT TAUGHT IN SCHOOLS

Primary/ Elementary	46.3%
Secondary/ High School	64.0%
Tertiary/ University/ College	50.3%
I don't know	14.3%
None	9.5%

A significant distinction was found at the primary/elementary level where IT was being taught in developing counties at double the rate found in developed countries. At the secondary/high school level the difference was not as pronounced, though developed countries did have a stronger prevalence of IT taught at this level. At the tertiary/university/college level the difference again was significant, in favour of the developed countries (58%), versus developing countries (42%). Despite access and awareness in IT being lower in developing countries, they were indeed more aware of the current status of local schooling. Just four percent of NPOs from developing countries did not know about the educational IT landscape in their local area, compared to 23 percent in developed countries. Another implication of this data was that the developed world in general produces an early workforce prepared with IT skills at a somewhat greater level than in the developing world. Table 5.7 compares responses from NPOs in developed versus developing countries.

TABLE 5.7: PREVELANCE OF IT TAUGHT IN SCHOOLS – DEVELOPED VS. DEVELOPING COUNTRIES

Level of Schooling	Developed Countries	Developing Countries
Primary/Elementary	61.5%	29.0%
Secondary/High School	68.0%	59.4%
Tertiary/University/College	57.7%	42.0%
None	3.9%	15.9%
I don't know	23.1%	4.4%

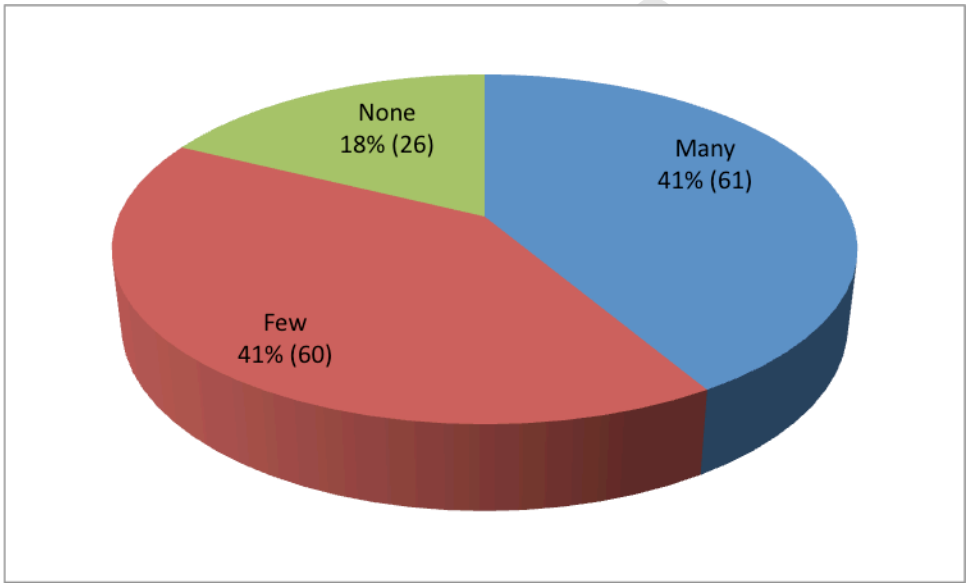
5.6 Web Usage and Analysis

An exploration of the nature and the extent to which the web was being used by NPOs revealed some fascinating trends. This section presents and analyses data received by respondents in this regard and is outlined under the following categories: *Local Landscape, Idealist.org, Organisational Website, Web Analytics, Feedback, Comparative Perceptions, Perceptions on the Web, Web 2.0, Marketing and Branding, Information Dissemination and Education, Risk, Email and Browser.*

5.6.1 Local Landscape

Approximately four out of five NPOs in the study had at least a few internet facilities in the immediate area available for public use. The data is depicted in Graph 5.18.

GRAPH 5.18: NUMBER OF INTERNET FACILITIES WITHIN 5KM OF THE NPO OFFICE



A closer examination of the data revealed some interesting trends. A comparison of rural versus urban areas showed some staggering differences. One striking difference is that 28 percent of NPOs based in rural areas had no internet facilities available for the public compared to only 13 percent in urban areas. This data implies that general awareness and knowledge of web technologies is likely to be greater in urban areas. The comparative data is presented in Table 5.8.

TABLE 5.8: NUMBER OF INTERNET CENTRES – RURAL VS. URBAN AREAS

Number of Internet Centres	Rural Areas %	Urban Areas %
Many	27.7%	48.0%
Few	44.7%	39.0%
None	27.7%	13.0%

A comparison of developed versus developing countries also inspired some curious observations. The results present themselves to be somewhat counter-intuitive. One may expect developed countries to have a greater level of access to internet facilities than developing countries. However, this information perhaps agrees with Kinuthia (2008) asserting that in recent years, there has been an emphasis on technology access development in the developing world. Akin to Kinuthia's (2008) description of the One Laptop Per Child initiative in Africa, the trend of greater internet connectivity in the developing world may be becoming more palpable, as reflected through this data. Furthermore, home computers may be more prevalent in the developed world and thus there is less of a need for internet centres. The data is displayed in Table 5.9.

TABLE 5.9: NUMBER OF INTERNET CENTRES – DEVELOPED VS. DEVELOPING COUNTRIES

Number of Internet Centres	Developed Countries	Developing Countries
Many	38.5%	44.9%
Few	38.5%	43.5%
None	23.1%	11.6%

5.6.2 Idealist.org

NPOs were requested to participate in this study based on their membership with the *Idealist.org* network of global nonprofits. Thus it was valuable to explore the details and perceptions surrounding the motivations to join *Idealist.org*, the nature and level of interaction NPOs have had with the site and the perceived value NPOs have derived through this free membership.

The data indicated that 85 percent of NPOs joined the network in 2005 or later. These findings were representative of the notion that *Idealist.org* is in fact a current database of NPOs and that membership rates have risen since the establishment of *Idealist.org* as a nonprofit organisation in 1995.

The motivations to join the *Idealist.org* were analysed. The data revealed that *Idealist.org* served as a promotional and marketing avenue for NPOs. Examining this desire to increase an organisation's visibility on the web, it was found that NPOs from developing countries were more motivated by this potential, with nearly 70 percent reporting this was a major driving factor in the decision to join *Idealist.org*, versus approximately 49 percent of NPOs in developed countries. Additionally, just over half of respondents used the network to introduce volunteer opportunities. NPOs in developing countries were also motivated to join the network for this reason at a higher rate than NPOs in developed countries. As *Idealist.org* provided a range of services, the data reflected the various intended uses NPOs had when deciding to join. Furthermore, respondents were allowed to offer their own reasoning as to why they became members. One participant stated that the organisation joined in order to get special NPO discounts on software. Another mentioned that design assistance was the reason for joining. There was some uncertainty from five respondents who claimed that they were not aware that they were part of the *Idealist.org* network. In these cases, it is likely that another staff member either past or present had joined the network without the knowledge of the participating NPO director. The motivations to join Idealist.org are presented in Table 5.10.

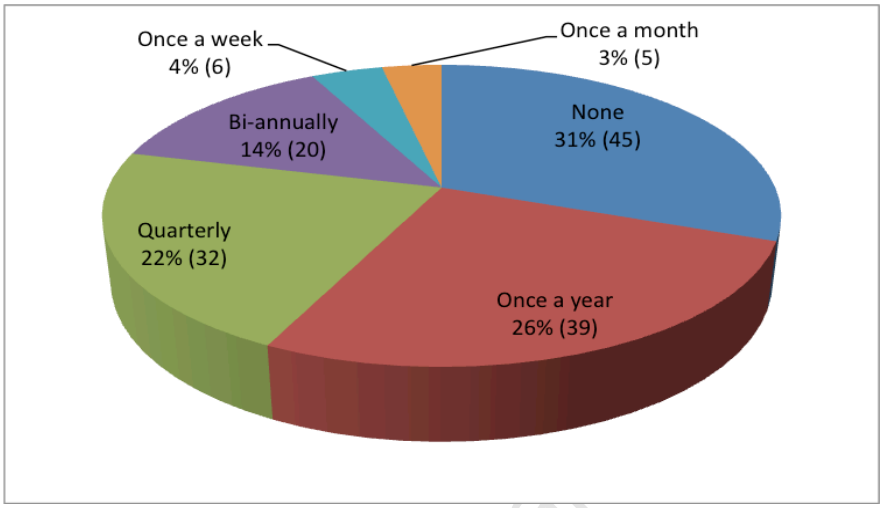
TABLE 5.10: MOTIVATIONS TO JOIN IDEALIST.ORG

Motivation	Percentage
To increase the organisation's visibility on the web	59%
To introduce volunteer opportunities	53%
To keep current in the field	46%
To obtain knowledge resources for management and sustainability purposes	35%
To seek potential funders	30%
To introduce job opportunities	27%
None	5%

Participants shared information on the frequency of updates made to *Idealist.org*. Approximately 69 percent of total respondents updated information on Ideaslit.org at least once a year. It was implied that the remaining 31 percent were not as active within the network. A striking difference between developing and developed countries was uncovered through closer analysis. Approximately 59 percent of NPOs in developing countries updated information on *Idealist.org* at least bi-annually, whereas this figure was just 29 percent in the developed countries. Though there were greater numbers of

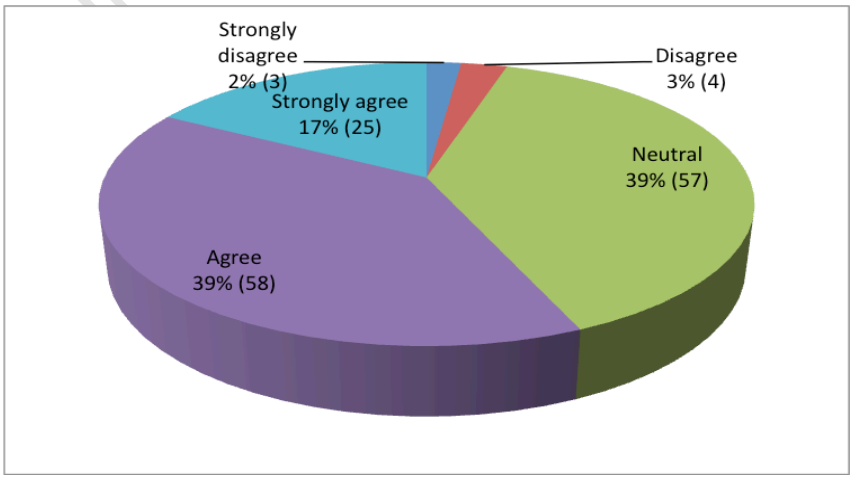
developed country NPOs listed on the site, as evident through the requests sent out, it was found that NPOs from developing countries were using the network to a greater degree. Data on frequency of updates is depicted in Graph 5.19.

GRAPH 5.19: FREQUENCY OF UPDATES MADE TO IDEALIST.ORG



A majority (58%) of participants strongly agreed or agreed that it was worthwhile in terms of time and/or effort to join *Idealist.org*. A significant 39 percent, however, were neutral. It was interesting that just five percent of respondents felt that it was not worth the time and/or effort to set up the account. Graph 5.20 represents data collected on NPO director perceptions as to the degree to which it was worth the time and/or effort to join *Idealist.org*.

GRAPH 5.20: WORTH THE TIME AND/OR EFFORT TO JOIN IDEALIST.ORG



Notably, 72 percent of respondents from developing countries agreed or strongly agreed with this statement, whereas only 42 percent of NPOs from developed countries felt the same way. Furthermore, more trends emerged through an analysis of frequency of updates to value in joining. It was found that of the 62 NPOs that updated information at least bi-annually, there was approximately a 77 percent agreement rating on the decision to join the *Idealist.org* network. This was in comparison to 41 percent agreement rating amongst the 85 NPOs who updated information either once per year or less.

5.6.3 Organisational Website

As a pre-requisite for inclusion in this study, all NPOs must have had an organisational website. A detailed examination of the issues surrounding the development and maintenance of the website, as well as the outlook towards the future, was conducted.

It was found that 59 percent of NPOs created a website in 2005 or later and 39 percent of NPOs created a website in 2007 or later. Interestingly, 51 percent of NPOs in developing countries created a website in 2007 or later, versus 28 percent of NPOs in developed countries. Furthermore, 77 percent of NPOs from developing countries created a website in 2005 or later, compared with 42 percent of NPOs from developed countries. This examination provided evidence that the NPOs in developed countries have had websites for longer than their counterparts in developing countries. This may be attributed to differences in available technologies and knowledge in the past. Regardless the justification, it is apparent that NPOs in the developing world have more recently been embracing the creation of organisational websites at a greater rate than those in the developed world.

An overwhelming majority of respondents agreed that marketing was a driving motive for having created a website. Information dissemination was also a strong motivating force. Interestingly, more than half felt that it was done to be more accountable to stakeholders. Table 5.11 provides the motives for creating a website.

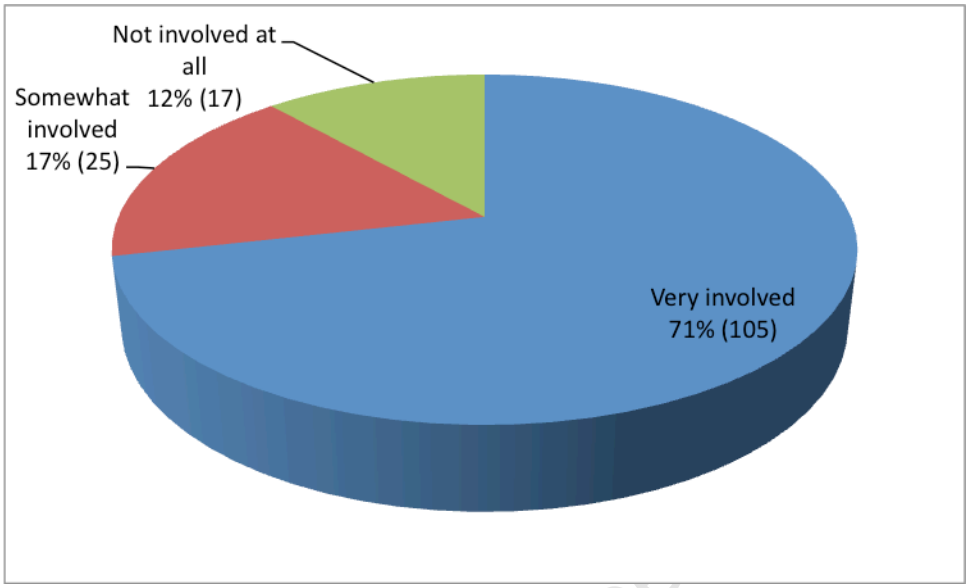
TABLE 5.11: MOTIVATIONS FOR CREATING A WEBSITE

Motivation	Percentage
To increase the organisation's visibility on the web	95%
To provide information of current news and/or events pertaining to the organisation	74%
To attract more funders	67%
To educate the public about information around topical issues	66%
To attract potential clients or beneficiaries	66%
To be more accountable to our stakeholders	53%
To keep up with other organisations in the field	49%
No particular reason	3%

Several differences were reported between developing and developed country NPOs. Firstly, 73 percent of NPOs from developed countries created a website to educate the public about information around topical issues, whereas the rate for NPOs in developing countries was 58 percent. Secondly, approximately 59 percent of developing country NPOs created a website to be more accountable to stakeholders, versus 47 percent of respondents in developed countries. The final meaningful difference was that only 40 percent of NPOs in developed countries reported a motivation of wanting to keep up with other organisations in the field, compared with 59 percent amongst the developing country respondents. Though most figures were virtually similar, these differences revealed that there was a greater emphasis on accountability and perhaps greater competition amongst NPOs in the developing world. Additionally, the data showed that providing topical information was more of a priority for NPOs in the developed world. Respondents were also able to provide their own motivations, outside of those listed. One participant stated that the ability to influence policy makers in addition to generating media coverage was a motivating factor. Another respondent commented that the decision to create a website was to make the organisation seem more legitimate, as they were a youth-run NPO.

NPO directors reported on the degree to which they were involved with the conceptualisation of the website. A considerable 88 percent of respondents were involved to some degree with the conceptualisation of the website. This implied that NPO directors overall played integral roles in the creation process of their websites. Graph 5.21 provides the level of NPO director involvement with the conceptualisation of the website.

GRAPH 5.21: DEGREE TO WHICH NPO DIRECTORS INVOLVED WITH THE CONCEPTUALISATION OF THE WEBSITE



NPO directors described who they believed were the target populations for the organisational website. Interestingly, both potential funders and beneficiaries of services, 63 percent and 61 percent, respectively, were felt to be target populations. This implies that organisational websites in great part were aimed at attracting visitors that could either potentially contribute to the sustainability of the NPO, or could potentially benefit from the NPO's services. Target populations are displayed in Table 5.12.

TABLE 5.12: TARGET POPULATIONS FOR WEBSITE

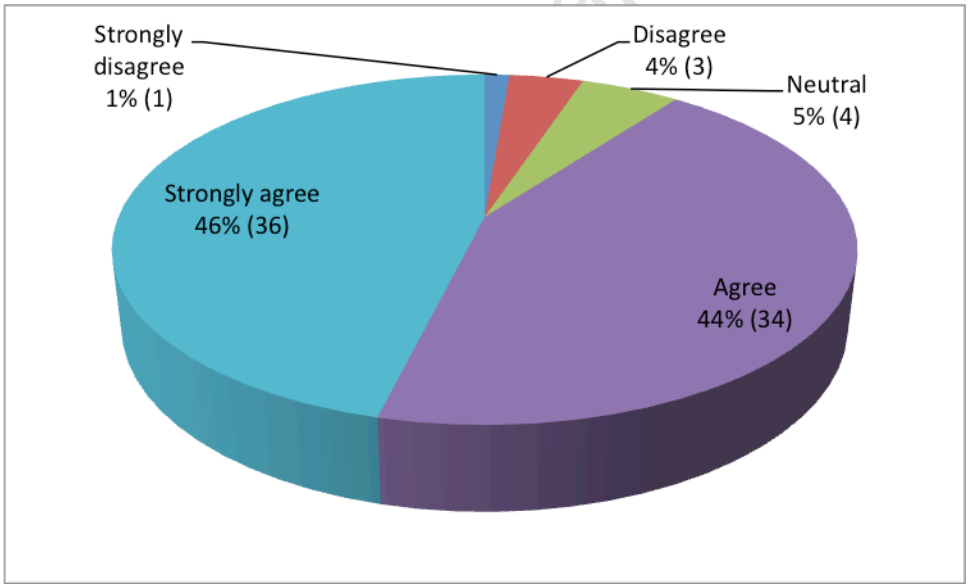
Target Population	Percentage
General users looking to become more educated and/or more informed	77.6%
Potential funders	63.3%
Potential beneficiaries of services	61.2%
Current funders	49.0%
Current beneficiaries of services	49.0%
None	0.7%

Twenty seven respondents (18%) stated that they used free software to create their organisational website. An additional 41 respondents (28%) reported that the costs associated with creating the website were donated by an external source. Of the 78 respondents (53%) that did report a cost for the

creation of their website, the average cost was US $4,496 per website. The highest cost reported was US $250,000, for what would likely be a highly sophisticated and intricate website. The lowest reported cost, amongst those that paid for a website, was a mere US $20. Hence, a wide range of costs were associated with website creation, and likely can be attributed to varying levels of sophistication. Overall, nearly half of NPOs globally either had their website donated for free or used free software. The remainder spent quite a sizable amount to create their websites on average.

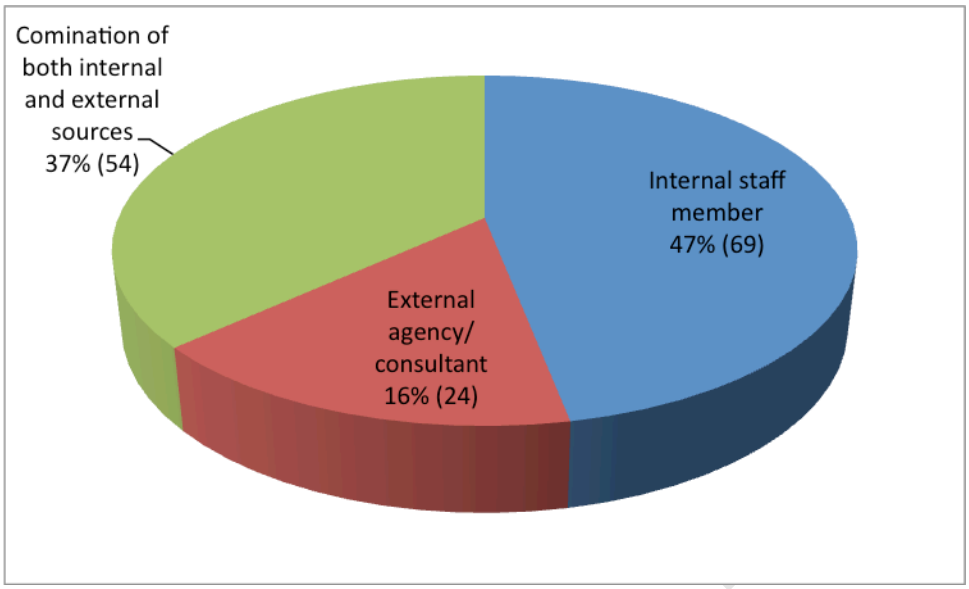
The 78 respondents (53%) that paid to create their website stated the degree to which they felt that spending this amount of money was worthwhile. Though costs may have been considered to be relatively high for those that paid to create a website, it was fascinating that 90% either strongly agreed or agreed that it was worthwhile to spend this amount of money to create the website. This finding was important in that it implied that the benefit reaped from spending this money, exceeded the associated costs. Graph 5.22 presents the degree to which website creation was cost-effective.

GRAPH 5.22: WEBSITE CREATION AS COST-EFFECTIVE



Only 16 percent of participants stated that the development of the website was contracted entirely to an external agency or consultant. Thus, the vast majority, 84 percent, had some degree of internal involvement with website development. This implied that staff had some level of specialised skills in this regard. The person(s) responsible for the development of the website is portrayed in Graph 5.23.

GRAPH 5.23: PERSON(S) RESPONSIBLE FOR THE DEVELOPMENT OF WEBSITE

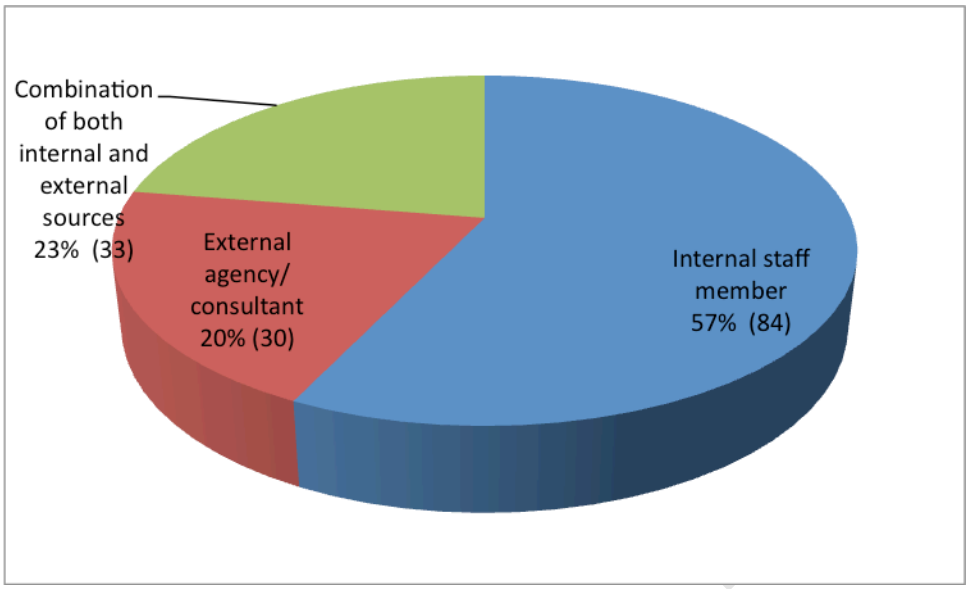


It was worthy to note however, that amongst developing countries, 25 percent of NPOs sourced their entire web development externally, whereas only nine percent did so in the developed countries. This finding indicated that NPOs from developed countries are more likely to have staff with website development skills than in developing countries.

Of the 80 NPOs (54%) that utilised some level of external assistance in the development of their website, 35 (44%) paid nothing for external web development assistance. The remaining 45 respondents (56%) indicated that the average cost spent on external assistance towards web development was US $2,296 during the preceding 12 months.

Data was collected regarding who was responsible for the maintenance of the organisational website. The figures were relatively consistent with the data on who was responsible for website development. Graph 5.24 depicts the person(s) responsible for the maintenance of the website.

GRAPH 5.24: PERSON(S) RESPONSIBLE FOR MAINTENANCE OF WEBSITE



NPOs from developed countries outsourced this web maintenance work to a lesser degree than did those from developing countries. This analysis indicated that NPOs from developed countries are more likely to have an internal staff member with some degree of web maintenance ability compared to NPOs from developing countries. The developed versus developing counties comparison is displayed in Table 5.13.

TABLE 5.13: PERSON(S) RESPONSIBLE FOR WEBSITE MAINTENANCE –

DEVELOPED VS. DEVELOPING COUNTRIES

Person Responsible	Developed Countries	Developing Countries
Internal staff member	66.7%	46.4%
External agency/ consultant	14.1%	27.5%
Combination of both internal and external sources	19.2%	26.1%

The costing associated with web maintenance revealed that of the 63 participants (43%) that received some level of assistance with web maintenance by an external agency, nearly half had paid nothing for this service. Of the 32 respondents (51%) that did pay, the average spent per annum amounted to US $808. Thus, it was found that the associated costs with web maintenance were substantially less than web development.

Respondents identified the person(s) who were responsible for determining the content of the organisational website. Revealingly, 91 percent of directors were involved equally across countries. It was interesting to note that internal staff members and volunteers contributed to web content to a greater degree in the developed versus developing countries. On the other hand, developing countries made use of external sources to a greater degree than developed ones. Additionally, respondents were allowed to provide other contributors to web content. Two respondents stated that board members were involved with determining content. One respondent replied that diplomatic officers contributed to content. Another respondent claimed that anyone could contribute to content simply by adding a comment, which likely would refer to a blog or a comment on an article presented on the organisational website. Table 5.14 presents the person(s) responsible for determining website content.

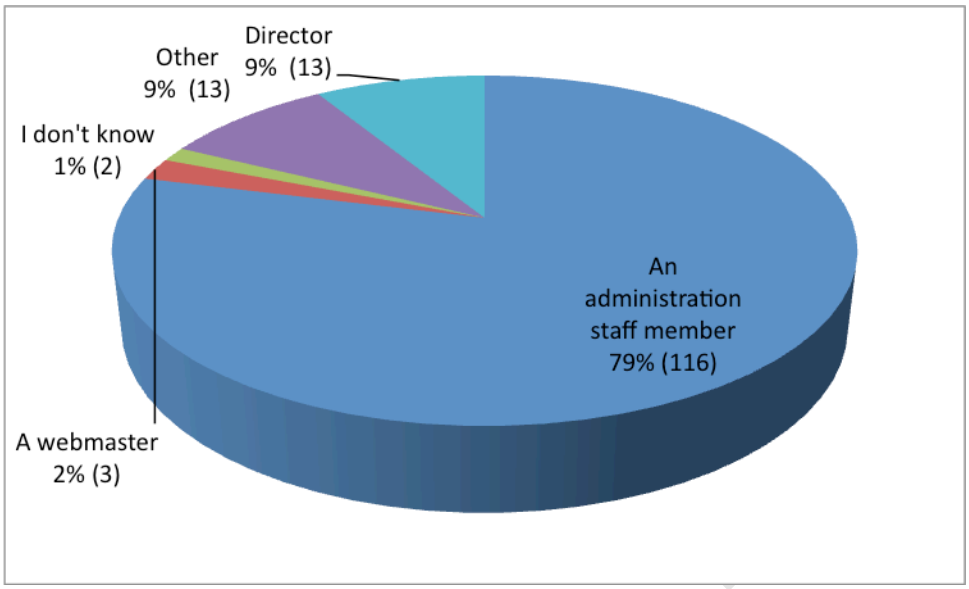
TABLE 5.14: PERSON RESPONSIBLE FOR

DETERMINING WEBSITE CONTENT

Person Responsible	Percentage
Director	90.5%
Internal staff members	64.0%
Volunteers	35.4%
External sources	12.9%
Clients	6.8%
None	0.7%

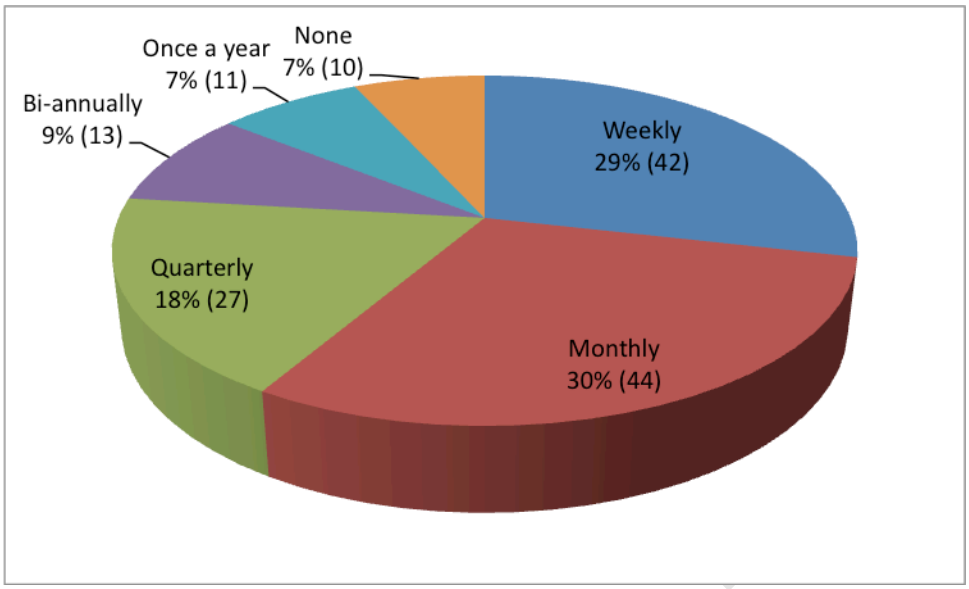
Participants reported on who was responsible for responding to emails received through the organisation's website. Data was consistent across countries and it is evident that administrative staff were most likely to respond to emails received via the website. Respondents also stated that programme staff and a combination of various staff members were responsible for this function. One respondent also indicated that there was no general email address for the agency and instead individual emails were listed on the website. The person(s) responsible for responding to emails is portrayed in Graph 5.25.

GRAPH 5.25: PERSON RESPONSIBLE FOR RESPONDING TO EMAILS



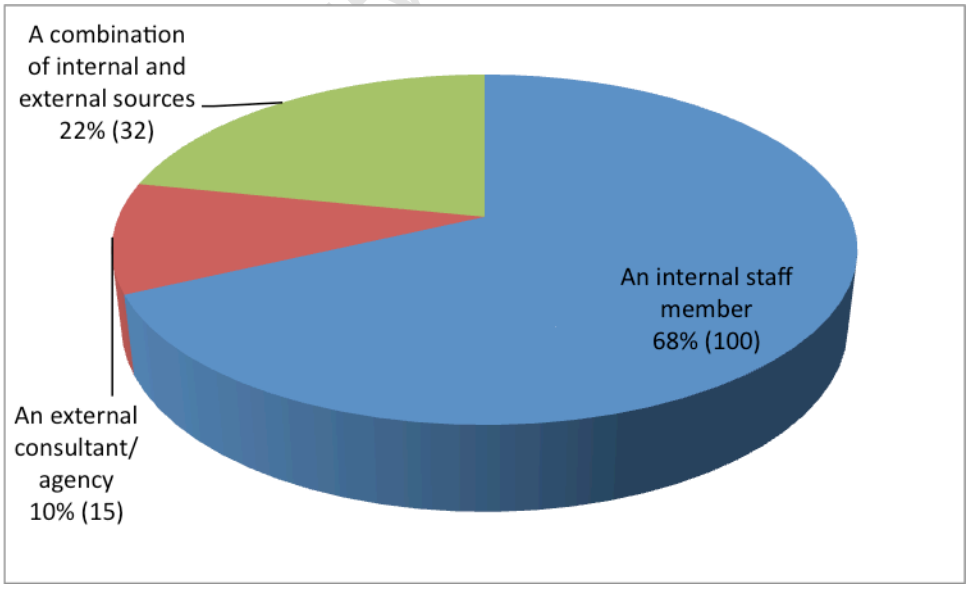
Data was gathered on the frequency that updates were made to organisational websites. In total, 59 percent of NPOs were identified as being quite active in updating their websites. Furthermore, an astounding 93 percent of respondents indicated that updates were made at least once a year. In sum, this data proved that NPO websites globally are dynamic and provide new information on a regular basis. However, it was found that nearly 40 percent of NPOs from developed countries updated information on a weekly basis, versus just around 16 percent in developing countries. This could have been related to available resources and capacity to make updates. Graph 5.26 depicts the frequency of updates made to websites.

GRAPH 5.26: FREQUENCY OF UPDATES MADE TO WEBSITE



Respondents reported on who was responsible for making updates to the organisational website. More than two-thirds of NPOs updated their websites using internal staff members only. The person(s) responsible for making updates to websites is shown in Graph 5.27.

GRAPH 5.27: PERSON(S) RESPONSIBLE FOR MAKING UPDATES TO WEBSITE



It is worthwhile to note that NPOs in developing countries were more reliant on external sources for making updates to their websites. Additionally, NPOs in developed countries had the internal technical

capacity to make updates at a substantially higher degree than NPOs in developing countries. An analysis found that of the approximately 68 percent (or 100 respondents) who reported that updates were made by an internal staff member, 69 percent made updates to the organisational website at least monthly. This starkly contrasted the roughly ten percent, or 15 respondents, who employed only external sources to make updates to the website. Within this segment of the population, approximately 27 percent of NPOs updated the website monthly. Hence, there was a distinctive correlation between outsourcing the task of updating an organisational website to the frequency of updates made to the website. An examination of the difference in responses between developed and developing countries can be seen in Table 5.15.

TABLE 5.15: PERSON RESPONSIBLE FOR UPDATES TO WEBSITE – DEVELOPED VS. DEVELOPING COUNTRIES

Person Responsible	Developed Countries	Developing Countries
Internal staff member	79.5%	55.1%
External agency/consultant	5.1%	15.9%
Combination of both internal and external sources	15.4%	29.0%

It was evident that most NPOs were limited by both financial costs and time with regards to the creation of their websites. Respondents provided further limitations. One South African participant claimed that it was difficult to find programmers in the country with the necessary specialised skills in "PHP, MySQL, Apache [and] Linux". Another respondent reported that the training required for a staff member to learn proved to be difficult. The major limitations in creating a website are presented in Table 5.16.

TABLE 5.16: MAJOR LIMITATIONS IN CREATING A WEBSITE

Limitation	Percentage
Financial costs	55.8%
Time	53.7%
Lack of knowledge of web technologies	37.4%
Shortage of suitable staff	31.3%
Limited availability of technology	16.3%
None	12.2%
Resistance from staff	2.0%

There were minor differences between developing and developed country NPOs. NPOs in developing countries more frequently stated that shortage of suitable staff, financial costs, limited availability of technology and lack of knowledge of web technologies were major limitations, versus their counterparts in developed countries. On the other hand, NPOs in developed countries more frequently stated that time proved to be a major limitation, versus their counterparts in developing countries.

Respondents reported what features were found on their organisational websites. The website features are presented in Table 5.17.

TABLE 5.17: WEBSITE FEATURES ON NPO WEBSITES

Website Feature	Percent
Contact information	99.3%
Mission statement	91.8%
Volunteer opportunities	70.8%
First person testimonials	44.2%
Employment opportunities	36.1%
Link to download or view annual report	32.0%
Blogs	31.3%
Link to download or view financial statements	23.1%
Message board	20.4%
Login requirement	15.7%
Alternative language	15.7%
Chat room	5.4%
None	0.7%

Nearly all respondents provided contact information on their websites. According to Fog et al (2002) in Kenix (2007), the posting of contact information is a key predictor for online credibility. The data thus implied that virtually all but one website in this study were likely to be credible.

The vast majority (92%) of NPOs provided a mission statement on their website, which was slightly higher than Kenix's (2008) research which found that 85 percent of NPOs had posted this information. This is in contrast to research conducted by Ingenhoff and Koelling (2008) who found that only 50 percent of NPOs presented a mission statement on their site.

A substantial 71 percent of NPOs posted volunteer opportunities on their site. This agreed with Wasley's (2009) assertion that NPOs valued the ability of the web to forge online relationships with volunteers.

First-person testimonials, or narratives given by actual beneficiaries, were posted by 44 percent of respondents. There was a substantial difference between this rate amongst NPOs in developed countries (52%), and those in developing countries (36%).

Employment opportunities were posted on websites by 36 percent of participants. This was a relatively significant difference from research conducted by Kenix (2007), which found that approximately 20 percent of NPOs posted employment opportunities. NPOs from developed countries posted employment opportunities at a significantly higher rate (46%), versus NPOs from developing countries (25%). This finding may have reflected a greater availability of employment opportunities in the developed world, or perhaps reflected a variance in the nature of presenting employment opportunities to the public. Other means may be preferred by the developing world, such as through newspapers or word of mouth.

Annual reports were posted on 32 percent of organisational websites. This was not in keeping with the findings of Kenix (2007) in which only 11 percent of NPOs had posted an annual report. This could indicate a growing trend in the NPO world to be more accountable and transparent to the general public. Furthermore, NPOs from developed countries posted this information at a higher rate (35%) than NPOs from developing countries (29%).

It was found that 31 percent of respondents reported having a blog on their website. Interestingly, NPOs from developing countries posted blogs on their website at a slightly higher rate (35%) than did their developed country counterparts (28%). According to Lowrey and Latta (2008), consistency in style, specialisation and scope of topic, and understanding readership and web traffic were indicative of a successful blog. It would be worthwhile to further explore this topic in greater detail in future research.

Financial statements were posted on 23 percent of organisational websites. This was notably higher than the 10 percent rate recorded in Kenix's (2007) study. Waters (2008) stressed the need for NPOs to be transparent and accountable and argued that NPOs should be more forthcoming with financial information by posting them on their organisational websites. The data revealed that there may be a trend towards greater transparency and accountability. Developed country NPOs responded at a higher rate (26%) than did developing country NPOs (20%) in this regard.

Message boards and log-in requirements were used minimally by NPOs. Chat rooms were rarely employed. In the case of log-in requirements, this type of feature was probably not desired by most

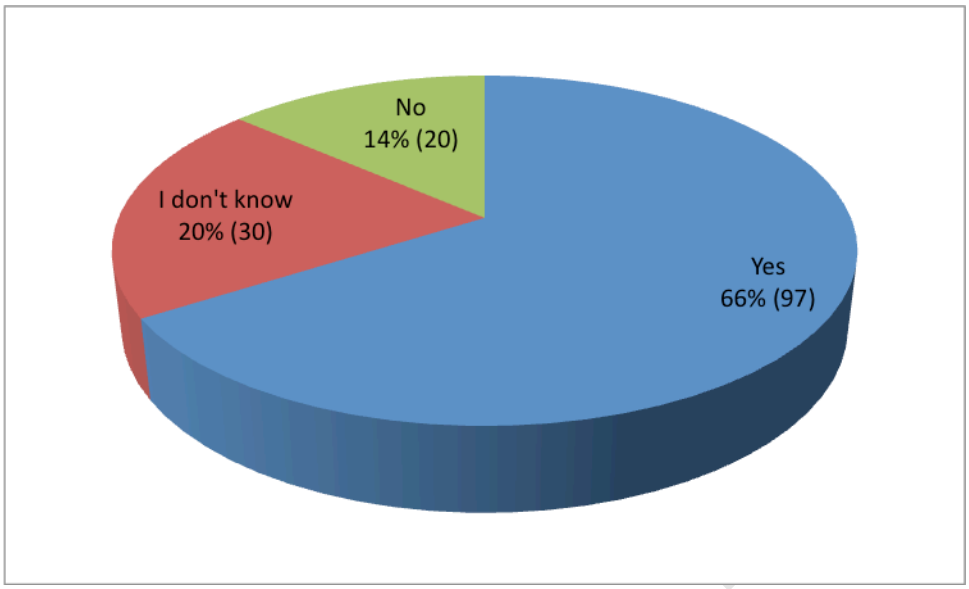
NPOs. Based on the findings regarding website target populations revealed earlier, NPOs indicated that their website targeted a range of users from the general public. A log-in requirement could thus have reduced the number of potential users visiting the site. Chat rooms were probably not employed to a great degree due to their very nature. A running chat room would have assumed that there are significant numbers of viewers to a website at any one given time. Furthermore, these users would need to have a desire to converse with one another. It was assumed that the nature of most NPO websites would not be consistent with these characteristics.

Alternative language options were found at a rate of 16 percent, considerably higher than the two percent found by Kenix (2007). This difference may have been attributed to the fact that Kenix (2007) examined NPOs from the United States, whereas the current study is a global one. Interestingly, 21 percent of NPOs from developed countries offered an option for an alternate language on their website, whereas this rate was only ten percent amongst developing country NPOs. This finding can appear counter-intuitive as the prevalence of multiple national languages in the developing world would be assumed to be greater than in the developed world. However, a segment of NPOs based in the developed world conduct service work in the developing world, and thus have multiple audiences to cater to, hence the alternate language option. It was assumed that there were very few NPOs, if any, based in the developing world which focus their service work in the developed world.

Respondents were also allowed to provide a few words on other features their websites had. Amongst the responses listed included photos, links to *Facebook* and *Twitter*, databases of statutes/legislation and articles, a members only area, newsletters, advocacy and campaigning activities, events, donor information, podcasts and other miscellaneous features. It was therefore evident that NPOs were using their websites as a means to interact with various audiences on a number of levels.

Approximately two-thirds of participants were satisfied with the amount of bandwidth their websites operated on. Graph 5.28 presents the level to which bandwidth was considered sufficient.

GRAPH 5.28: BANDWIDTH AS CONSIDERED SUFFICIENT



Amongst NPOs from developed countries, 72 percent found the bandwidth to be sufficient, whereas 59 percent of NPO directors from developing countries felt the same way. Additionally, only eight percent of respondents from developed countries felt that the amount of bandwidth was insufficient, versus 20 percent in the developing world. These findings indicated that the developing world experienced more negative issues pertaining to amount of bandwidth, than the developed world did. Kenix (2007) found that 83 percent of NPOs in her study use low bandwidth technology, likely due to financial constraints or to allow greater access to the site. Though the current study did not analyse the low versus high bandwidth status, it was assumed, based on these findings, that financial constraints and/or available technology were likely reasons for discord amongst those NPOs not satisfied with the level of bandwidth their websites operate within.

NPO directors were asked to report on the average number of hits received to the website per month, based on the last 12 months. Fifty eight percent of NPOs did not know how many hits on average their websites received per month. Of the 62 respondents (42%) that were able to produce figures, the average number of hits received per month was 185,483. This number was not entirely meaningful based on the spread of data. Specifically, data ranged from 15 hits per month to 10,000,000 hits per month. A closer analysis of all 62 respondents who provided data on number of hits revealed that 50 percent of NPOs received 1000 or less hits per month. Interestingly, 26 percent of the 62 respondents

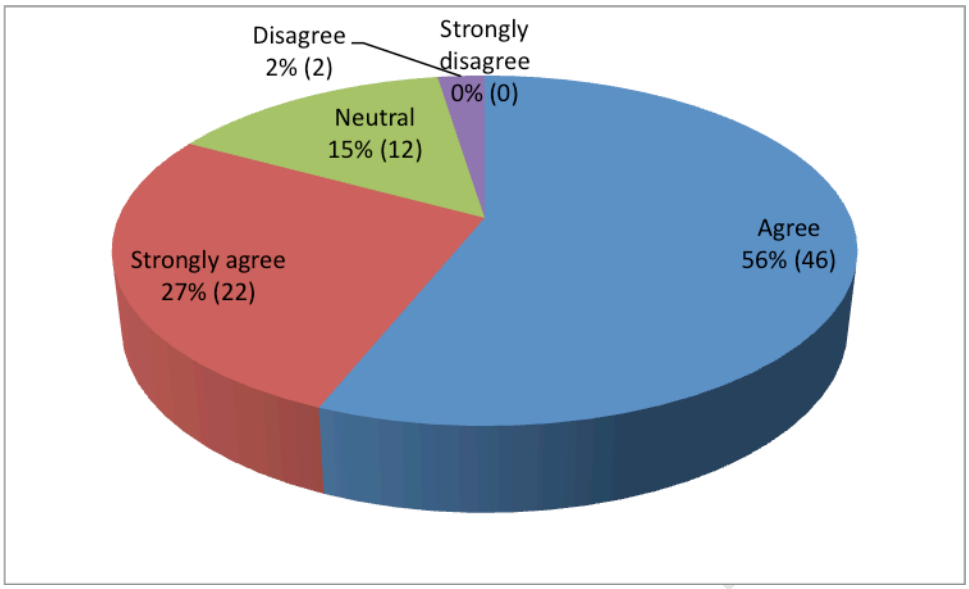
received 20,000 or more hits on average per month. This data reflects the range of NPO websites included in the survey, and their respected range of viewership.

5.6.4 Web Analytics

Web analytics tools such as *Google Analytics*, *ClickTracks* and *HitsLink* (Heck 2006) are tools that allow organisations to understand and track their website viewership and other data pertaining to the website. A small majority of 56 percent of participants indicated that they did indeed conduct these analyses whereas 44 percent did not. Interestingly, 64 percent of NPOs from developed countries used web analytics tools, versus only 45 percent of NPOs from developing countries. Financially these tools can be quite expensive, but this is not accepted as a typical constraint in that *Google Analytics* is a widely available and free web-based tool. A more likely constraint could be the time factor involved in running these analyses, in addition to the time needed to dissect, understand and implement changes based on the data. Furthermore, a lack of awareness of the existence and potential of these tools may have also played a role in why many organisations were not utilising web analytics tools.

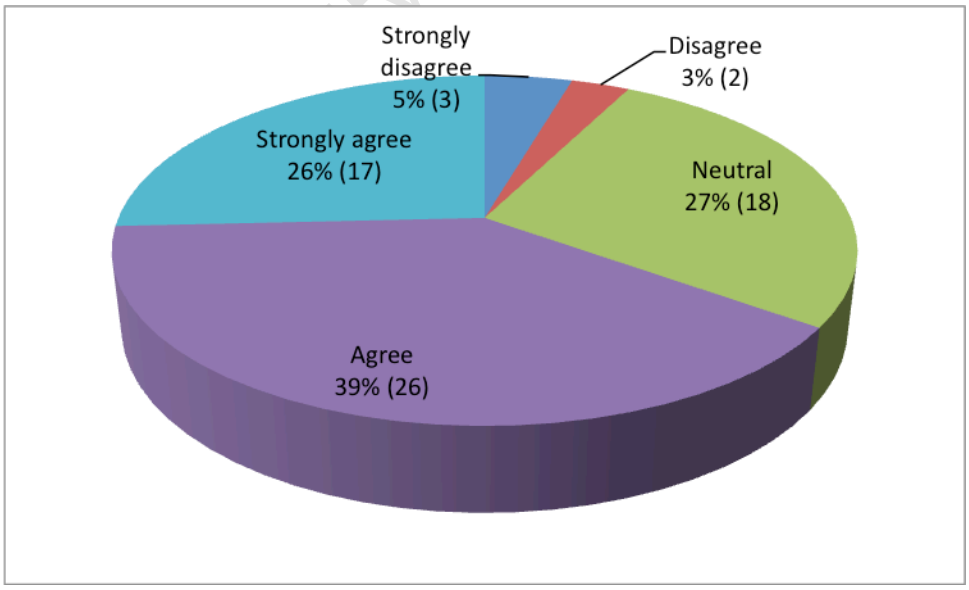
The 82 respondents (56%) that did utilise web analytics tools commented on the degree to which they found them to be valuable. It was evident that a sizable majority (83%) either agreed or strongly agreed that web analytics tools are helpful to the organisation. The benefits of conducting web analytics analyses as described by Heck (2006), Kaushik (2007) and Mathews (2009) were being reaped by the majority of NPOs that were utilising these tools. The level of value of web analytics tools is displayed in Graph 5.29.

GRAPH 5.29: WEB ANALYTICS TOOLS AS VALUABLE



Of the 65 NPO directors (44%) who did not conduct web analytics analyses, a significant majority (65%) of respondents either agreed or strongly agreed that training would be helpful in this regard. Graph 5.30 depicts this desire for training.

GRAPH 5.30: TRAINING DESIRED FOR WEB ANALYTICS TOOLS



A closer examination revealed that NPOs from developing countries were more eager to receive training in this regard (79%) versus NPOs from developed countries (46%). An overall look at data revealed that

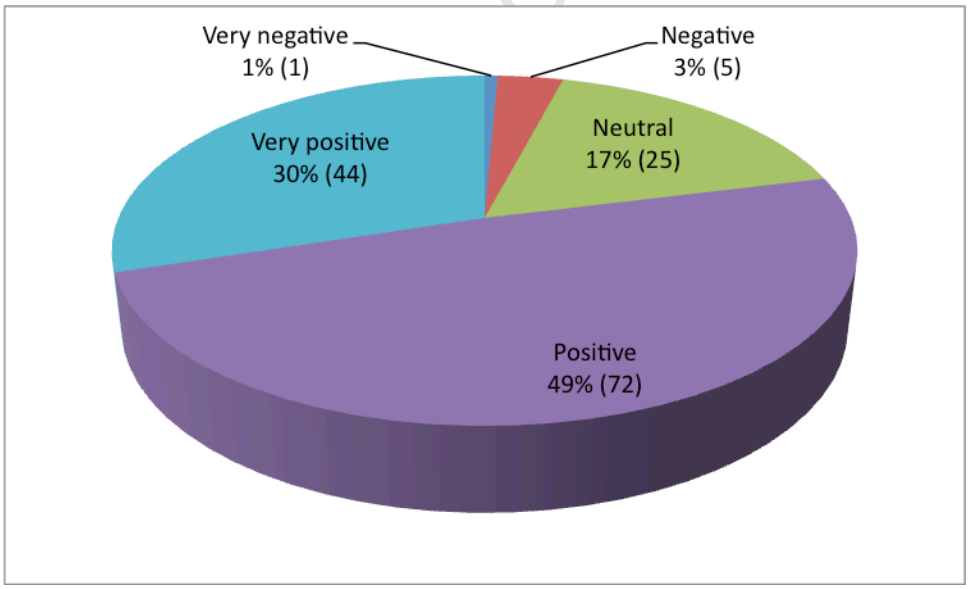
110 of the 147 respondents (75%) placed some level of positive value on web analytics analyses. This figure included those that had engaged with these tools and found them to be helpful, as well as those organisations that had not yet engaged with these tools, yet desired training. This again confirmed assertions by Heck (2006), Kaushik (2007) and Mathews (2009) that web analytics analyses have many benefits to organisations.

5.6.5 Feedback

The level of internal and external feedback on the organisational website was analysed, as well as the degree to which this feedback was given effect.

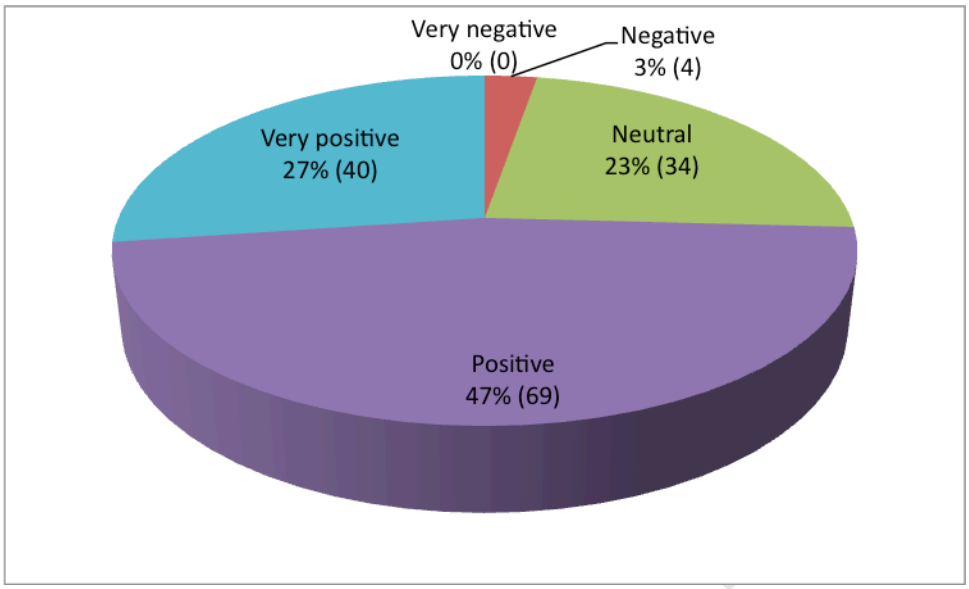
NPO directors reported on the nature of feedback typically received by staff members. An overwhelming majority (79%) of respondents claimed that internal feedback was either positive or very positive. This indicated that most NPO staff members were satisfied or highly satisfied with their organisational website. Graph 5.31 shows the typical internal feedback on website.

GRAPH 5.31: TYPICAL INTERNAL FEEDBACK ON WEBSITE



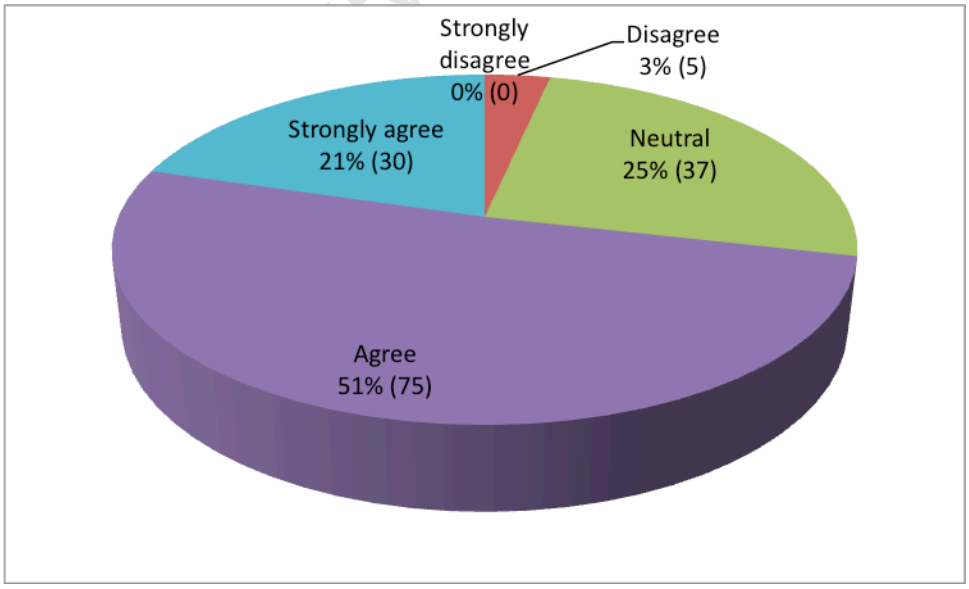
Participants then commented on feedback received by external stakeholders. External stakeholder feedback was relatively consistent with feedback received by internal staff members. This indicated that NPO websites were typically viewed under similar lenses both inside and outside of the organisation. Typical external stakeholder feedback is presented in Graph 5.32.

GRAPH 5.32: TYPICAL EXTERNAL STAKEHOLDER FEEDBACK ON WEBSITE



Respondents reported on the degree to which the organisation regularly gives effect to feedback. The data revealed that feedback was in fact absorbed and appropriate changes and adjustments were implemented to reflect the feedback received. The level of effect is shown in Graph 5.33.

GRAPH 5.33: ORGANISATION REGULARLY GIVES EFFECT TO FEEDBACK



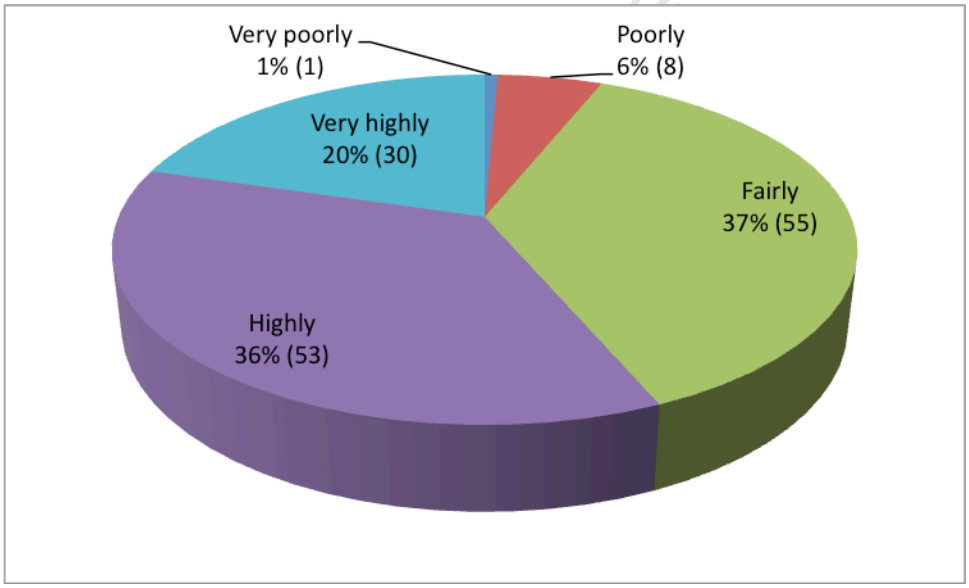
The data on feedback was consistent with Reynolds (2008) who reported that feedback from staff members and external patrons is valued and can result in a more effective website.

5.6.6 Comparative Perceptions

Respondents reported on how they believed their own website ranked in comparison to other NPO websites within the same service field and in the same geographic location. It was interesting to note that only seven percent of respondents felt that their website ranked either poorly or very poorly. Amongst NPOs from developed countries, nine percent felt that their organisation ranked poorly or very poorly, versus just three percent amongst the developing countries. This may imply that the competition within the developed world was greater in terms of quality of websites. The data indicated that in sum, NPOs were generally satisfied with their own websites. This comparison is displayed in Graph 5.34.

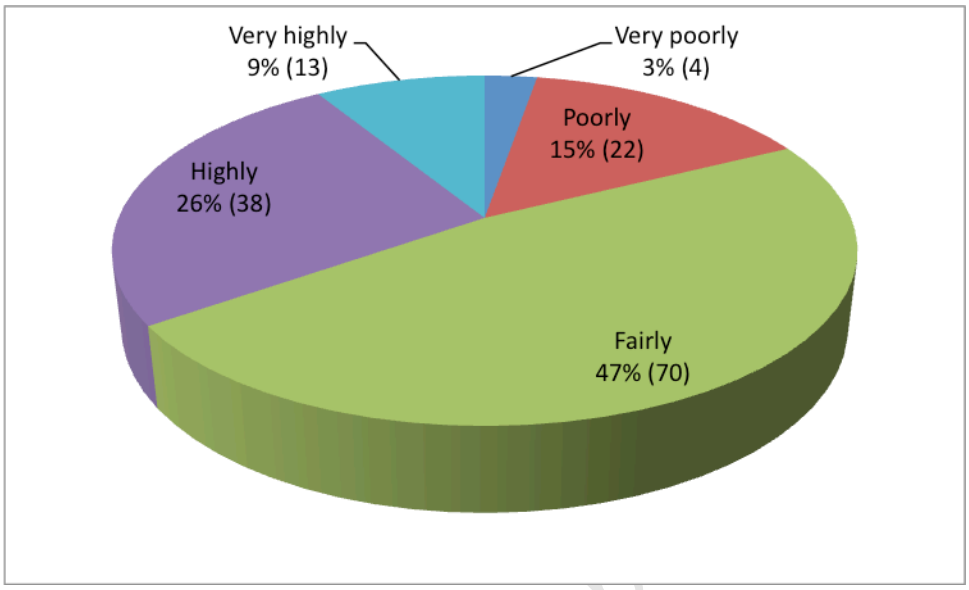
GRAPH 5.34: WEBSITE RANKING COMPARED TO OTHER NPO WEBSITES

WITHIN THE SAME SERVICE FIELD AND IN THE SAME GEOGRAPHIC LOCATION



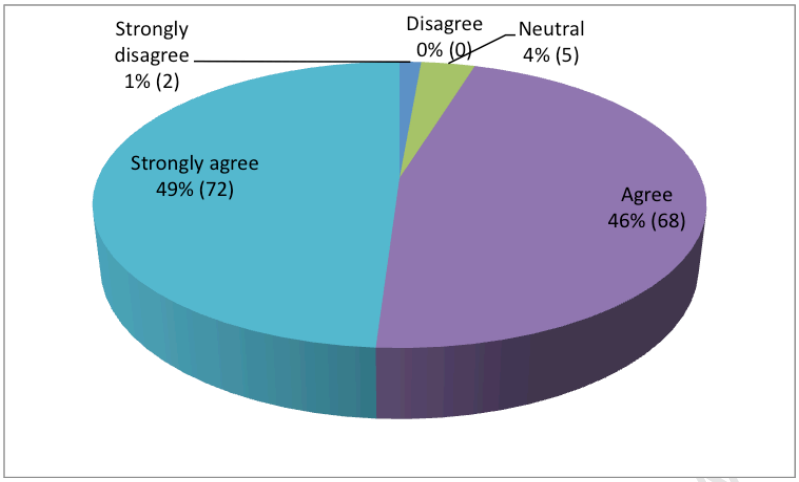
Participants provided their perceptions as to how they felt their organisation's website ranked compared to NPOs across the globe, in the same service field. It was interesting to note that in this case, there was a shift towards the negative, in comparison to assessments only examining other NPO websites in the same geographic area. This represented a more humble view on the global level. Furthermore, 45 percent of NPOs from developed countries reported that they felt their website ranked highly or very highly on the global scale, whereas just 23 percent of respondents from developing countries felt the same way. Graph 5.35 portrays this global comparison.

GRAPH 5.35: HOW THE ORGANISATIONAL WEBSITE RANKED COMPARED TO OTHER NPO WEBSITES WITHIN THE SAME SERVICE FIELD ACROSS THE GLOBE



NPO directors commented on whether their organisation's website could be improved upon. The data revealed some fascinating trends. An astounding 95 percent of respondents either strongly agreed or agreed that the organisation's website could be improved upon. This reflected a common perception that there were areas that have not reached their fullest potential. In other words, NPO directors believed that their websites could either integrate more features to maximise effect, and/or current features could be improved upon to some degree. The need for improvement is shown in Graph 5.36.

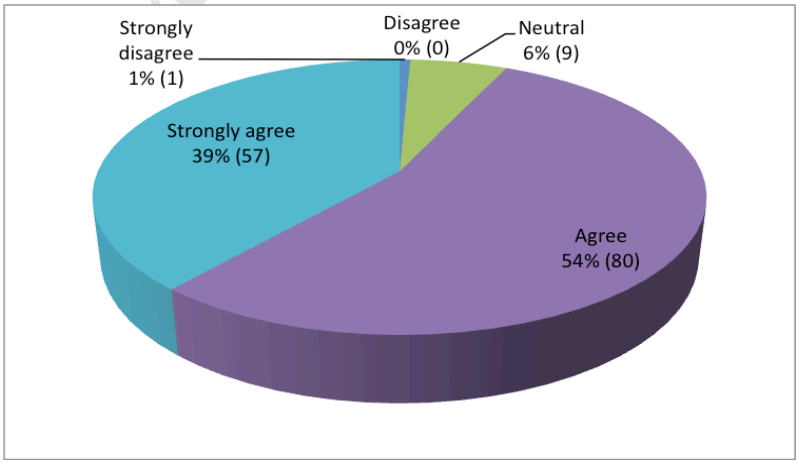
GRAPH 5.36: THE ORGANISATIONAL WEBSITE CAN BE IMPROVED UPON



5.6.7 Marketing, Promotions & Branding

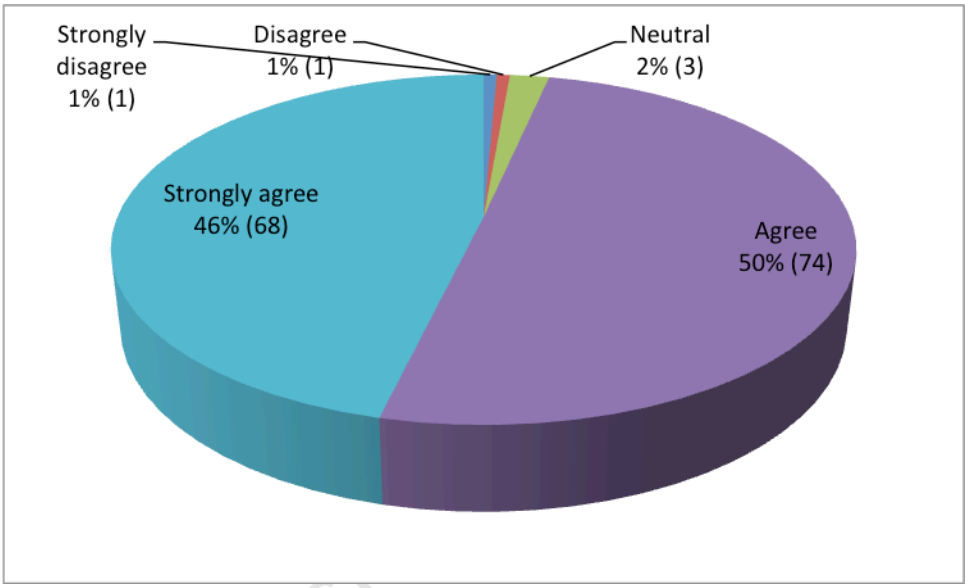
Respondents provided views on the degree to which web technologies had improved the organisation's ability to market its services. A substantial 93 percent of participants viewed web technologies favourably, either having stated that they agreed or strongly agreed. These findings were important in that they proved that web technologies had the power to market services in a positive way. This strongly confirmed Stokes' (2009) assertion that the web is a powerful tool for marketing. The degree to which marketing was improved through web technology usage is depicted in Graph 5.37.

GRAPH 5.37: WEB TECHNOLOGIES AS IMPROVING MARKETING



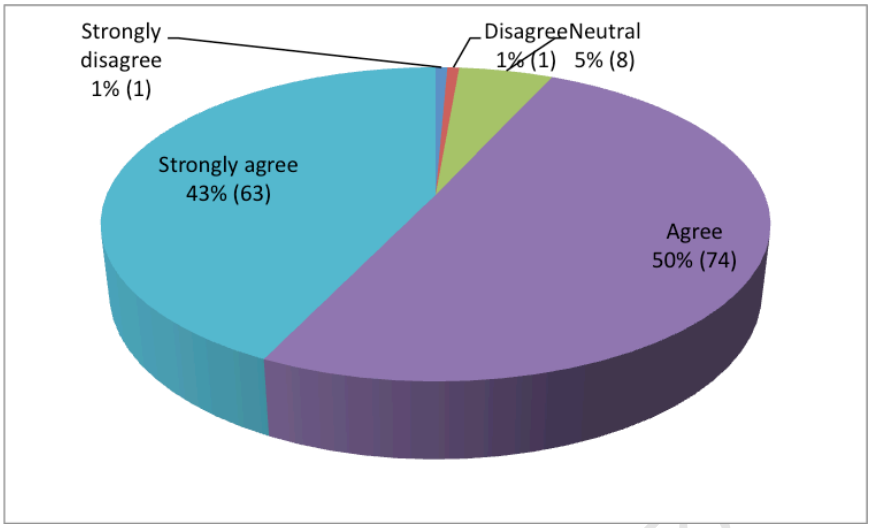
Respondents reported on the degree to which web technologies assisted with the promotion of the organisation. A substantial 96 percent agreement rating was consistent with the perceptions surrounding the power of the web to market services. This question was related to the previous one, yet differed slightly in its more general nature. The promotion of an organisation was understood to encompass several areas, including the marketing of services. Graph 5.38 presents the impact web technologies have had with the promotion of the organisation.

GRAPH 5.38: WEB TECHNOLOGIES AS ASSISTING WITH PROMOTION



Additionally, respondents commented on the degree to which they felt that web technologies assisted with the branding of the organisation. The data was spread similarly, with a very significant 93 percent of NPO directors having strongly agreed or agreed. This data concurred with Vestergaard's (2008) assertion that NPOs have begun to integrate branding into their marketing strategies. This was a fascinating finding in that it provided evidence that NPOs had in fact integrated branding into their marketing strategies, in addition to having used the web as a major driving vehicle for this purpose. This is akin to the corporate world, where branding and web-based marketing strategies are often central to sustainability and hence have many resources devoted to their development. The impact of web technologies on the branding of organisations is shown in Graph 5.39.

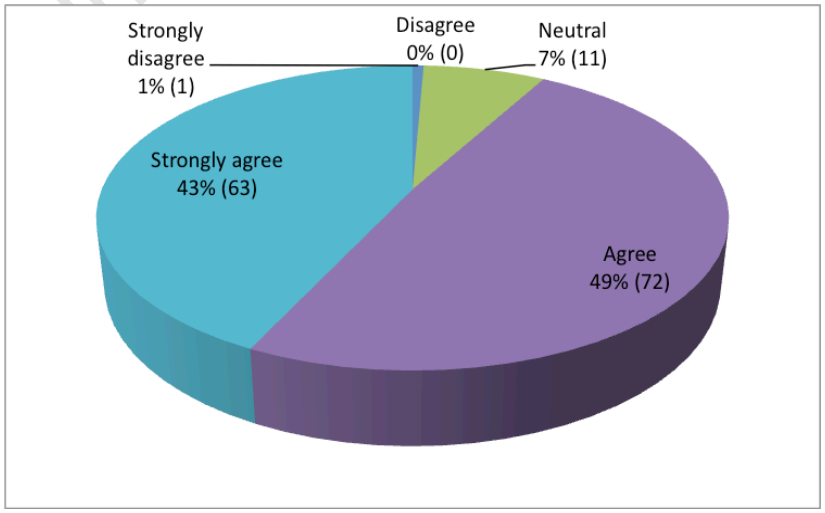
GRAPH 5.39: WEB TECHNOLOGIES AS HAVING IMPROVED BRANDING



5.6.8 Information Dissemination and Education

A considerable majority (92%) either strongly agreed or agreed that web technologies improved the organisational ability to educate and disseminate information. This provided evidence that web technologies have an ability to communicate information for the purposes of educating the public. NPOs overwhelmingly have identified this characteristic of web technologies, and have been utilising these methods as well. Graph 5.40 displays the level of improvement.

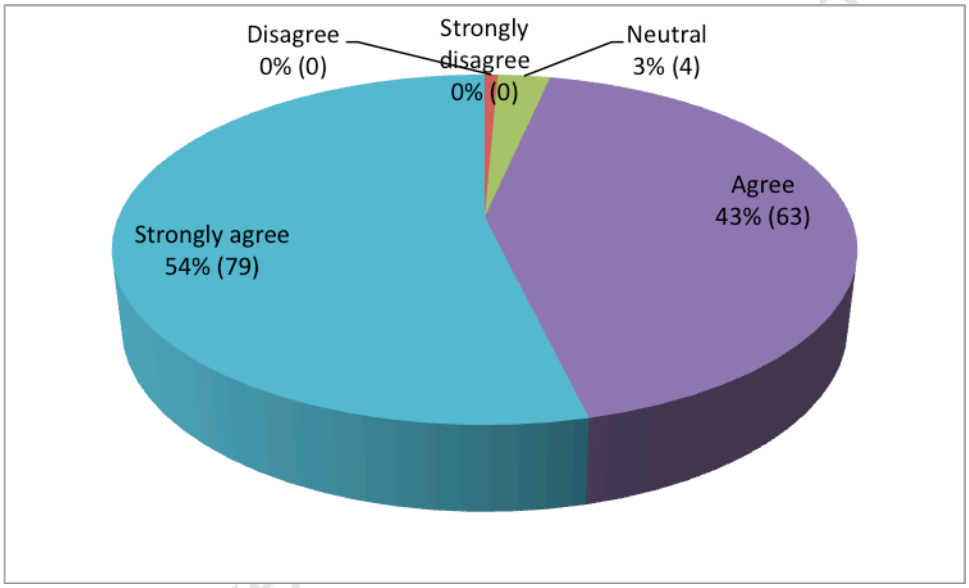
GRAPH 5.40: WEB TECHNOLOGIES AS HAVING IMPROVED THE EDUCATION AND/OR DISSEMINATION ROLE OF THE ORGANISATION



A substantial 97 percent of respondents felt that web technologies were instrumental in having provided information about the organisation and its services. Interestingly, no participants disagreed with this notion. Thus, it was determined that web technologies were fundamentally powerful as communication tools, with regards to NPOs. This agreed with Thirumal and Robins (2008) who found that web technologies had the power to transform the lives of India's rural Dalit population. The utility of web technologies to share information is presented in Graph 5.41.

GRAPH 5.41: WEB TECHNOLOGIES AS USEFUL FOR SHARING INFORMATION

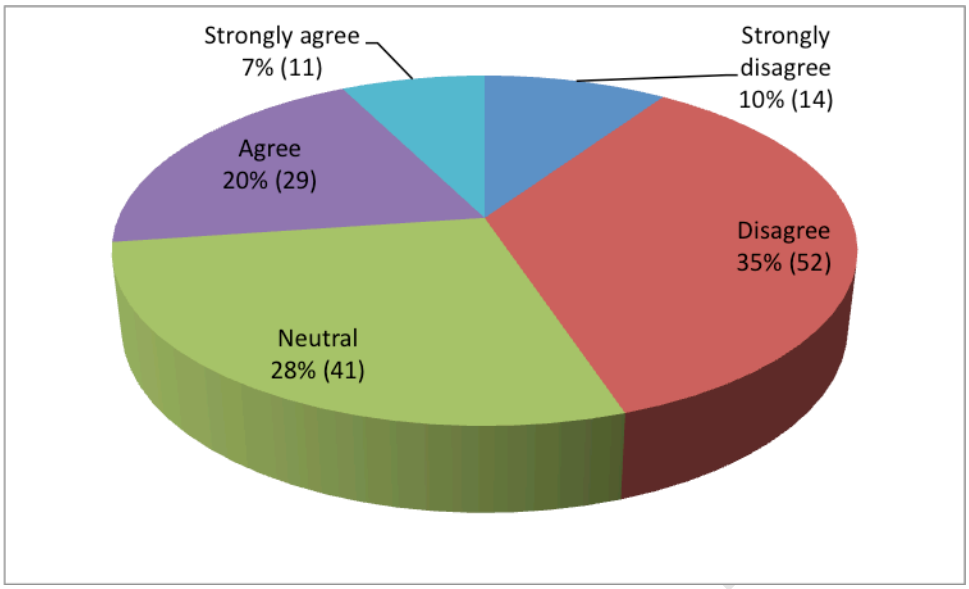
ABOUT THE ORGANISATION AND ITS SERVICES



5.6.9 Risk

Twenty seven percent of participants agreed or strongly agreed that web technologies did pose some level of risk. The data in sum is relatively balanced across agreement, disagreement and neutrality. Though risk may be a factor for some, it is apparent that it is not a big enough factor to deter web technology usage altogether. The security risk factor is shown in Graph 5.42.

GRAPH 5.42: WEB TECHNOLOGIES AS POSING A SECURITY RISK

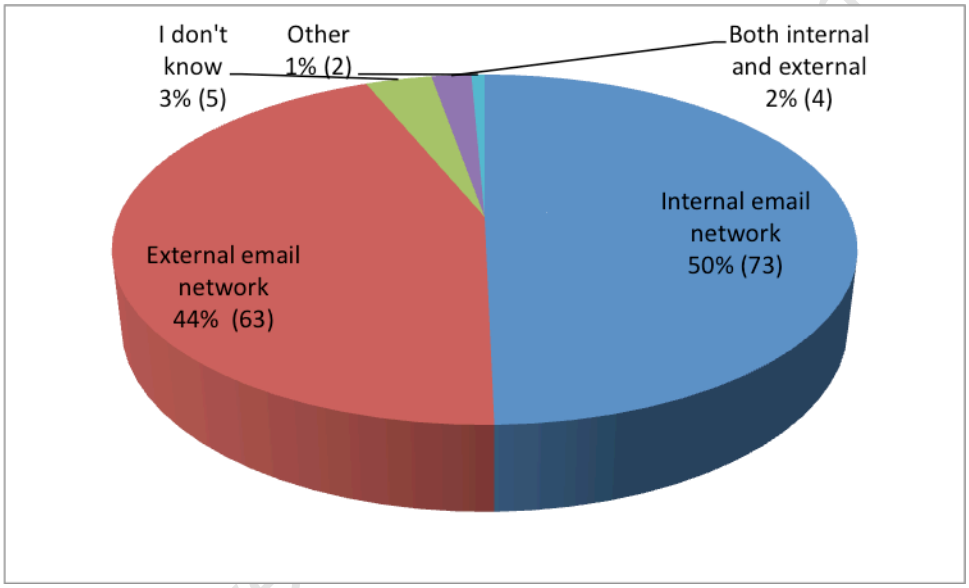


Respondents reported on whether their organisation's website had been hacked into in the past. Ninety one percent of NPO directors stated that their websites had never been hacked into. This provided supporting evidence to the perceptions on risk with regards to the utilisation of web technologies. As most organisations have not likely experienced their organisation's website being hacked, they do not perceive these technologies to be a significant threat. Participants also commented on experiences regarding the hacking of their sites. Two respondents reported that an unreliable internet service provider had resulted in the website having been hacked. Another respondent claimed that conservative parties did not agree with the information being presented on the organisational website, and thus caused damage to the site. One hacked NPO stated that a Turkish hacker had compromised the organisational site. Yet another one vowed that a Chinese hacker was responsible for having hacked their site. A respondent reported that a hacker had altered metatags to include pornographic terminology. One director declared that due to hacking, bogus emails were being sent out unknowingly on behalf of the organisation. Lastly, one NPO director stated that a hacker had changed original text into profanities on the organisational website, but that it was identified early and immediately rectified. Overall, the majority of NPOs did not experience any damage done to their sites via hacking. Nevertheless, based on the responses provided, web technology usage does have underlying potential threats.

5.6.10 Email

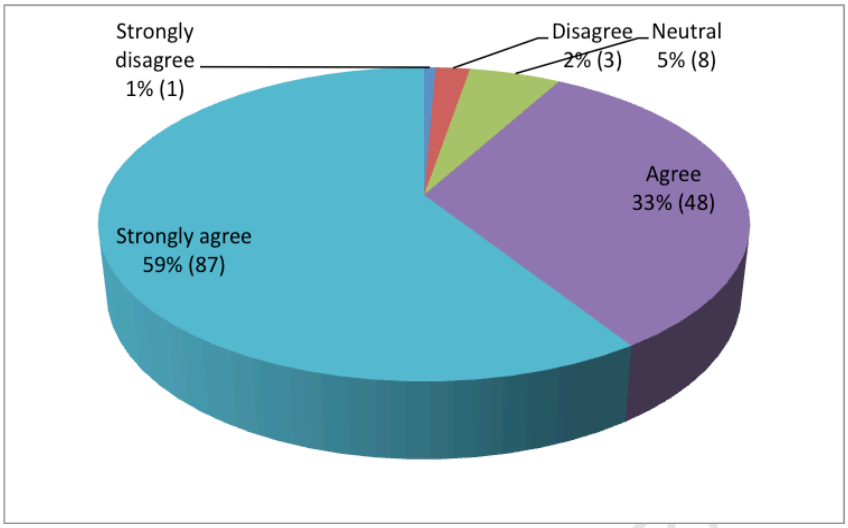
Half of NPOs globally used an internal email network system. External email networks such a *Gmail, Hotmail, Yahoo Mail* and others were used by 44 percent of respondents. Interestingly, 56 percent of NPOs from developed countries used an internal email network, versus 41 percent of NPOs from developing countries. The costs associated with the development and maintenance of an internal network may have played in a role in the decision to employ an internal email network. The types of email systems are presented Graph 5.43.

GRAPH 5.43: TYPE OF EMAIL SYSTEM



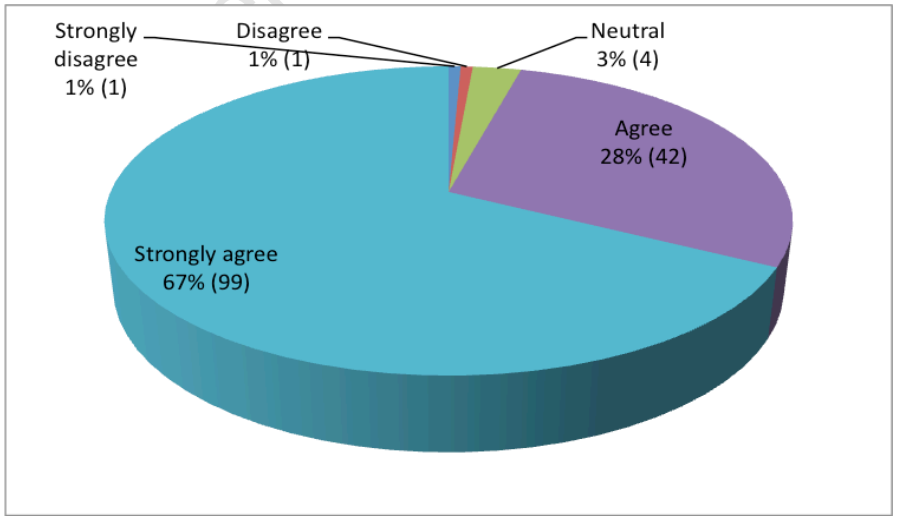
Ninety two percent of respondents either strongly agreed or agreed that email communication was necessary for internal dialogue amongst staff members. This finding was important in that it provided evidence that NPOs globally relied on email technologies as a fundamental means of interaction at the internal level. Amongst developed countries, 69 percent of respondents relied heavily on email communication internally, whereas this figure was 48 percent amongst developing countries. The reliance on email communication for internal dialogue is depicted in Graph 5.44.

GRAPH 5.44: EMAIL COMMUNICATION AS NECCESSARY FOR INTERNAL DIALOGUE



Respondents additionally reported on the degree to which email communication was necessary for dialogue amongst external stakeholders. A substantial majority (95%) of participants either strongly agreed or agreed with this notion. This concurred with Pillsbury et al (2005) who found that email communication enabled NPOs in Africa to develop meaningful relationships with external stakeholders, including funders. The reliance on email communication for external dialogue is presented in Graph 5.45.

GRAPH 5.45: EMAIL COMMUNICATION AS NECCESSARY FOR EXTERNAL DIALOGUE

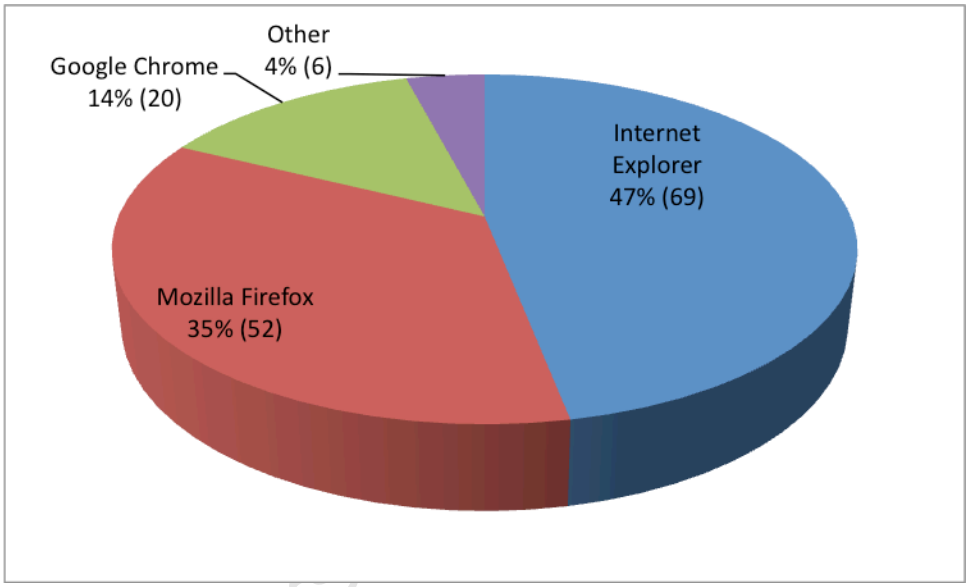


In sum, the data exemplified the permeating effect of email technologies into the operations of NPOs.

5.6.11 Browser

The data indicated that amongst NPOs around the world, *Microsoft's Internet Explorer* was the most popular web browser. *Mozilla Firefox* was next in popularity, followed by *Google Chrome*. As *Google Chrome* was the newest of the main contenders, its penetration into the market perhaps was not as widespread. Other browsers used included *Opera, Safari* and *Bing*. Graph 5.46 shows the types of browsers used.

GRAPH 5.46: TYPE OF BROWSER



5.6.12 Web 2.0

Web 2.0 technologies are characterised by their collaborative and interactive nature. It was generally understood that NPOs are typically participatory in nature, and as such, it was worthwhile to examine the extent and nature of Web 2.0 technology usage. Specifically, the NPO usage of social networking sites (SNSs) was investigated. The data revealed that NPOs were in fact engaging with the public via social networking sites. *Facebook* was the most popular amongst NPOs globally which confirmed Wasley's (2009) findings that NPOs are using *Facebook* extensively. Furthermore, the findings confirmed research from *Comscore* that reported that *Facebook* was the most widely used social networking site (Whitcomb 2010). However, the data is contradictory to *Comscore's* research that found that *MySpace* was approximately 50 percent less popular than *Facebook* (Whitcomb 2010). Furthermore, *Comscore's* research found that *Twitter* was approximately one third as popular as

MySpace and less than 20 percent as popular as *Facebook* (Whitcomb 2010). This contradicted the current findings, which revealed that *Twitter* has been growing in popularity, whereas *MySpace* has been losing its prominence. *Twitter* was more widely used by NPOs in the developed world (45%), than by NPOs in the developing world (33%). *LinkedIn*, however, was used by slightly more in the developing world (23%), than in the developed world (18%). *Ning, Community Village, Orkut* and *My Community* were amongst other SNSs used by respondents. Additionally, some respondents reported that they were currently in the process of setting up accounts with social networking sites. NPO SNS usage is displayed in Table 5.18.

TABLE 5.18: NPO SNS USAGE

Web 2.0 Social Networking Site	Total Percentage	Developed Countries Percentage	Developing Countries Percentage
Facebook	66%	66%	65%
Twitter	39%	45%	33%
LinkedIn	20%	18%	23%
Other	9%	13%	3%
MySpace	6%	5%	7%
None	4%	4%	4%

A further examination of the NPO utilisation of each of the major social networking sites revealed some fascinating trends. Firstly, the 97 respondents (66%) who use *Facebook* reported on the various functions *Facebook* is used for. The majority of *Facebook* users utilised the SNS for volunteer recruitment, fundraising and marketing purposes, in addition to creating NPO related events. This finding concurred with Dyrli (2006) in the assertion that online fundraising is now being utilised in new ways more than ever. It also concurred with Whitcomb (2010) in his discussion about the uses of *Facebook*. Moreover, nearly half used *Facebook* for education dissemination. Blogging and posting job opportunities were not employed at as high of a rate, but were still generally used by NPOs. Data was fairly consistent across countries. One noticeable difference was that NPOs in developing countries used *Facebook* for fundraising purposes at a slightly higher rate (41%) than their counterparts from developed countries (33%). Additionally, it was reported that NPOs used *Facebook* for advocacy and campaigning purposes, to post pictures, to communicate amongst staff members and to create general awareness. *Facebook* functions are presented in Table 5.19.

TABLE 5.19: FACEBOOK FUNCTIONS

Function	Percentage
Recruiting volunteers	59%
Fundraising	56%
Marketing purposes	55%
Creating events	54%
Education dissemination	47%
Blogging	28%
Posting job opportunities	27%
Other	6%
None	2%

Facebook "friends" are individuals and other groups that have either added or been added by an NPO, and form that NPO's particular network. Of the 97 (66%) of total respondents that used *Facebook*, it was found that the average NPO had a network of 282 friends. The range of data was quite significant, with one NPO having reported a network of nearly 4,000 friends. Interestingly, it was found that 46 percent of *Facebook* users had 100 or fewer friends in their networks, and a vast majority of 86 percent had 500 or fewer friends.

The 58 NPOs (39%) that used *Twitter* reported on the main purposes this SNS site was utilised. The majority of *Twitter* users utilised the SNS for blogging, marketing and education dissemination purposes. The site was also generally used for recruiting volunteers, fundraising, posting job opportunities and to create events. Interestingly, *Twitter* was utilised for blogging at double the rate (56%) than *Facebook* (28%). Respondents also reported using *Twitter* for advocacy and campaigning, providing updates about the organisation, and finding others interested in the organisation's work. *Twitter* functions are displayed Table 5.20.

TABLE 5.20: TWITTER FUNCTIONS

Function	Percentage
Blogging	56%
Marketing purposes	53%
Education dissemination	51%
Recruiting volunteers	41%
Fundraising	39%
Posting job opportunities	27%
Creating events	27%
Other	8%
None	7%

"Followers" are individuals and groups that have networked with a particular NPO on *Twitter.* It was discovered that the average NPO had approximately 311 followers on *Twitter*. A closer examination of the data revealed that 50 percent of NPOs on *Twitter* have 100 or fewer followers. A sizable majority of 76 percent have under 500 followers, and slim minority of seven percent of NPOs have 1,500 or more followers on *Twitter*.

The 30 respondents (20%) who used *LinkedIn* reported on the major functions utilised through the SNS. Interestingly, *LinkedIn* was used for posting job opportunities at a greater rate (41%) than the previously two listed SNSs (27% each). Respondents additionally reported that general networking purposes and to position the organisation within the sector were uses of *LinkedIn*. These findings can be attributed to the fact that *LinkedIn* is a professional SNS. Table 5.21 depicts *LinkedIn* functions.

TABLE 5.21: LINKEDIN FUNCTIONS

Function	Percentage
Posting job opportunities	41%
Marketing purposes	41%
Recruiting volunteers	31%
Education dissemination	28%
Creating events	25%
Fundraising	19%
Blogging	19%
Other	19%
None	16%

"Connections" on *LinkedIn* are individuals and groups that are part of an NPO's network. The average number of connections for NPOs using *LinkedIn* was 244. Interestingly, 83 percent of *LinkedIn* users reported having 100 or less connections. One organisation reported having 5,000 connections, thus revealing the varied level of use amongst NPOs.

Lastly, the usage of *MySpace* was explored in greater detail. The ten *MySpace* using respondents (6%) reported on the various functions the SNS was used for. Though general usership of the SNS was quite low, those NPOs that were active members stated that creating events, education dissemination and fundraising purposes were the main uses of the site. Furthermore, half used it for volunteer recruitment and blogging purposes. It was generally used for marketing and to post job opportunities as well. The various functions utilised on *MySpace* are reported in Table 5.22.

TABLE 5.22: MYSPACE FUNCTIONS

Function	Percentage
Creating events	60%
Education dissemination	60%
Fundraising	60%
Recruiting volunteers	50%
Blogging	50%
Marketing purposes	40%
Posting job opportunities	30%
Other	10%
None	10%

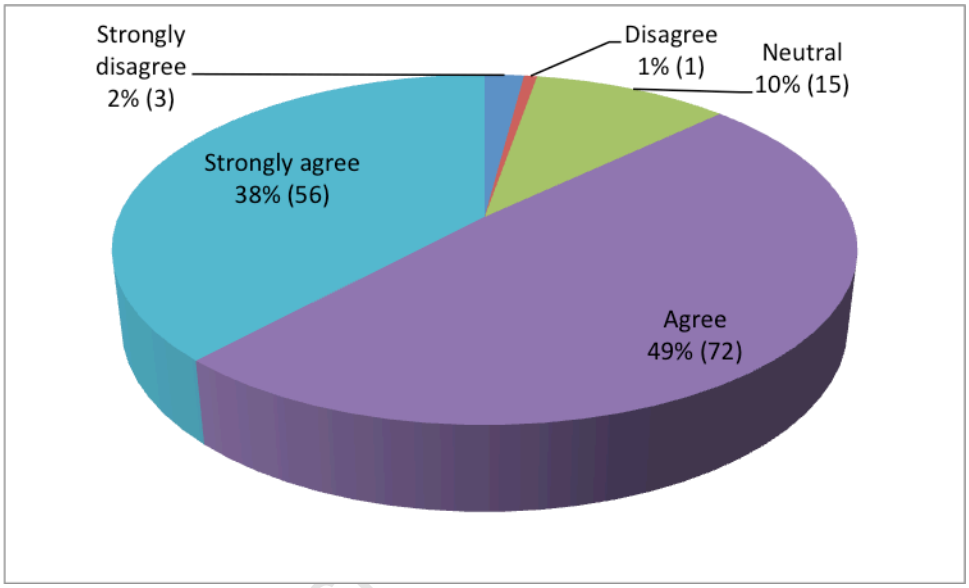
"Friends" are individuals or groups that are part of an NPO's network on *MySpace.* *MySpace* using NPOs had 107 friends on average. The data was spread fairly evenly in this regard. The findings revealed that *MySpace* was the least popular of the major SNSs amongst NPOs, as well as having the lowest average network of members.

5.6.13 Perceptions on Web Technologies

It was worthwhile to explore NPO director perceptions on the degrees to which web technologies have been valuable to the organisation within a variety of contexts.

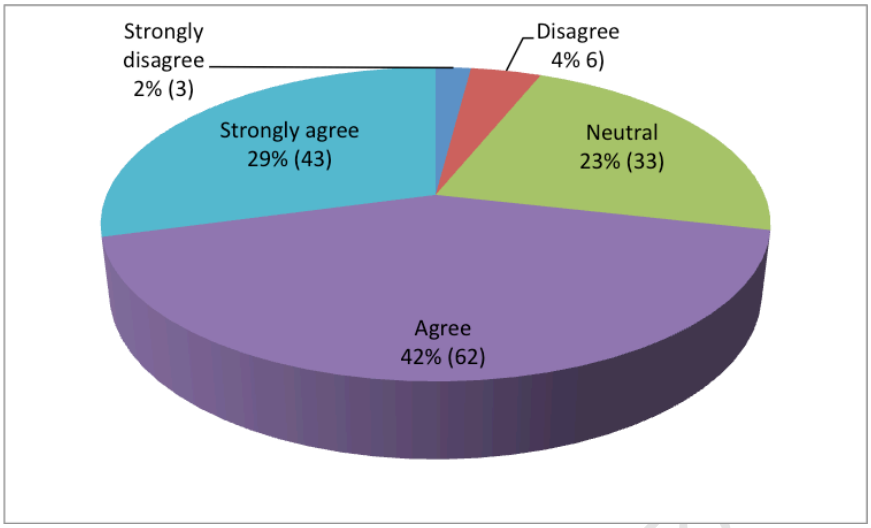
Respondents reported on whether web technologies had improved performance output with regards to organisational efficiency. A substantial 87 percent of NPO directors either strongly agreed or agreed that web technologies had improved the performance output of the organisation. This data implied that organisations overall were operating at higher levels of efficiency due to their web technology usage. These tools are thus clearly valued by NPOs. The figures were virtually consistent across countries. Graph 5.47 depicts the degree to which web technologies have improved performance output.

GRAPH 5.47: WEB TECHNOLOGIES AS IMPROVING PERFORMANCE OUTPUT



Seventy one percent of participants either agreed or strongly agreed that individuals could be more quickly organised and/or mobilised as a result of web technologies. This finding was important in that it affirmed the web as a powerful tool in communication and advocacy. This concurred with the research of Li (2001), Kenix (2007) and Thirumal and Robins (2008) which all found that web technologies did aid in the ability of NPOs to organise and mobilise individuals. Interestingly, NPOs from the developed world were more neutral to this notion (27%) than NPOs from developing countries (17%). Director perceptions are presented in Graph 5.48.

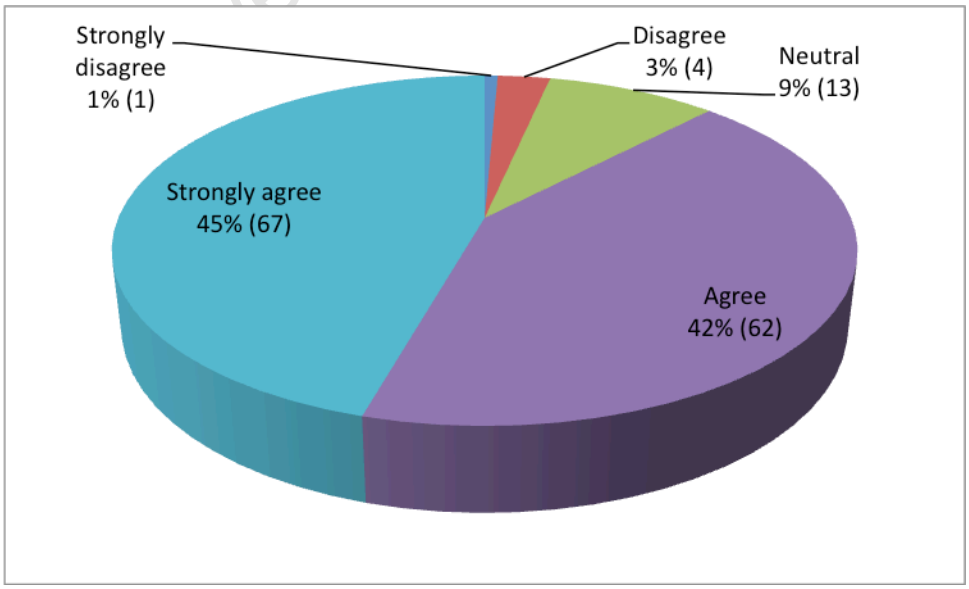
GRAPH 5.48: WEB TECHNOLOGIES AS IMPROVING ORGANISATION/MOBILSATION



Eighty seven percent of NPO directors either strongly agreed or agreed that web technologies had allowed organisations to reach audiences that were previously difficult or impossible to reach. The importance of this finding was that it emphasised the role of web technologies in having increased the potential reach of organisations to the general public. Data on the ability of web technologies to reach these audiences is shown in Graph 5.49.

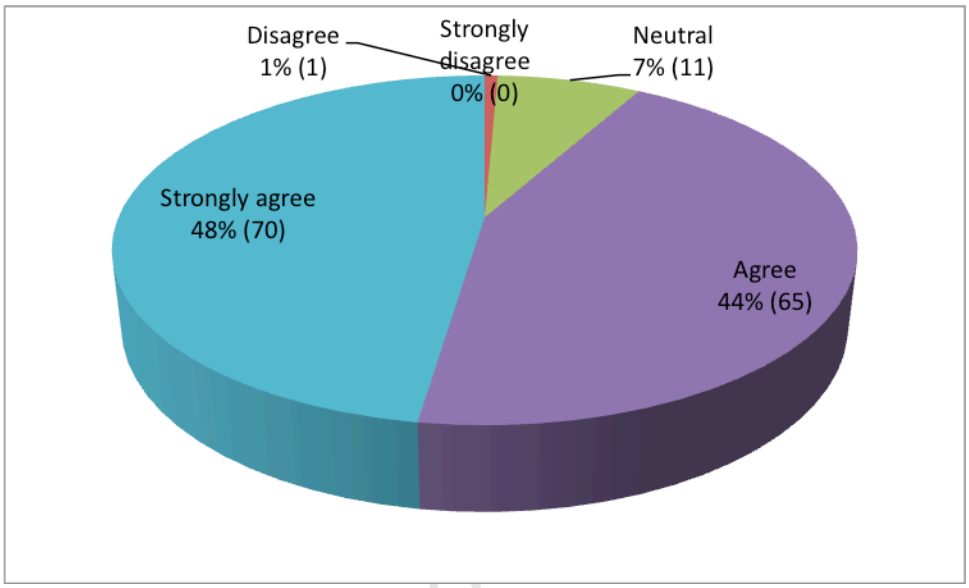
GRAPH 5.49: WEB TECHNOLOGIES AS IMPROVING ABILITY TO REACH

PREVIOUSLY HARD TO REACH AUDIENCES



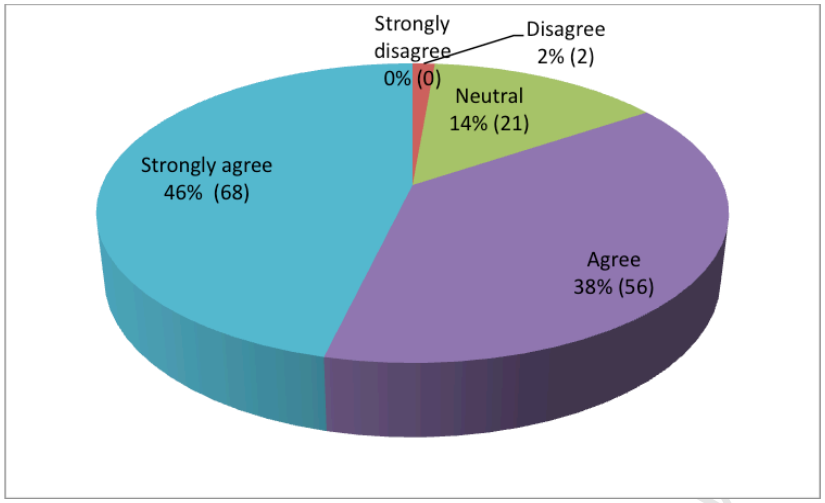
An impressive majority of 92 percent of participants either strongly agreed or agreed that data could be more quickly and/or accurately transmitted to audiences via web technologies. The findings agreed with research conducted by Al-Qirim (2007) that found that information could be more quickly spread to the public via web technologies. Participant views are displayed in Graph 5.50.

GRAPH 5.50: WEB TECHNOLOGIES AS IMPROVING ABILITY TO TRANSMIT DATA



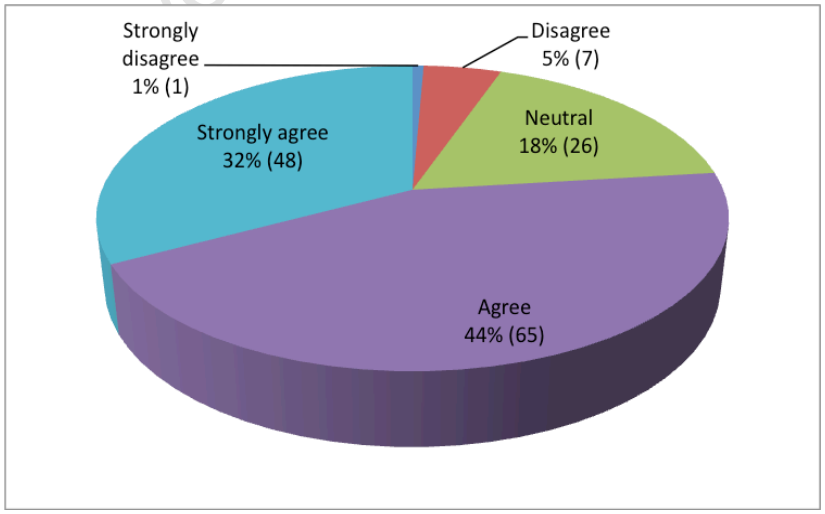
An astounding 84 percent of respondents either strongly agreed or agreed that the benefits of web technologies outweighed the costs. In sum, this provided evidence that the usage of web technologies was indeed cost-effective. The data was consistent across countries, thus making this a global trend. A very slim minority (2%) felt that the utilisation of web technologies was not cost-effective. Web 2.0 technologies are typically characterised with their low or non-existent financial costs. SNSs such as *Facebook*, *Twitter* and *LinkedIn* are free services, and as such, it was implied that NPOs are obtaining benefits from their integration, while not having to allocate much if any finances towards these web technologies. Graph 5.51 portrays this cost-benefit value.

GRAPH 5.51: WEB TECHNOLOGIES BENEFITS AS OUTWEIGHING COSTS



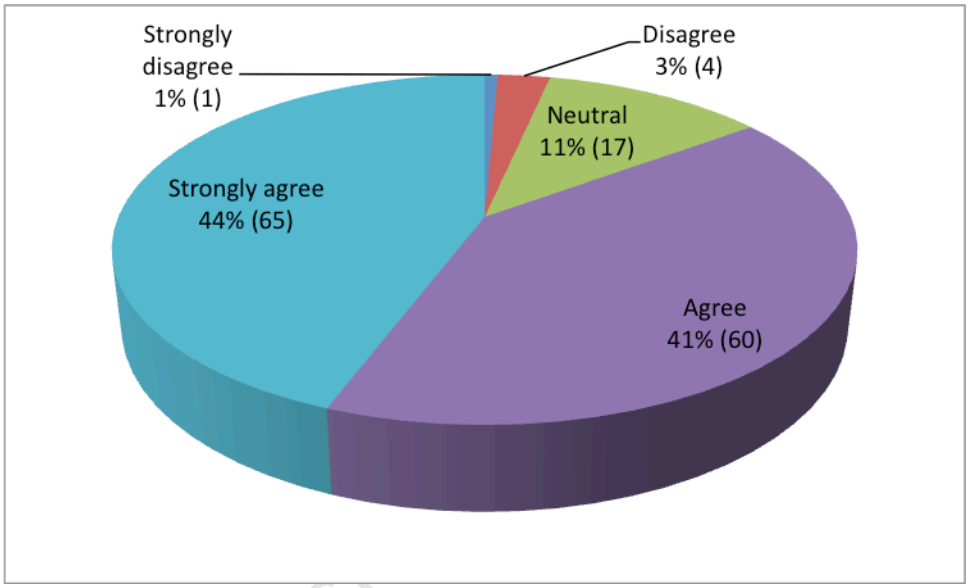
Over three-quarters of participants either strongly agreed or agreed that the advent of web technologies had revolutionised the way the organisation operated. The data implied that the operations of NPOs around the world have significantly changed based on their usage of web technologies. This finding was important in its reflection on the reliance on web technologies with regards to organisational operations. Interestingly, NPOs from developed countries were slightly more neutral to this notion (22%) than their counterparts from developing countries (13%). The impact of web technologies on revolutionising operations is displayed in Graph 5.52.

GRAPH 5.52: WEB TECHNOLOGIES AS REVOLUTIONISING OPERATIONS



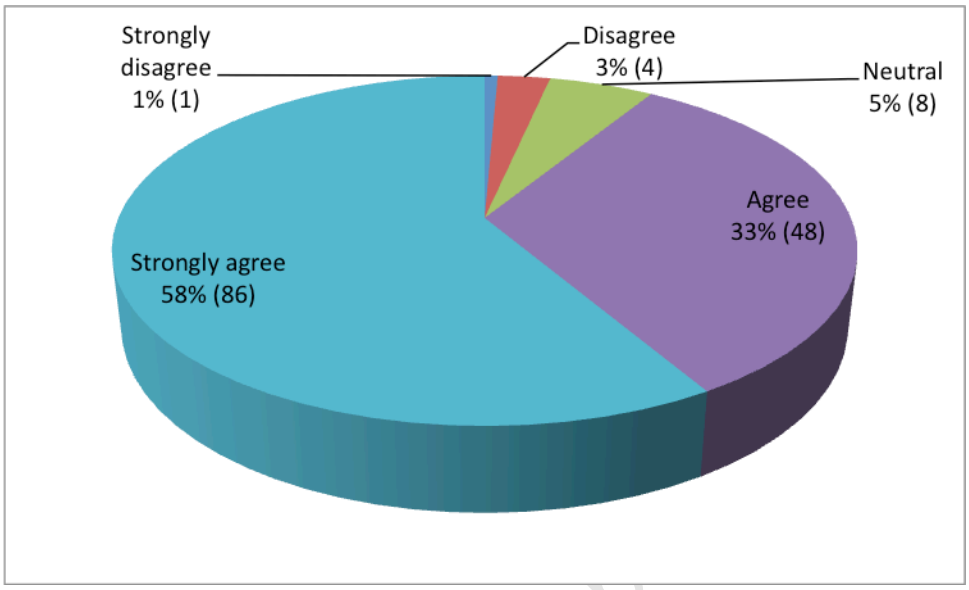
Data was gathered as to the degree to which NPO directors believed that present web based activities were crucial to the organisation's current sustainability. Eighty five percent either strongly agreed or agreed with this concept. The data implied that NPOs globally were dependent on web technologies for their own sustenance. The nature of how web technologies have played a contributing role to sustainability will be explored in greater detail in the following section on sustainability. The fascinating results concerning sustainability and present web based activities are presented in Graph 5.53.

GRAPH 5.53: PRESENT WEB BASED ACTIVITIES AS CRUCIAL TO SUSTAINABILITY



Ninety one percent of respondents either strongly agreed or agreed that more investment would be made in web development, setting aside any financial costs. Hence, the data indicated that web development is highly valued by NPOs. This desire is depicted in Graph 5.54.

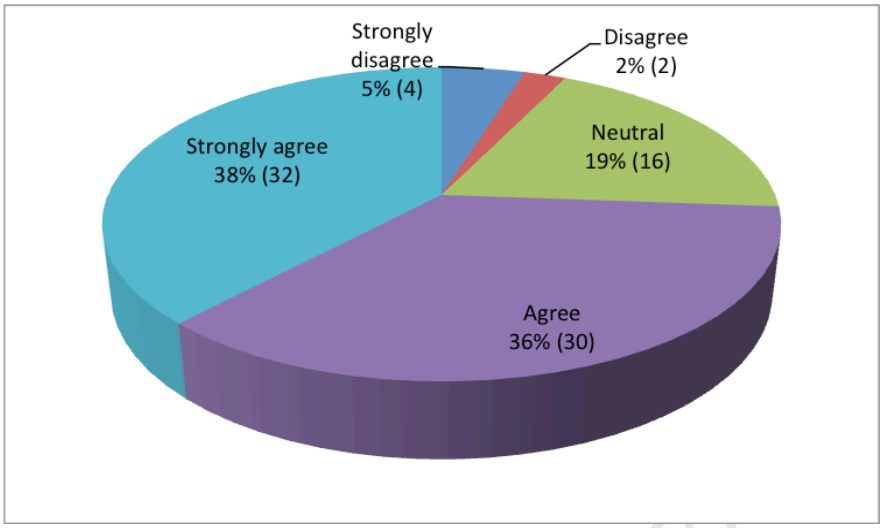
GRAPH 5.54: DESIRE TO INVEST MORE INTO WEB DEVELOPMENT IF MONEY WAS NO OBJECT



5.6.14 Workers and the Web

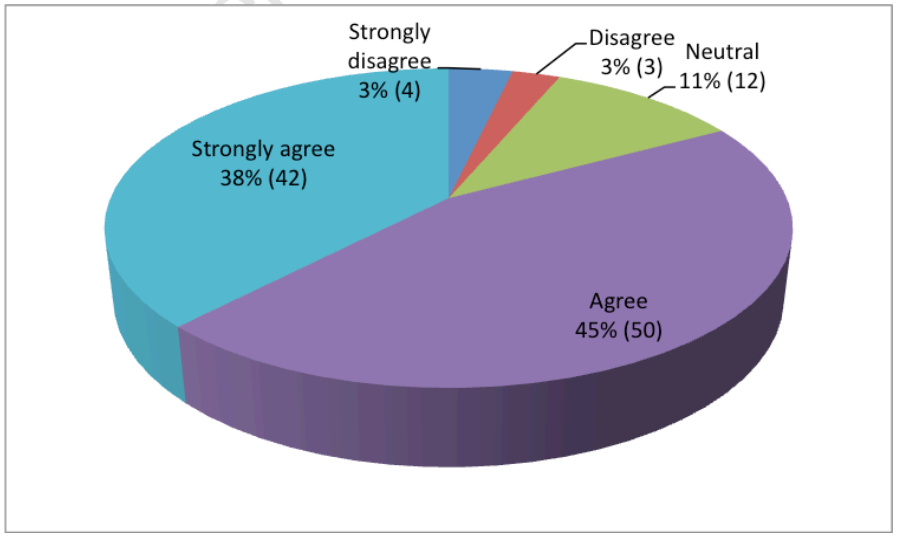
The role of the web with regards to paid and unpaid workers was examined. Fifty five percent of NPO directors reported that they had used the web to recruit staff members. Interestingly, 59 percent of participants from developed countries used the web to recruit staff members, versus a slightly lower rate of 51 percent of participants from developing countries. The 81 NPO directors (55%) reported on the web's level of effectiveness for this purpose. Nearly three-quarters of these respondents either strongly agreed or agreed that the web was useful in recruiting staff members. It was worthwhile to note that nearly 80 percent of NPOs from developed countries had found this method of staff recruitment to be valuable, whereas only 66 percent of NPOs from developing countries agreed with this sentiment. Though the difference is not substantial, it still implied that developed countries have experienced more success in web-based staff recruitment than are NPOs in developing countries. The value of the web as an effective staff recruitment tool is shown in Graph 5.55.

GRAPH 5.55: THE WEB AS AN EFFECTIVE STAFF RECRUITMENT TOOL



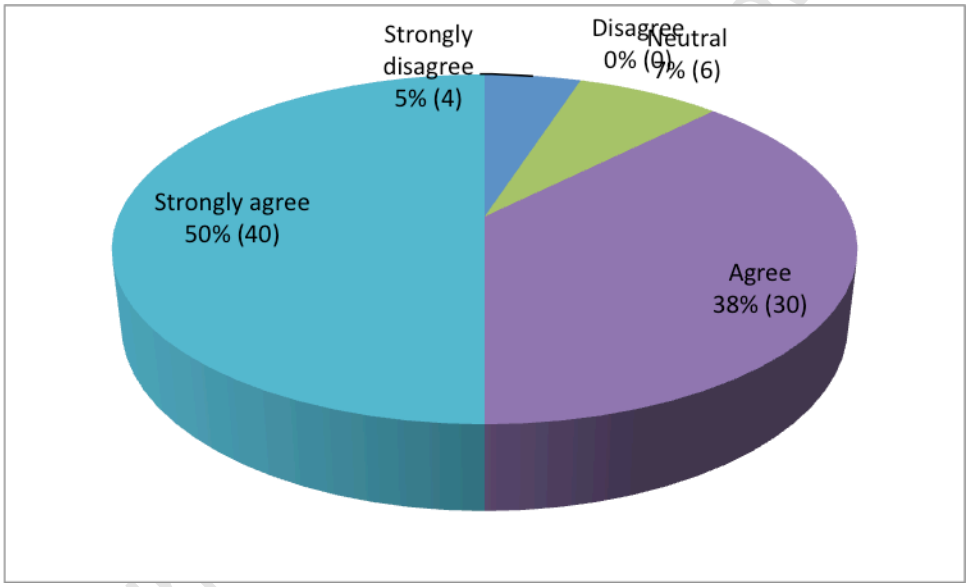
It was also found that the majority of NPOs (76%) used the web to recruit volunteers. This majority, 111 NPO directors (76%), indicated the effectiveness of using the web to recruit volunteers. Eighty three percent of web-based volunteer recruiting NPOs either strongly agreed or agreed that the web was effective in the recruitment of volunteers. The data confirmed Wasley's (2009) assertion that NPOs strongly valued their ability to develop relationships with volunteers via the web. These perceptions are presented in Graph 5.56.

GRAPH 5.56: THE WEB AS AN EFFECTIVE VOLUNTEER RECRUITMENT TOOL



It is understood that volunteers do not always operate in the immediate area of the organisation's office. As such, it was important to explore the extent to which NPOs used the web to manage volunteers. It was found that 54 percent of NPOs did use the web for this purpose. The 80 NPO directors (54%) also commented on if they deemed the web as an effective tool to manage volunteers. The most striking observation was that half of these respondents strongly agreed that the web was an effective tool in managing volunteers. A substantial 88 percent either strongly agreed or agreed with this notion. The data provided evidence that NPOs have experienced a great deal of success in managing volunteers using the web, and likely will continue to do so in the future. Graph 5.57 displays this effect.

GRAPH 5.57: THE WEB AS AN EFFECTIVE VOLUNTEER MANAGEMENT TOOL



Interestingly, a slightly larger majority of NPOs from developed countries (93%) agreed or strongly agreed, versus 82 percent amongst NPOs from the developing world.

5.7 Sustainability

A range of topics relating to organisational sustainability were explored. NPO directors provided hard data and shared their perspectives on the following issues: *threats, IT and sustainability, web usage and sustainability, hiring staff, the global recession, fundraising,* and *income and expenditure.*

5.7.1 Threats

Current threats to organisational sustainability were listed by respondents. The threats are presented in Table 5.23.

TABLE 5.23: CURRENT THREATS TO SUSTAINABILITY

Threat	Percentage
Lack of funding	84%
Lack of suitably qualified staff	34%
Lack of suitable office accommodation	33%
Lack of computers	22%
Competition with other organisations in the same or similar field	18%
Lack of community support	15%
Poor internet connectivity	12%
Lack of transportation	12%
Unstable infrastructure (e.g. erratic electricity supply, erratic telephone connection)	11%
Other	9%
High staff turnover	7%
Lack of infrastructure in community (e.g. roads)	7%
Political interferences	7%
None	6%
Corruption	5%
Financial mismanagement	1%

The findings revealed that the sustainability of a vast majority (84%) of NPOs was threatened by a lack of funding. This agreed with the intimidating figures uncovered by Smit (2005). Around one third of respondents reported that a lack of suitably qualified staff posed a threat to sustainability. Examining the data closer, however, revealed that in developing countries this rate was 49 percent, whereas in developed countries, it was just 21 percent. This finding indicated that NPOs in developing countries were significantly disadvantaged in terms of sustainability due to a lack of suitably qualified staff. Furthermore, this trend was evident again when examining the lack of suitable office accommodation, with 52 percent of NPOs in developing countries having reported this as a major threat, versus just 17 percent in the developed world. This crucial finding also reflected a disadvantage within the developing world versus the developed one. This notion of depravity in the developing world was further confirmed in the finding that a lack of computers proved to affect 35 percent of NPOs from developing countries, in stark contrast to just 10 percent amongst NPOs from developed countries. A lack of

infrastructure in the community such as roads plagued 14 percent of NPOs from developing countries, whereas no NPOs from the developed world reported this as being a threat to sustainability. Similarly, high staff turnover was found as a threat at a rate of 12 percent in the developing world, versus a mere four percent in the developed world. Yet another fascinating finding which exemplified the disadvantages faced by developing country NPOs was that a lack of transportation was reported at a rate of 19 percent in the developing world, in comparison to just five percent in the developed world. Unstable infrastructure including an erratic electricity supply or an erratic telephone connection was stated as affecting 23 percent of NPOs from developing countries, whereas no developed country NPOs had listed this as a concern. Likewise, poor internet connectivity affected a significant 23 percent of developing country NPOs, while only three percent of developed country NPOs reported this as a threat to sustainability. These serious and severe differences between the developing and developed world indicated that overall, developing country NPOs are facing a more diverse set of threats at a greater frequency than NPOs from developed countries. Interestingly, there was one variance in which developed countries were at a disadvantage. Competition with other organisations in the same or similar field was reported at a rate of 24 percent by NPOs from developed countries, whereas only 10 percent of NPOs from developing countries listed this as a threat. This finding is significant in that it indicated that there are generally more competing NPOs in the developed world, which may be contending for a limited set of resources. Additionally, respondents provided miscellaneous other threats to current sustainability. These included issues surrounding a dearth of volunteers, committed staff, knowledgeable IT professionals and participation in events. Furthermore, corruption in the beneficiary community was also listed as a threat by one respondent.

5.7.2 Global Recession

The research explored NPO director perceptions of the effects that the recent global recession has had on the organisation with regards to sustainability. An analysis of the findings revealed some captivating trends. Firstly, sixty nine percent of NPOs around the globe responded that due to the recent global recession, it had been harder to obtain funding. This finding concurred with Di Mento (2010) who found that donors on average had been granting less money to NPOs due to the global recession. These figures also agreed with the findings of Charities Aid Foundation (2009), particularly that difficulty in obtaining funding was the most severe outcome of the recession. Interestingly, 73 percent of NPOs from developed countries reported that it had been harder to obtain funding, versus 64 percent amongst

NPOs from developing countries. Approximately one third of respondents claimed that they had to seek alternative funding sources due to the global recession. In this case, 35 percent of developing country NPOs and just 23 percent of developed country NPOs stated that this was a result of the recession. Twenty percent of respondents claimed that they created new programmes and services, but nearly that same percentage of participants reported that they had to reduce the number of programmes and services. In terms of retrenching or laying off employees, developed country NPOs were impacted in this way at a higher rate (15%) than NPOs from developing countries (6%). In sum, the global recession that the world was either going through or emerging from, has indeed affected NPOs at a variety of levels. Table 5.24 shows the impact of the 2008 global recession on sustainability.

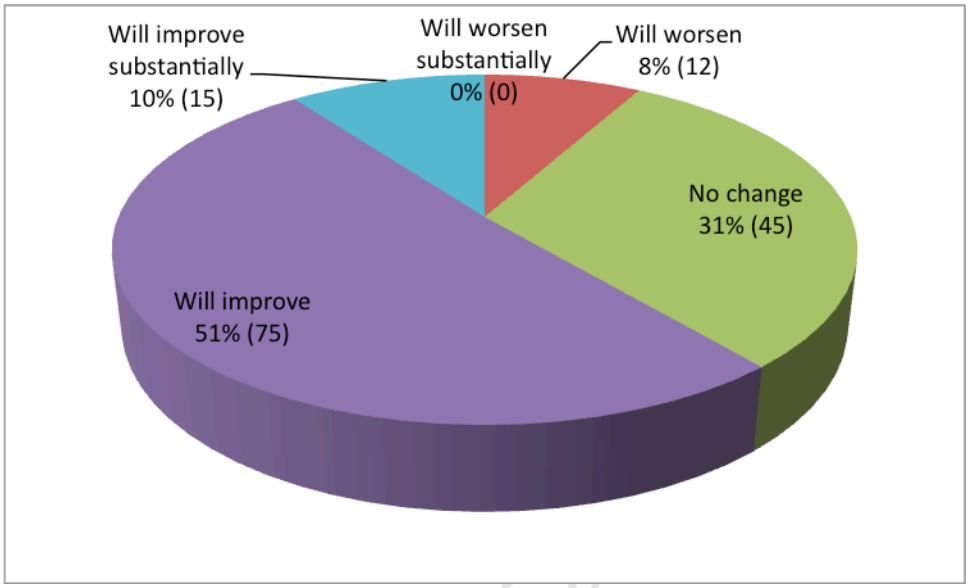
TABLE 5.24: IMPACT OF GLOBAL RECESSION ON SUSTAINABILITY

Impact Indicator	Percentage
More difficult to obtain funding	69%
Had to seek alternative funding sources	29%
More beneficiaries to serve	28%
Reducing the number and/or scale of programmes and services	21%
Creation of new programmes and services	20%
None	16%
Had to retrench/layoff employees	11%
Able to receive more funding	6%
Hired more employees	5%
Other	5%

Participants were asked to provide their impressions on the global recession for the period of the next six months. It was evident that NPO directors believed that the global recession would improve to some degree over the next six months. A sizable segment of nearly one third of respondents believed that there would be no significant change over this period. A lesser minority of just eight percent of participants believed that conditions would worsen. The findings indicated that there was an overall level of optimism in the short term that global economic conditions would improve to some degree. A closer examination revealed that this optimism was shared at a far higher degree in the developing world, with 76 percent of NPOs having believed that some level of improvement would happen over the next six months, versus an optimism level of just 49 percent amongst NPOs in the developed world. Furthermore, 15 percent of NPOs from developed countries believed that conditions would worsen over this period, whereas not a single respondent from the developing world felt this way. The perceptions

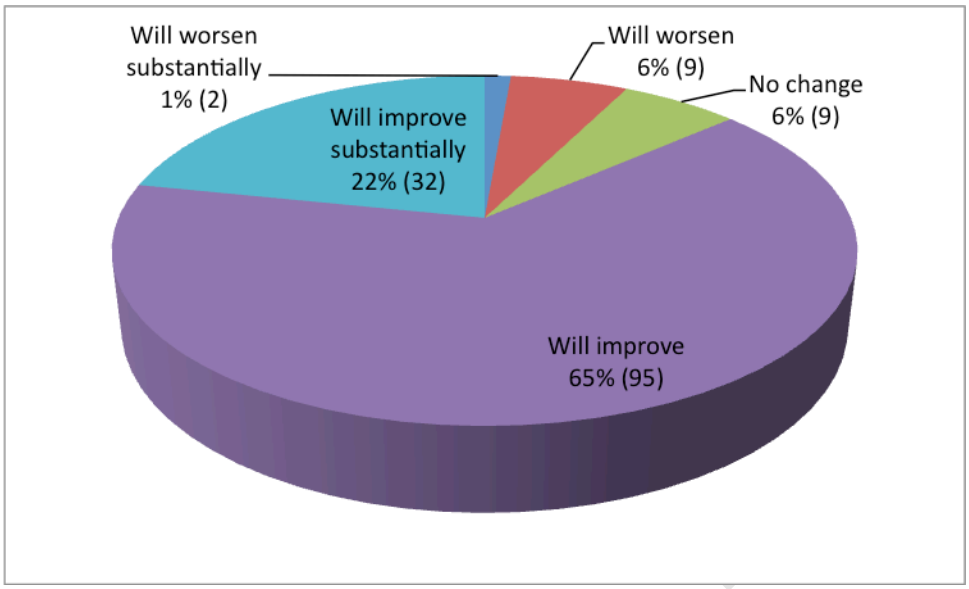
coincided with the higher rate of hardships such as difficulties in obtaining funding, found in the developed world compared to the developing one. The short term views are portrayed in Graph 5.58.

GRAPH 5.58: SHORT TERM VIEW ON THE GLOBAL RECESSION



Data was also gathered on NPO director impressions on the global recession over the next five years. It was revealed that optimism levels in the long term were significantly higher than in the short term. A considerable majority (87%) of NPO directors believed that the global recession would improve to some degree in the long term. A minimal six percent felt there would be no change, and just seven percent felt that conditions would worsen to some degree. Interestingly, this pessimism was present at greater rates amongst NPOs in the developed world (12%) versus their developing world counterparts (3%). Optimism was found at a rate of 93 percent in the developing world, whereas this figure was slightly lower in the developed world (81%). If the predictive powers of NPO directors were accurate, the global recession would be more of a temporary phenomenon than a long term malady. This is related to Shiller's (2010) claim that social psychology has a strong influence on economic conditions as they pertain to recessions. The long term views are displayed in Graph 5.59.

GRAPH 5.59: LONG TERM VIEW ON THE GLOBAL RECESSION



5.7.3 Income/Expenditure

Organisational sustainability was additionally measured by an analysis of income and expenditure data. NPOs reported on income and expenditure levels based on the last audited/accurate financial year. Income/expenditure data is shown in Table 5.25.

TABLE 5.25: INCOME AND EXPENDITURE

Country	Income	Expenditure	Net Balance	Income to Expense Ratio
Australia	127,412	147,326	-19,914	0.86
Canada	554,215	508,526	45,689	1.09
UK	530,596	1,116,351	-585,755	0.48
Developed Countries Totals	1,212,223	1,772,203	-559,980	0.68
Developed Countries Average	**404,074**	**590,734**	**-186,660**	**0.68**
India	56,666	104,732	-48,066	0.54
Pakistan	1,549	2,715	-1,166	0.57

South Africa	398,948	395,975	2,973	1.01
Developing Countries Totals	457,163	503,422	-46,259	0.91
Developing Countries Average	**152,388**	**167,807**	**-15,420**	**0.91**

Figures by country represent the average income, expenditure, net balance and income to expense ratio for NPOs in that country. The "developed countries average" and "developing countries average" reflect the average income, expenditure, net balance and income to expense ratio for each particular set of countries – developed and developing. All figures are in U.S. Dollars. The findings were very significant. Firstly, an examination of the averages revealed that developed countries typically have greater access to financial resources than in developing countries. This implied that their access to income was greater. Furthermore, the levels at which they spend financial resources was also greater. Interestingly Canada had the highest average income, just slightly more than that amongst NPOs in the UK. However, the UK outspent the other countries by far.

Amongst the developing countries, South Africa dominated both India and Pakistan in terms of level of finances coming in and out of the organisation. These figures alone, however, are simply indicators of key trends. Additionally, it was found that only Canada and South Africa had positive net balances over the past 12 months. A closer examination of the income to expense ratio yielded some fascinating and meaningful results. South Africa had the most balanced income to expense ratio, followed closely by Canada. The most imbalanced was the UK, followed by India and then Pakistan. Developing countries in general had a more balanced income to expenses ratio of 0.91, versus 0.68 amongst the developed countries. It was important to integrate the assertion by Granof (2001) who stated that performance could not purely be measured by quantitative financial means alone when examining NPOs. Additionally, the data was viewed through a lens similar to that of Meckin (2009) who claimed that an income to expense ratio of 1.00 is the ideal target for NPOs in general. It was assumed that perhaps one reason some countries have a ratio closer to 1.00 was that they employ financial risk management assessments, and opt for less risky endeavours, to ensure sustainability. A developed country like the UK, on the other hand, likely had greater access to resources and reserves and thus can expend more in a year, without as grave a concern over how this related to the revenue of that particular year. However, when examining the low ratios of India and Pakistan, it was believed that organisations here

on average were not as sustainable, and it was assumed their levels of reserves were lower. A closer examination of individual NPOs and the nature of their spending and revenue would need to be employed in order to obtain a more complete understanding of this topic. The findings coincided with Fitz-enz (2009) in his assertion that simple cost reduction strategies and their effect on improving profit margins is not an indicator that can solely determine value for the organisation, and that an analysis of human capital management must be integrated in order to understand the past, present and future of an organisation.

Respondents reported on the number of months their organisation could sustain itself if no additional income was generated. Table 5.26 depicts NPO sustenance strength.

TABLE 5.26: SUSTENANCE STRENGTH

Country	Number of Months
Australia	23
Canada	7
UK	7
Developed Countries Total	37
Developed Countries Average	**12**
India	48
Pakistan	1
South Africa	12
Developing Countries Total	61
Developing Countries Average	**20**

The data is striking in that it may appear counter-intuitive to popular belief. Namely, it would have been expected that NPOs from developed countries would have a greater level of reserves, or in other words could sustain themselves longer without any further additional income. However, it was found that developing countries actually have more financial reserves in terms of organisational sustenance relative to their output, than do developed countries. Examining income to expenditure ratios with this data, there did not appear to be any recognisable correlations. It was interesting to note, nevertheless, that India was the most equipped to continue its operations if income generation was to be halted. This was in stark contrast to what appeared to be financially risky income to expenditure streams, based on the data presented earlier (see Table 4.26). The data, however, was found to be quite varied within countries. As such, an examination of the data when removing the two outliers – both the highest and

lowest reported figures by country, revealed some interesting findings. The adjusted data is presented in Table 5.27.

TABLE 5.27: SUSTENANCE STRENGTH - ADJUSTED

Country	Number of Months
Australia	5
Canada	7
UK	7
Developed Countries Total	19
Developed Countries Average	**6**
India	5
Pakistan	2
South Africa	8
Developing Countries Total	15
Developing Countries Average	**5**

When removing the outliers, the data may be more accurate of true global trends. Here, developed countries on average have a slightly higher edge over developing countries with regards to organisational sustainability.

This financial data is perhaps not the most reliable, and may be problematic. This is due to the fact that respondents were allowed to enter any figures as they wished. This is a significant issue in that respondents may have either intentionally or unintentionally misrepresented their organisation, which would lead to corrupted data. A more accurate measure would likely be found by directly analysing audited/accurate financial reports. This, however, was not feasible for this study.

5.7.4 Fundraising

The research unveiled findings with regards to the nature and extent of online and offline fundraising.

Firstly, methods of offline fundraising were explored. NPO directors reported on the various ways organisations raised funds using offline means. Offline fundraising strategies are presented in Table 5.28.

TABLE 5.28: OFFLINE FUNDRAISING STRATEGIES

Offline Fundraising Strategy	Percentage
Direct requests to trusts and funds	54%
Direct requests to corporations	50%
Mail	47%
Events	43%
Government funding	35%
Fees	32%
Phone	29%
Sale of goods offline	16%
Text messaging	10%
None	8%

Direct requests to both trusts/funds and corporations were the most widely used forms of offline fundraising. Figures were virtually consistent across the developed and developing world. The next most popular offline effort was direct mailings. Interestingly, 57 percent of NPOs from developing countries utilised this method, versus just 38 percent of NPOs from developed countries. Events, government funding, fees and phone requests were all used by a fair amount of NPOs globally. It was found that NPOs from developed countries employed fundraising events to a greater degree (50%) than their counterparts from developing countries (35%). Similarly, NPOs from developed countries made use of government funding at a greater rate (44%) than amongst NPOs from developing countries (26%). The reasoning behind this variance may have been that governments from developed countries had greater levels and/or more accessible funding available for NPOs than governments from developing countries. Yet another fascinating discovery was that 22 percent of respondents from developing countries utilised text messaging strategies to raise funds, whereas not a single NPO from developed countries did so. This agrees with research presented by Kinkade et al (2008) that focused on NPO mobile phone usage, primarily in the developing world. However, Kinkade et al (2008) did additionally provide information about mobile phone usage by NPOs in the UK, which is in contrast to the zero response rate reported by developed countries onto the usage of mobile phones for fundraising purposes.

NPO directors reported on the various ways organisations raised funds using online means. Online fundraising strategies are displayed in Table 5.25.

TABLE 5.25: ONLINE FUNDRAISING STRATEGIES

Online Fundraising Strategy	Percentage
Email requests	61%
Online donations	53%
None	20%
Sale of goods online	15%
Other	5%

The findings revealed that email requests and online donations were the most popular online fundraising strategies employed by NPOs at the global level. Some fascinating variances were found between developing and developed country NPOs. Most strikingly, it was found that a substantial 84 percent of NPOs in developing countries had adopted the technique of email requests as an online fundraising strategy, versus a rate of just 40 percent amongst NPOs from developed countries. Interestingly, online donation strategies were employed by NPOs in the developed world at a higher rate (62%) than their counterparts in the developing world (44%). Interestingly, 23 percent of NPOs from developed countries employed the strategy of selling goods online, whereas just six percent of NPOs from developing countries did the same. Respondents additionally reported that events were promoted online as a fundraising strategy.

A majority of NPOs (52%) had an option on their websites for visitors to donate funds online. A closer examination revealed that a 68 percent of NPOs from developed countries had this option on their websites, versus just 35 percent of NPOs from developing countries. This finding implied that NPO websites in the developed world on average were more sophisticated than NPO websites from the developing world in this regard.

Of the 78 (52%) NPOs that had an option on their websites for visitors to donate funds online, it was found that 74 percent of NPOs utilised an external online donation site for fundraising purposes, and 26 percent employed an internal donation form. Interestingly, NPOs from developing countries used an external donation site at a rate of 48 percent, versus a considerably higher rate of 87 percent amongst NPOs from developed countries. The findings supported assertions presented by Ellis (2010) that emphasised the benefits of donating funds online.

Respondents reported on the amount of fundraising revenue received via online donations in the past 12 months. The averages of online donation revenue are shown in Table 5.26.

TABLE 5.26: ONLINE DONATION REVENUE - AVERAGES

Country	Online Donations (US $)
Australia	1,657
Canada	5,216
UK	10,458
Developed Countries Total	17,331
Developed Countries Average	**5,777**
India	10,156
Pakistan	0
South Africa	64,281
Developing Countries Total	74,437
Developing Countries Average	**24,812**

The online donations presented are based only on the NPOs that reported having an option for website users to donate funds online. The averages per country are presented. The data in its crude form revealed some interesting trends. Most noteworthy is that on average, NPOs from developing countries had attained greater amounts of donations than NPOs from developed countries having used this online method. South Africa in particular appeared to be the most successful at having accrued online donations. However, a closer examination of the data revealed that there were some outliers in the data set. Namely, in South Africa, one NPO reported earning more than US $530,000 in the past 12 months using online methods. The same organisation had been in operation for nearly 20 years and has had a website since 1998. As such, it is not unlikely that their reporting is sound. Nevertheless, it was worthwhile to remove the highest and lowest piece of data from each country. The adjusted figures are depicted in Table 5.27.

TABLE 5.27: ONLINE DONATION REVENUE – ADJUSTED

AVERAGES

Country	Online Donations (US $)
Australia	1,175
Canada	2,783
UK	8,808
Developed Countries Total	12,766
Developed Countries Average	**4,255**
India	4,667
Pakistan	0
South Africa	6,597
Developing Countries Total	11,264
Developing Countries Average	**3,755**

Interestingly, with the adjusted data, it was found that developed countries on average have obtained slightly more funds via online donations than developing countries. It is believed that a larger data set would reveal more meaningful findings.

Participants additionally provided comparative data on what percent of fundraising income of the past 12 months was obtained from offline versus online sources. A closer examination of the data by country and by segment of the world revealed some captivating trends. Offline versus online sources are displayed in Table 5.28.

TABLE 5.28: OFFLINE VS. ONLINE SOURCES

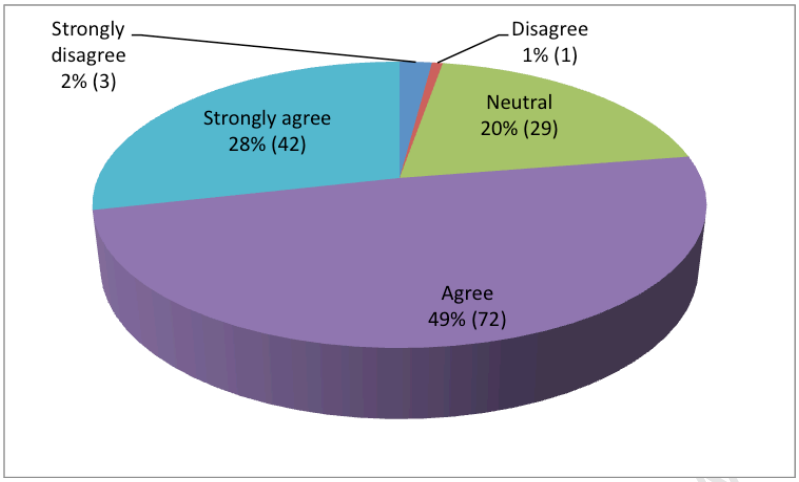
Country	Percentage of Offline Sources	Percentage of Online Sources
Australia	57	43
Canada	45	55
UK	49	51
Developed Countries Average	**50**	**50**
India	49	51
Pakistan	39	61
South Africa	48	52
Developing Countries Average	**45**	**55**

The data was relatively balanced across countries, with the exception of Pakistan. In this case, however, there was a smaller pool of data to analyse, so it is assumed that greater levels of Pakistani participants would have resulted in more accurate figures. Nevertheless, this data revealed that online sources have contributed to at least as much fundraising revenue than offline sources both in the developing and developed worlds. This finding is fascinating in that it indicated a significant online presence for fundraising purposes.

NPO directors provided data on whether they maintained an electronic database of current and/or potential donors. Sixty nine percent of participants maintained an electronic donor database, whereas 31 percent did not. Rates were relatively consistent between the developing and developed worlds. Of those respondents who did in fact maintain an electronic database and also did have an option on their website for funders to donate money online (58 respondents), it was found that the average amount of fundraising dollars accumulated through online donations in the past 12 months was US $16,643. In contrast, of those respondents who did not maintain an electronic database of funders but did have an option on their website for users to donate money online (18 respondents), it was found that the average amount of fundraising dollars accumulated through online donations in the past 12 months was US $9,206. This could support the notion of the importance of maintaining an electronic database of current and potential funders, in that it was found that those that did maintain a database received almost twice the amount of online donations than those who did not.

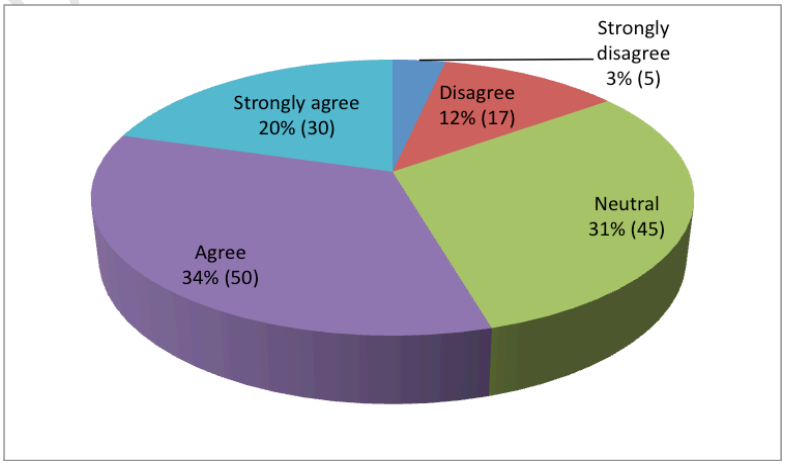
NPO directors additionally reported on the degree to which they felt that the web was a useful tool for fundraising. Seventy seven percent of participants either strongly agreed or agreed with this sentiment. The implications of this finding are substantial. Based on the data, NPOs in general had a better chance of sustaining themselves through fundraising efforts if they pursued options that integrated the web. Graph 5.60 presents NPO director perceptions on the utility of the web as a tool for fundraising.

GRAPH 5.60: THE WEB AS USEFUL FOR FUNDRAISING



A slight majority of NPO directors (54%) either agreed or strongly disagreed that donors prefer their monies be used for other areas besides IT and/or web development. The data agreed in part with findings by Smit (2005) relating to the difficulty in obtaining funding for operational expenses. However, the figures are not as staggering as those discovered by Smit (2005), which may indicate that there has been a recent shift over the past few years in the direction of funders being more open to providing funds for a wider variety of expenses. It was interesting to note that NPOs from developed countries disagreed with this notion at a higher rate (21%) than NPOs from developing countries (9%). Perceptions are displayed in Graph 5.61.

GRAPH 5.61: FUNDERS AS PREFERRING FUNDS NOT GO TO WEB AND/OR IT DEVELOPMENT



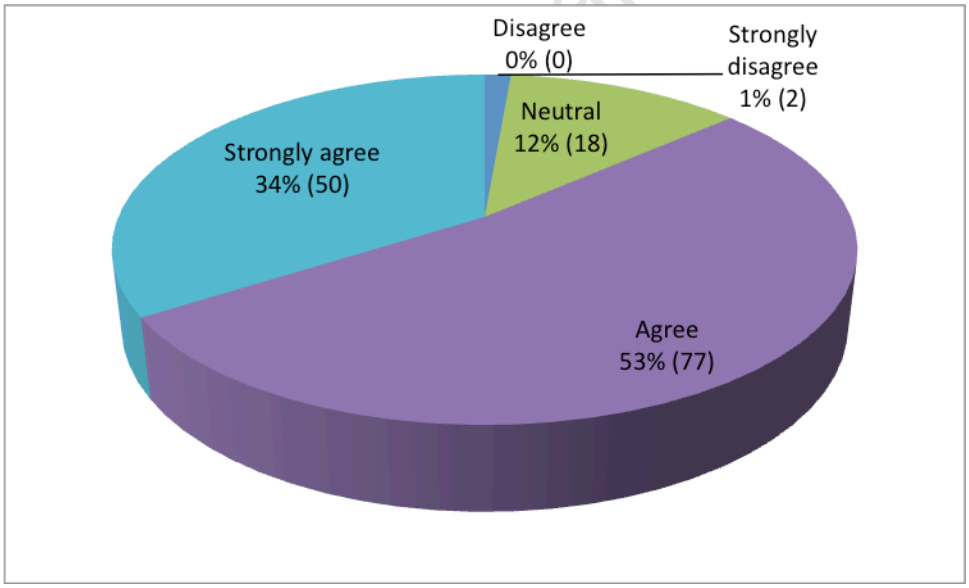
It would be worthwhile for future research to examine what specific areas are most popular to fund amongst donors.

5.7.5 IT and Sustainability

NPO directors offered their perspectives on the role of IT with regards to organisational sustainability. A number of topics were examined including communication, management, and the creation and evaluation of programmes, amongst others.

Eighty seven percent of respondents either strongly agreed or agreed that IT had in fact enhanced sustainability by improving communication within the organisation. This finding was relevant in that it revealed a positive link between IT usage for internal communication purposes and the sustainability of an NPO. NPO Director views are portrayed in Graph 5.62.

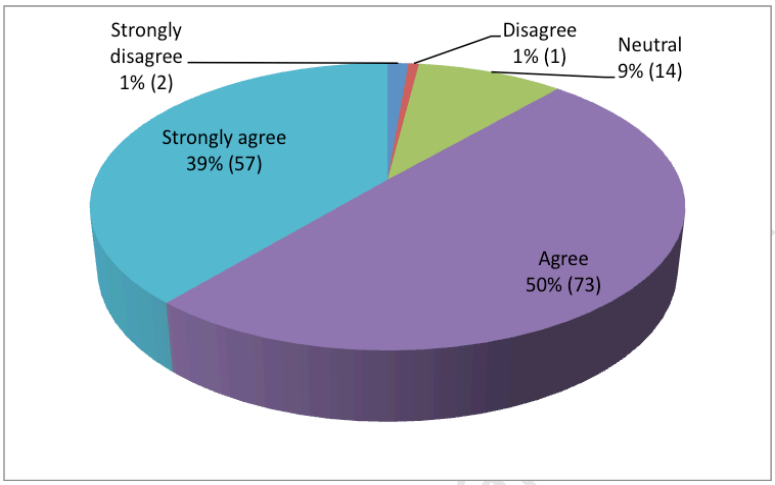
GRAPH 5.62: IT AS ENHANCING SUSTAINABILITY BY IMPROVING INTERNAL COMMUNICATION



Furthermore, respondents reported on the degree to which IT had enhanced sustainability by improving communications with stakeholders outside of the organisation. The findings revealed that 89 percent of NPO directors either agreed or strongly agreed with this notion. The miniscule two percent of NPOs that disagreed to some degree with this idea further reflected the global phenomenon that IT was a useful

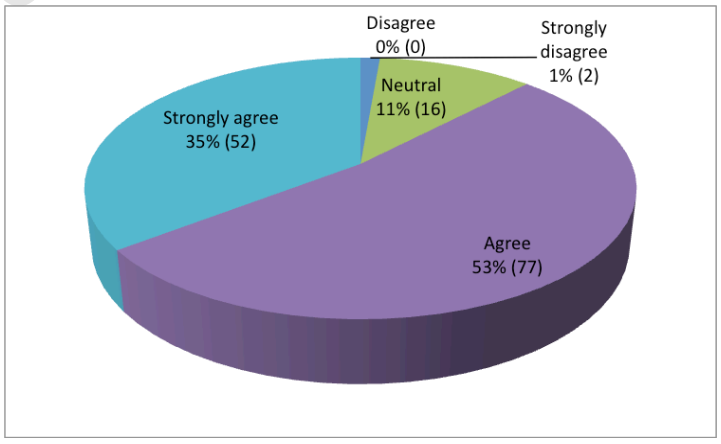
tool for the purpose of communicating with external stakeholders. This level of improvement is presented in Graph 5.63.

GRAPH 5.63: IT AS ENHANCING SUSTAINABILITY BY IMPROVING EXTERNAL COMMUNICATION



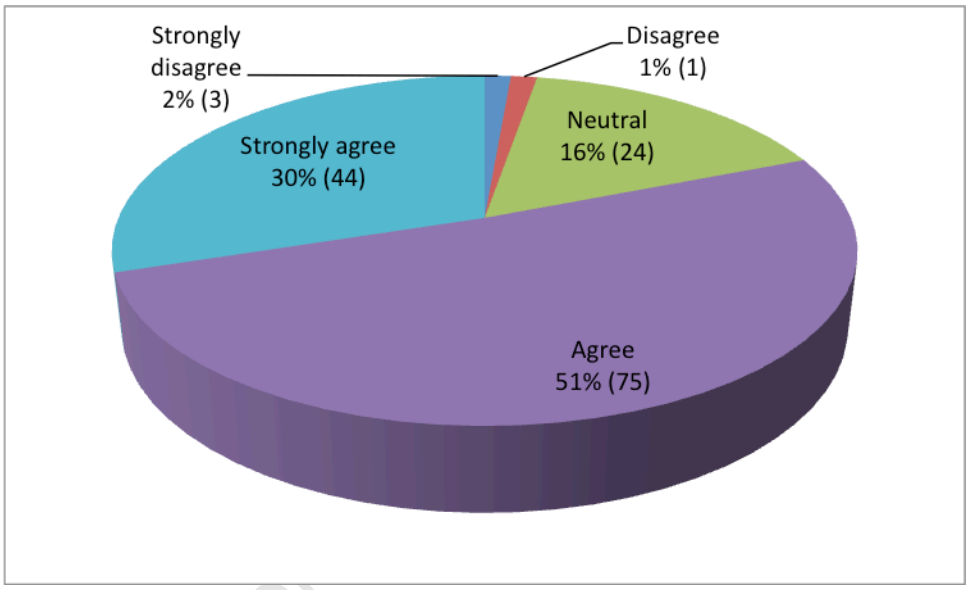
Participants reported on the degree to which IT had enhanced sustainability by improving organisational efficiency. The data provided further support to the belief that IT did enhance organisational sustainability. Eighty eight percent of respondents either strongly agreed or agreed with this concept. This pertinent finding is relevant in that it implied that without IT, organisations would be less efficient in their operations. The findings on enhanced sustainability are shown in Graph 5.64.

GRAPH 5.64: IT AS ENHANCING SUSTAINABILITY BY IMPROVING ORGANISATIONAL EFFICIENCY



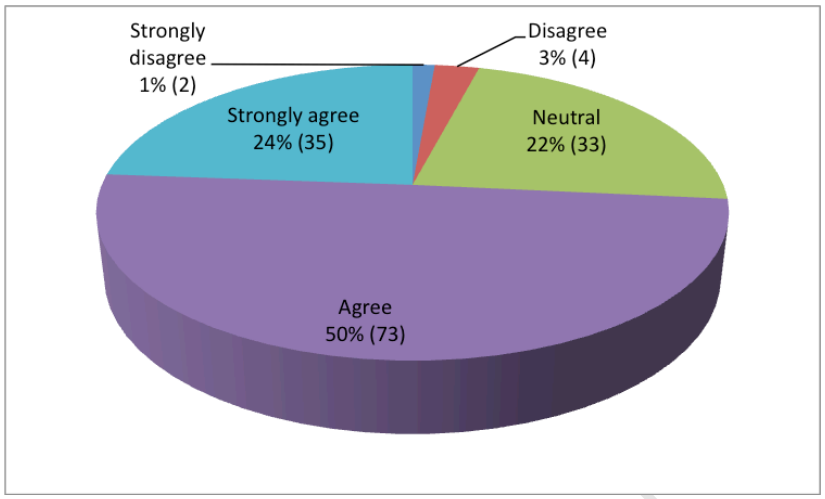
It was believed that technologies in a general sense are characterised by their ability to reduce the traditional time taken to perform tasks. As such, it was important to ask NPO directors to report on the degree to which IT had enhanced sustainability by improving time management. A considerable 81 percent of NPO directors either agreed or strongly agreed that IT did have a positive correlation to time management. This finding implies that IT has enabled NPOs to better utilise time for operational purposes. It would be worthwhile to examine how this saved time is allocated to different operational activities. Graph 5.65 depicts the data on time management.

GRAPH 5.65: IT AS ENHANCING SUSTAINABILITY BY IMPROVING TIME MANAGEMENT



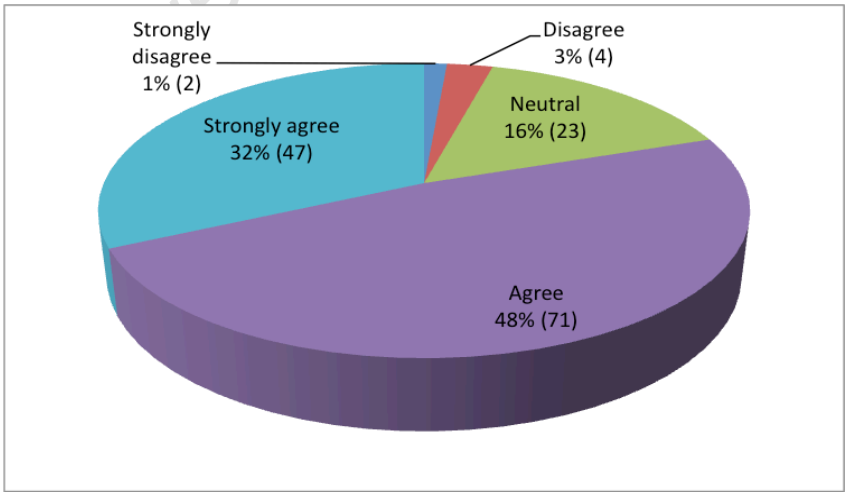
Nearly three-quarters of respondents either agreed or strongly agreed that management control had been improved due to IT. This finding indicated that intelligent IT usage enhanced management capacities. Graph 5.66 displays the data on management control.

GRAPH 5.66: IT AS ENHANCING SUSTAINABILITY BY IMPROVING MANAGEMENT CONTROL



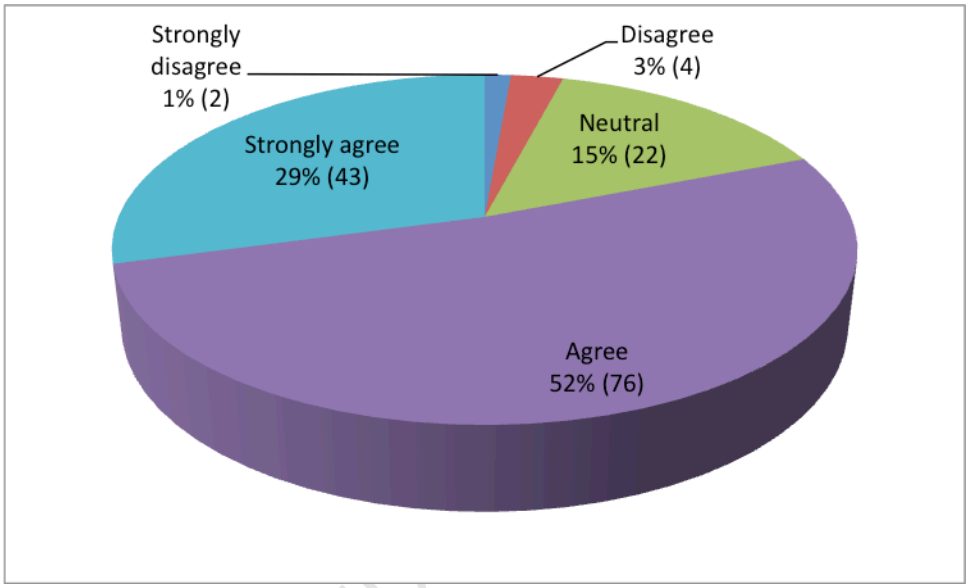
Eighty percent of participants either strongly agreed or agreed that IT had aided in the programme planning and/or development process. NPOs in the developing world resonated with this notion to a slightly higher degree (87%) than NPOs from the developed world (76%). The planning and/or development of new programmes data is portrayed in Graph 5.67.

GRAPH 5.67: IT AS ENHANCING SUSTAINABILTY WITH REGARDS TO PLANNING AND/OR DEVELOPMENT OF NEW PROGRAMMES



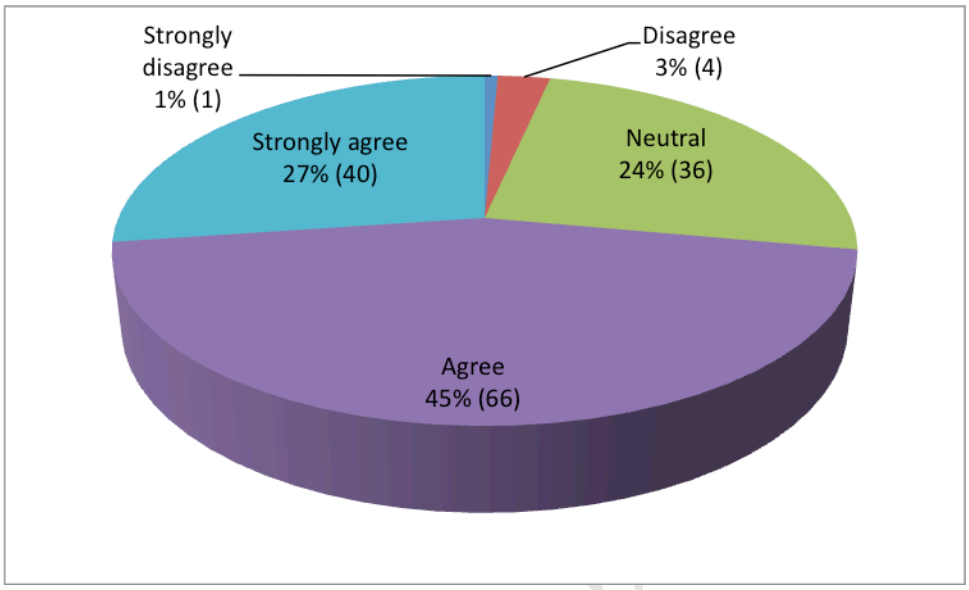
The degree to which the management of current programmes had been improved by IT was also explored. A substantial majority (81%) agreed to some extent with this idea. In other words, management capacities had been enhanced due to the advent of IT. NPO director perceptions are shown in Graph 5.68.

GRAPH 5.68: IT AS ENHANCING SUSTAINABILTY WITH REGARDS TO THE MANAGEMENT OF CURRENT PROGRAMMES



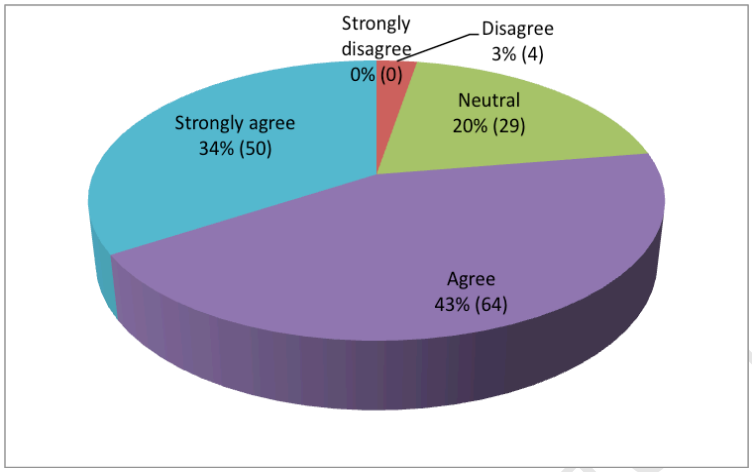
NPOs monitor and evaluate programmes in order to better understand the strengths and weaknesses of programmes, and to assess the degree to which programme objectives were met. It was assumed that the efficient and effective monitoring and evaluation of programmes is a positive indicator for organisational sustainability. A significant majority (72%) of respondents either strongly agreed or agreed that programme monitoring and evaluation capacities had been improved through the utilisation of IT. Interestingly, 79 percent of NPOs from developing countries agreed to some degree with this notion, versus 65 percent amongst NPOs from developed countries. Monitoring and evaluation data is displayed in Graph 5.69.

GRAPH 5.69: IT AS ENHANCING SUSTAINABILTY BY IMPROVING THE MONITORING AND EVALUATION OF PROGRAMMES



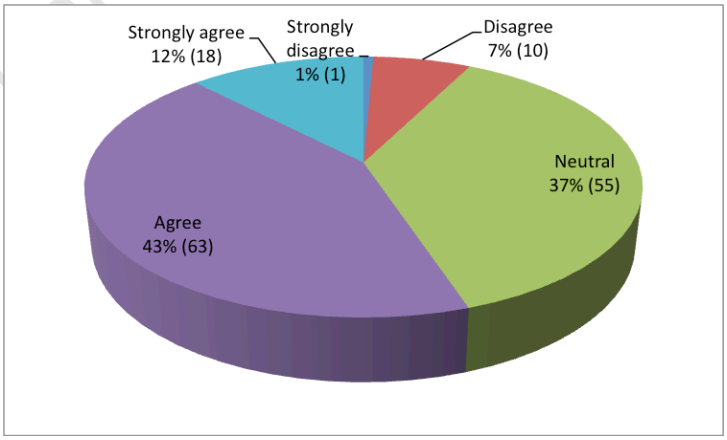
The modern technological world is marked by an increased flow of information than in times past. It was believed that tools to assist organisations in their ability manage diverse sets of information would be valued and would hence make an organisation more sustainable. The majority of respondents (77%) either strongly agreed or agreed that IT had improved the organisation's ability to house and manage information. Results were consistent across both the developing and developed world, thus revealing that information technologies are true to their name – they are technologies with the power to enhance information flows in multitudinous ways. Participant perspectives are depicted in Graph 5.70.

GRAPH 5.70: IT AS ENHANCING ABILITY TO DEVELOP AND/OR SUSTAIN A REPOSITORY OF INFORMATION



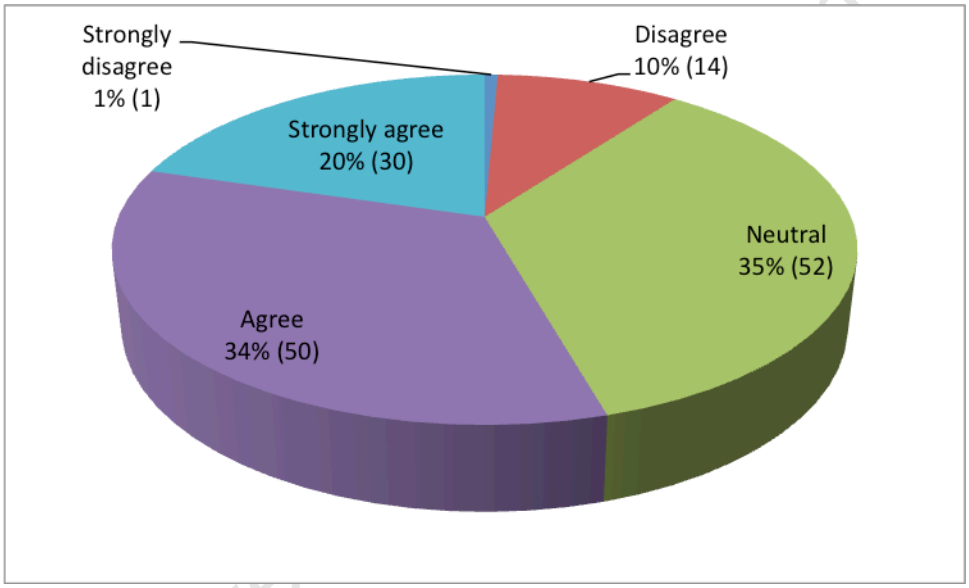
NPO directors offered their views on the relationship between IT and the motivation levels of staff. Specifically, participants were asked if the use of IT had improved the motivation levels of staff. A slight majority (55%) agreed to some extent with this notion. Thirty seven percent of respondents did not recognise any noticeable links between IT usage and motivation levels of staff. Interestingly, NPOs from developing countries more visibly recognised a positive link between IT and motivation levels of staff (65%), than did NPOs from developed countries (45%). Data on motivation levels is presented in Graph 5.71.

GRAPH 5.71: IT AS HAVING IMPROVED MOTIVATION



A slender majority (54%) either agreed or strongly agreed that IT sophistication was important in order to attract competent staff. It was interesting that a comparable 46 percent of respondents either disagreed or were neutral to this notion, thus implying that IT sophistication is just one factor amongst others with regards to attracting competent staff. Furthermore, it was found that 66 percent of NPOs from developing countries favoured this notion, versus 45 percent amongst NPOs from developed countries. Respondent views are showcased in Graph 5.72.

GRAPH 5.72: IMPORTANCE OF HAVING SOPHISTICATED LEVELS OF IT IN ORDER TO ATTRACT COMPETENT STAFF



In sum, the findings indicate that IT is a valuable tool for NPOs in terms of the management of time, programmes, information and a variety of other sustainability indicators.

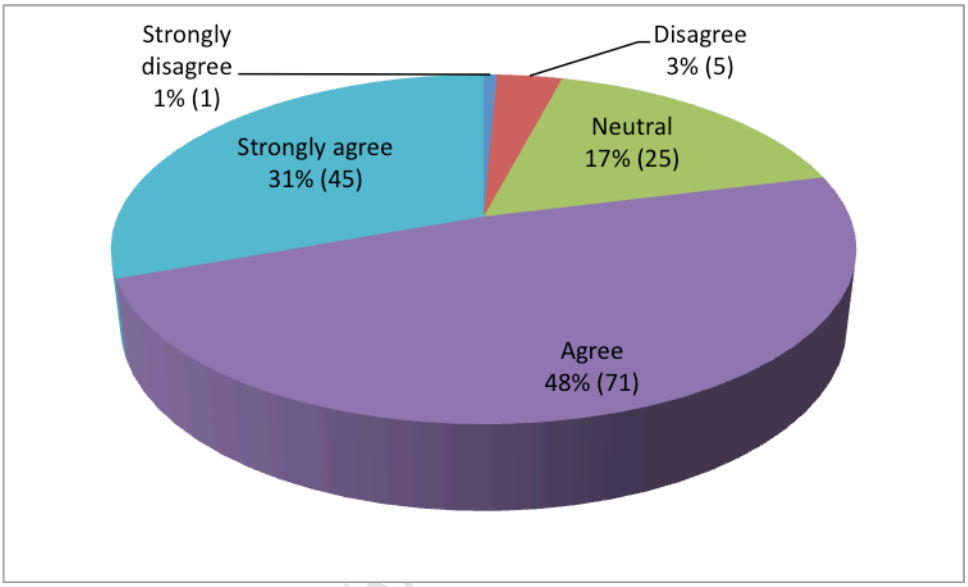
5.7.6 Web Usage and Sustainability

The research explored NPO director perceptions of the nature of the relationship between web technology usage and organisational sustainability. Topics ranged from partnership creation and management, information dissemination and education awareness, and motivation levels of staff, amongst others.

Seventy nine percent of participants either strongly agreed or agreed that web technologies provided an avenue for organisations to develop new partnerships with external groups and individuals. Data was

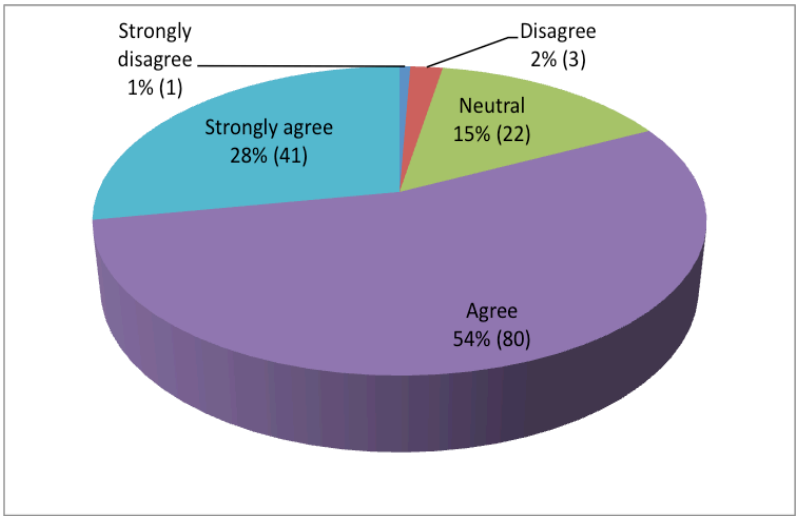
virtually consistent across countries, thus implying that web technologies have broadened the reach of organisations to communicate and connect with the outside world. This finding is consistent with assertions by Rhoades et al (2009), who argued that web technologies improved the public's ability to collaborate. Overall perspectives are shown in Graph 5.73.

GRAPH 5.73: WEB TECHNOLOGIES AS ENHANCING ABILITY TO CREATE NEW PARTNERSHIPS



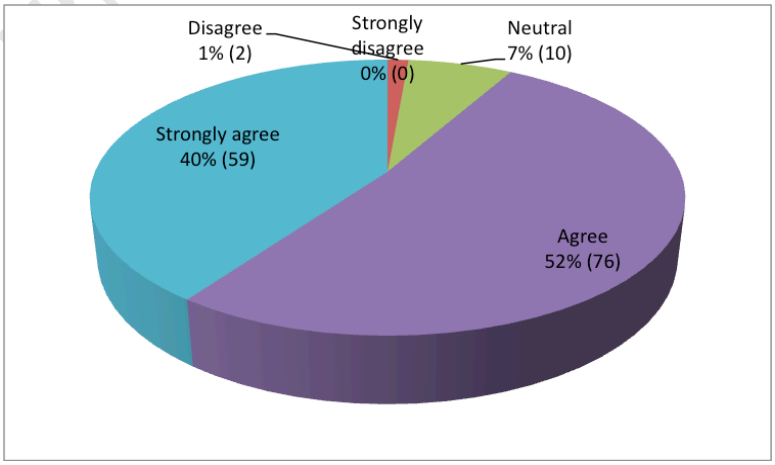
Eighty two percent of respondents felt that web technologies had aided in their ability to sustain partnerships. As partnerships inherently rely on communication to be sustainable, this finding implied that web technologies allowed for greater and more diverse streams of communication between constituencies. The findings agreed with Donston (2008) who found that web technologies improved collaboration and communication. Thus, a positive correlation exists between web technology usage and organisational sustainability in this regard. Graph 5.74 portrays these viewpoints.

GRAPH 5.74: WEB TECHNOLOGIES AS ENHANCING ABILITY TO SUSTAIN PARTNERSHIPS



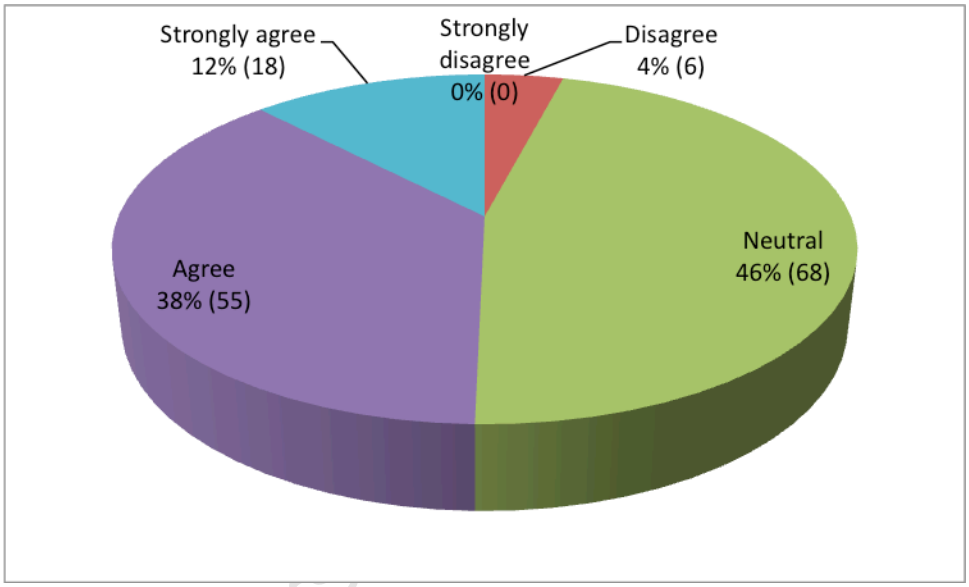
A substantial majority (92%) of NPO directors credited web technologies with having had a positive ability to assist organisations in their capacity to educate the public and/or generate greater levels of public awareness. This was in resolute harmony with Dotson (2008), Li (2001) and Kenix (2007) who all asserted that web technologies aided in the ability to communicate information to the public. NPO director views are depicted in Graph 5.75.

GRAPH 5.75: WEB TECHNOLOGIES AS ENHANCING ABILITY TO EDUCATE THE PUBLIC AND/OR CREATE GREATER LEVELS OF PUBLIC AWARENESS



Respondents reported on the degree to which the advent of web technologies had improved motivation levels amongst staff. Half of NPOs either strongly agreed or agreed with this notion. The substantial 46 percent of participants who were neutral to this idea implied that staff members were motivated by a variety of other factors in addition to the advent of web technologies. Graph 5.76 presents this data on motivation levels and web technologies.

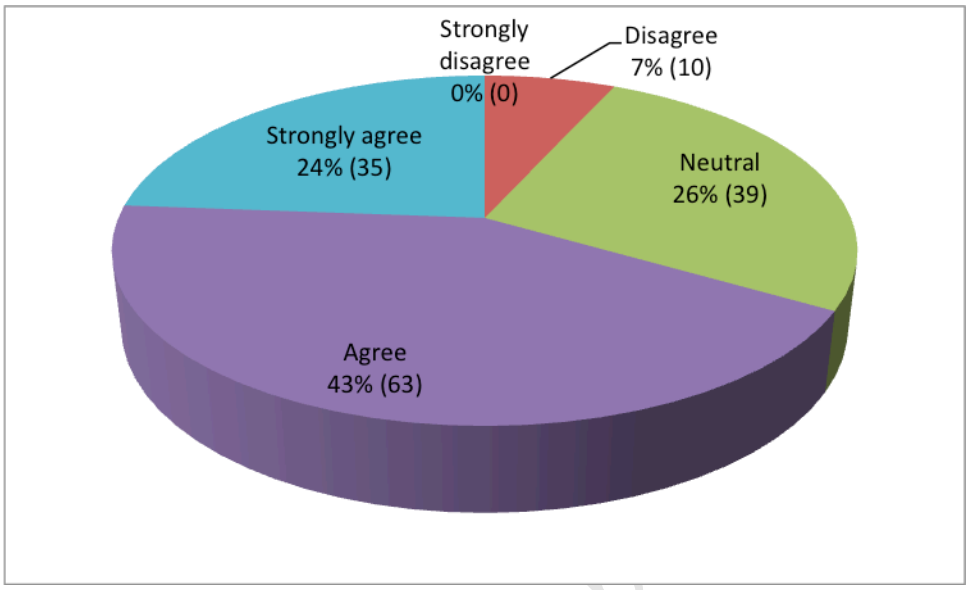
GRAPH 5.76: WEB TECHNOLOGIES AS HAVING IMPROVED MOTIVATION LEVELS AMONGST STAFF



NPO directors reported on the importance of having reliable internet capacities in order to attract competent staff. Approximately two-thirds of NPOs either strongly agreed or agreed that it was important to have reliable internet capacities in order to attract competent staff. A closer examination of the data revealed that 74 percent of developing country NPOs agreed with this notion versus 60 percent amongst developed nations. This finding coincided with this study's previously reported finding that unstable internet connectivity plagued NPOs from developing countries to a greater degree than those in developed countries. The importance of having reliable internet capacities is shown in Graph 5.77.

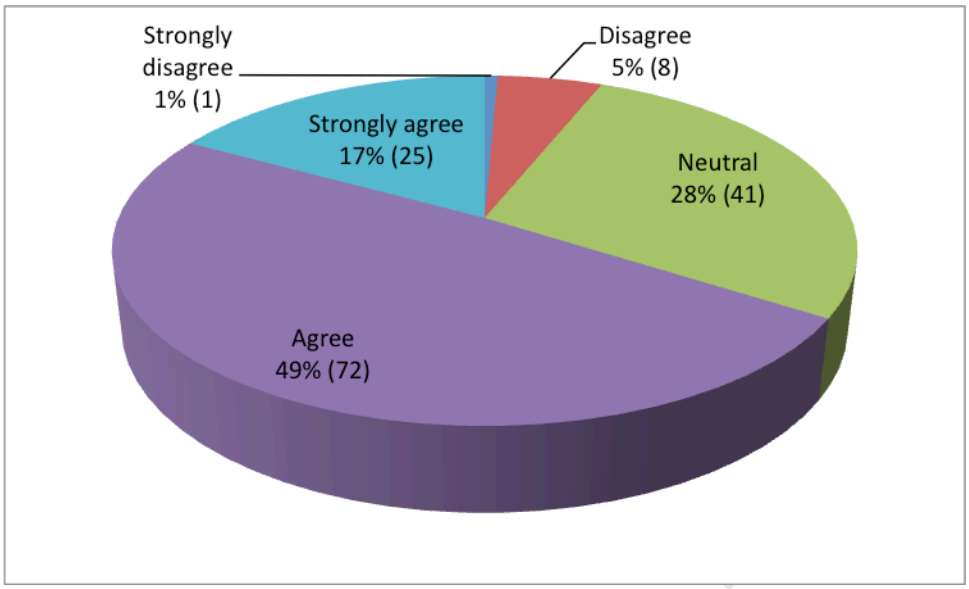
GRAPH 5.77: IMPORTANCE OF HAVING RELIABLE INTERNET CAPACITIES

IN ORDER TO ATTRACT COMPETENT STAFF



Furthermore, respondents were asked to report on the degree to which web technologies informed directors of global trends that have a direct effect on organisational sustainability. The data revealed that the majority of NPO directors (66%) utilised web technologies to learn about global trends pertinent to the organisation's sustainability. The finding particularly pointed to a key characteristic of the internet – the fact that it is a gigantic warehouse of information. It was implied that most NPO directors engage with web technologies to extract useful information that can help further sustain the organisation in some capacity. Interestingly, a striking 75 percent of NPOs from developing countries agreed with this sentiment, versus 58 percent amongst NPOs from developed countries. Thus, it appears as though web technologies have had a stronger importance in the developing world for becoming informed on issues of sustainability. One possible explanation for this variance could be that there may exist a greater variety of information outlets in the developed world, thus they are not as reliant on any one source, such as the web. Views on the impact of web technologies to inform NPO directors on global trends are presented in Graph 5.78.

GRAPH 5.78: WEB TECHNOLOGIES AS INFORMING ON GLOBAL TRENDS



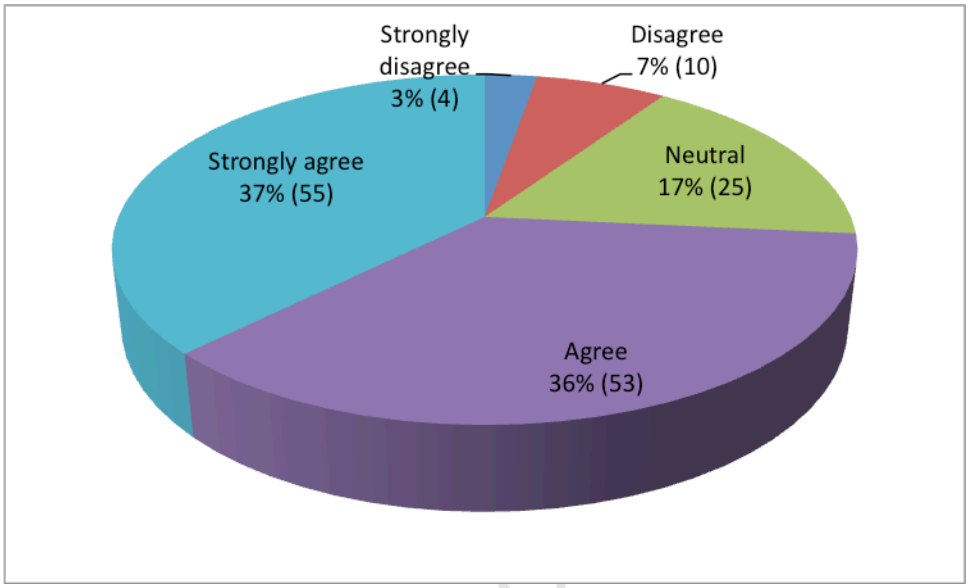
5.8 Future Outlook

NPO directors lastly provided their perceptions towards future desires for training and assistance with web technologies, the role that web and information technologies will have with regards to the organisation and the general future outlook towards technology development. The following areas were examined: *assistance and training, future role of web technologies,* and *evolution of technology.*

5.8.1 Assistance and Training

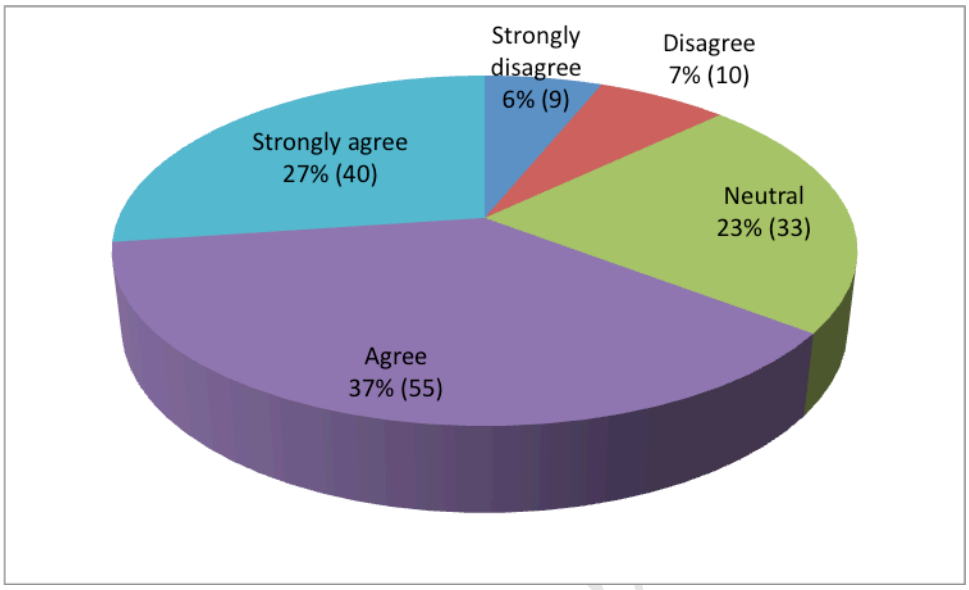
Seventy three percent of participants either strongly agreed or agreed that assistance would be useful for the organisation with regards to increasing the functionality of their websites. This trend was important in that it provided evidence of the general need for website assistance in the NPO world. This trend was more pronounced amongst NPOs from developing countries (83%) versus NPOs from developed countries (65%). This indicated that developing countries are in greater need of assistance in improving the functionality of their websites, which confirmed previous findings that revealed that developed country NPOs had more sophisticated websites on average. The desire levels are portrayed in Graph 5.79.

GRAPH 5.79: DESIRE FOR FURTHER ASSISTANCE IN INCREASING WEBSITE FUNCTIONALITY



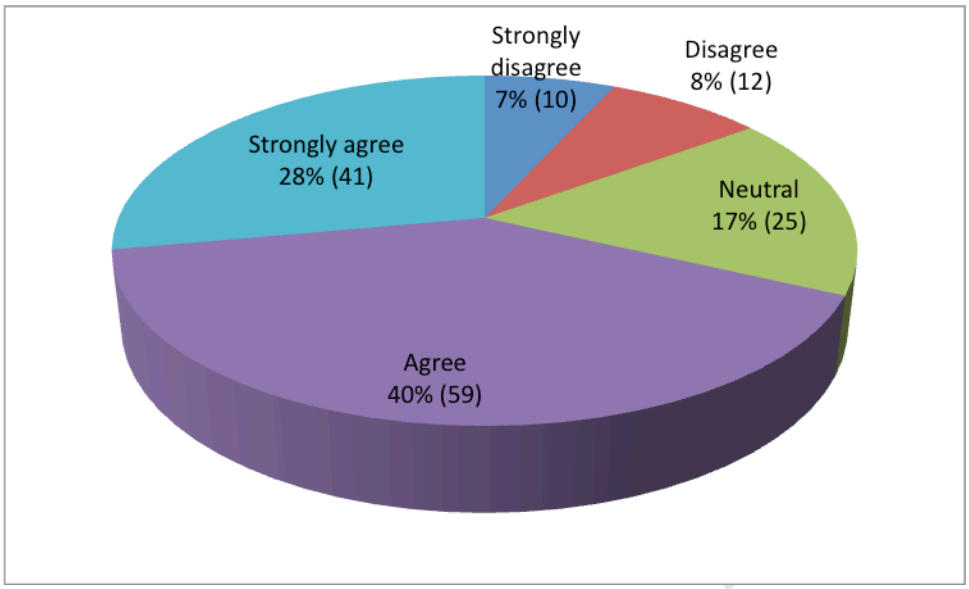
NPO directors additionally reported on the degree to which they desired training with regards to web technologies. The majority of NPO directors (64%) either strongly agreed or agreed with this sentiment. This indicated that participants generally felt that they could learn more about web technologies and their usage for organisational purposes. This desire was most prominent amongst NPO directors from developing countries (78%) in comparison to NPO directors from developed countries (53%). This finding perhaps indicated that NPO directors from developed countries are generally more fluent in web technology usage than NPO directors from developing countries. Alternatively, NPO directors from developed countries simply may have been less desirous of training for other reasons, such as being too busy or generally disinterested. The desire levels are shown in Graph 5.80.

GRAPH 5.80: DESIRE FOR PERSONAL TRAINING WITH REGARDS TO WEB TECHNOLOGIES



Furthermore, respondents reported on the degree to which they believed their staff was in further need of training with regards to web technologies. A sizable majority (68%) of NPO directors believed that their staff was in need of this type of training to some extent. Similar to the previous two areas of exploration, it was found that NPOs from the developing world agreed with this notion to a greater degree (78%) than NPOs from the developed world (60%). This may have implied that staff members from NPOs in the developing world on average were not as knowledgeable on web technologies than staff members from NPOs in the developed world. Though this may be the case, the findings perhaps also indicatde that NPO directors from developing countries were simply more willing to have their staff engage in training and assistance than NPO directors from the developed countries. Graph 5.81 displays the level of desire.

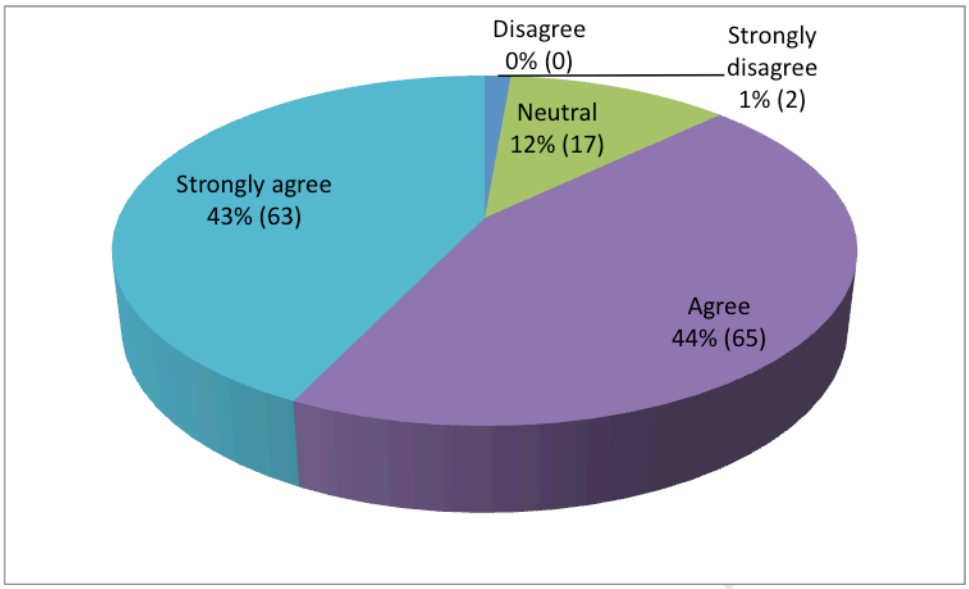
GRAPH 5.81: DESIRE FOR STAFF TRAINING WITH REGARDS TO WEB TECHNOLOGIES



5.8.2 Future Role of Web Technologies

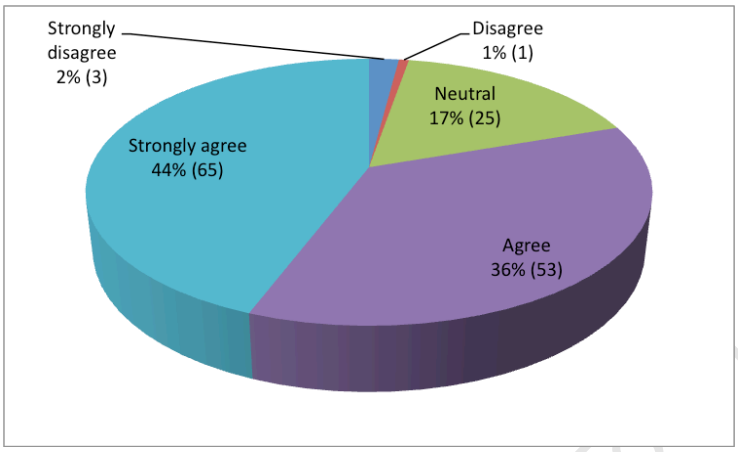
Participants provided data on the degree to which organisations intend to use web technologies to increase their marketing efforts. A considerable majority (87%) felt that web technologies will be increasingly utilised in the future for marketing purposes. This finding was significant in that it offered further evidence of a positive relationship between web technologies and marketing. The findings were consistent with assertions by Rheingold (2000) and Stokes (2009) who both stressed the importance of the role of the web with regards to marketing. Interestingly, 92 percent of respondents from developing countries agreed with this notion, versus 83 percent amongst respondents from developed countries. NPO director perceptions are showcased in Graph 5.82.

GRAPH 5.82: INTENTION TO USE WEB TECHNOLOGIES TO INCREASE MARKETING EFFORTS



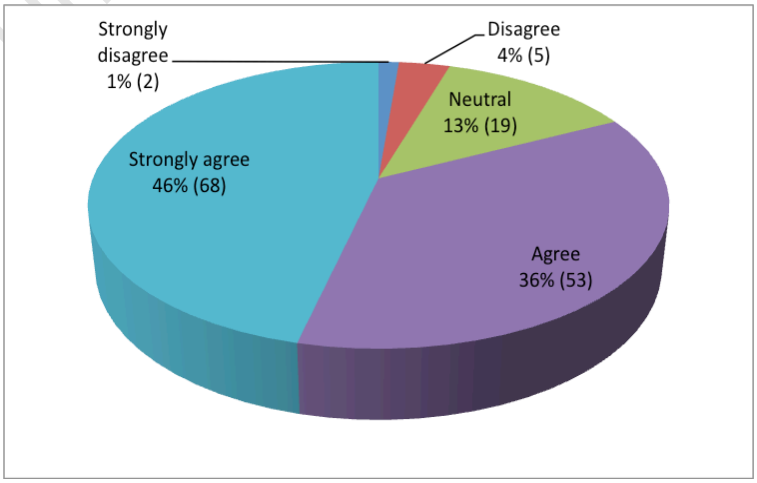
Eighty percent of participants intend to use web technologies to some degree in the future to obtain new sources of funding. This agreed with the 69% of total respondents who reported earlier that due to the recent global recession it had been harder to obtain funding. Furthermore, this agreed with the 84% of total respondents who reported that a lack of funding was a serious threat to organisational sustainability. It was fascinating to note that 73% of participants from developed countries intend to use web technologies to obtain new sources of funding, versus a significantly higher 89% amongst participants from developing countries. These findings were critical in that they revealed that web technologies could serve as a vehicle to confront and solve issues of financing for organisations. Views are presented in Graph 5.83.

GRAPH 5.83: INTENTION TO USE WEB TECHNOLOGIES TO OBTAIN NEW SOURCES OF FUNDING



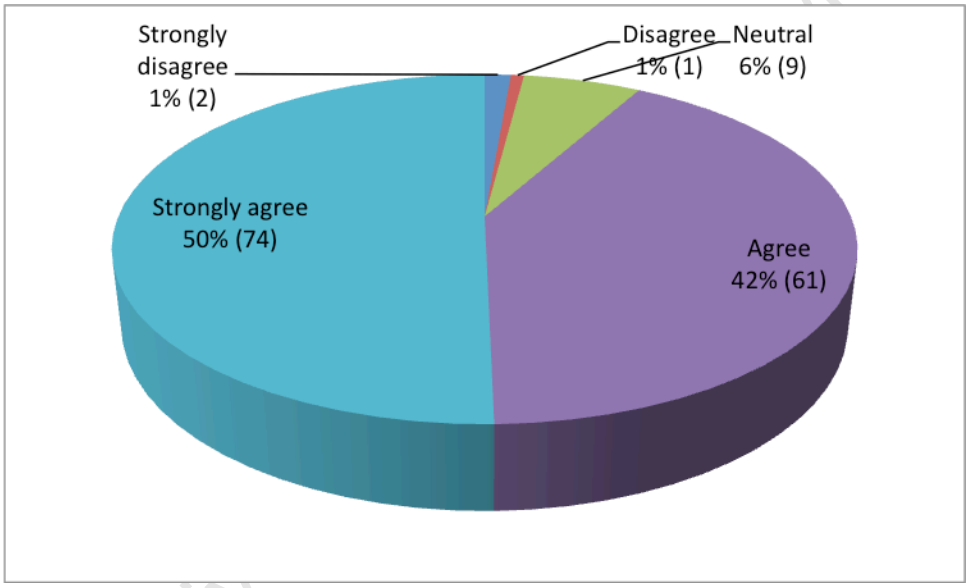
Respondents were asked to report on the degree to which they felt that the organisation needed to increase its web presence in order to survive in the future. A majority (82%) either strongly agreed or agreed on the importance of increasing the organisation's web presence in order to survive in the future. This finding was momentous in its implication linking web presence to organisational sustainability. The future outlook for the vast majority of NPO directors is promising given that they continue to develop their web presence through high quality and varied efforts. Figures were consistent across countries, thus making this a global phenomenon. The importance of increasing a web presence for future survival is shown in Graph 5.84.

GRAPH 5.84: IMPORTANCE OF INCREASING WEB PRESENCE



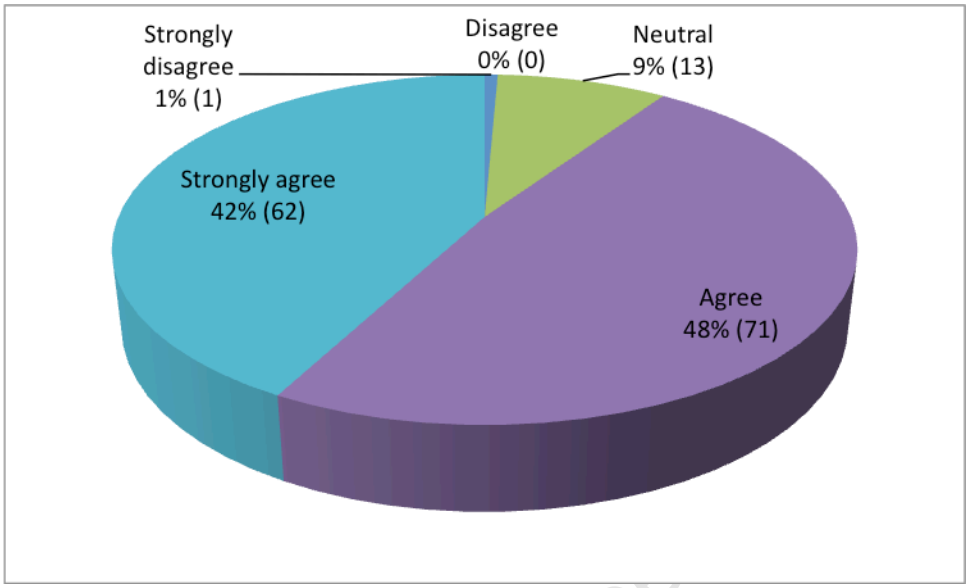
Respondents reported on the degree to which it was important for organisational sustainability to stay current with new web technologies and/or new forms of web interactivity. Ninety two percent of participants either strongly agreed or agreed with this sentiment. The finding was important in that it reaffirmed the link between web technologies and organisational sustainability. Specifically, it implies that as web technologies continue to evolve, NPOs globally will embrace them in a way to maximise their use for organisational objectives. The importance of staying current with new web technologies and/or new forms of web interactivity is displayed in Graph 5.85.

GRAPH 5.85: IMPORTANCE TO STAY CURRENT WITH NEW WEB TECHNOLOGIES AND/OR NEW FORMS OF WEB INTERACTIVITY



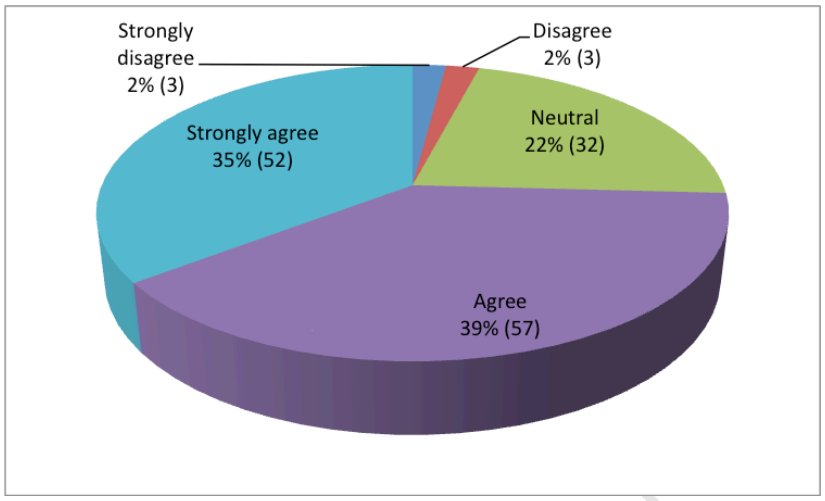
Furthermore, respondents provided data on the degree to which they believed that organisations which stay current with web technologies will be more successful than organisations that do not. The data concurred with the previous data regarding the need to stay current with web technologies. Ninety percent of respondents either strongly agreed or agreed that organisations that do not engage with web technologies are at a disadvantage in terms of sustainability than organisations that do. In addition, the data was in alignment with Rheingold's (2000) assertion that given a climate of global economic competition, organisations must allocate resources towards technology development to sustain. NPO director perceptions are shown in Graph 5.86.

GRAPH 5.86: ORGANISATIONS WHICH STAY CURRENT WITH WEB TECHNOLOGIES AS BEING MORE SUCCESSFUL THAN ORGANISATIONS THAT DO NOT



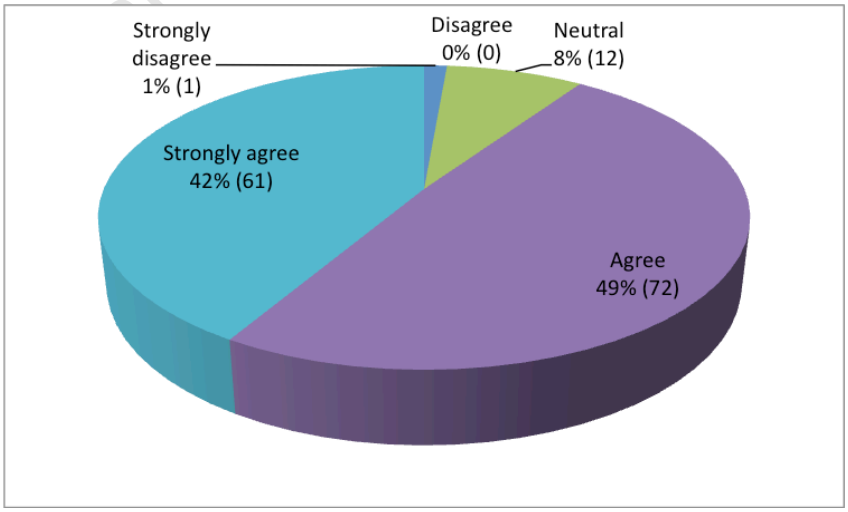
NPO directors also commented on whether they felt that the geographic area in which their organisation operates would see greater levels of web connectivity in the future. Seventy four percent of participants either strongly agreed or agreed with this notion. This provided evidence that there is a growing trend of increased web connectivity around the globe. As technologies become more cost effective and easier to implement in previously untapped areas, it is believed that connectivity and access will increase. Interestingly, 81 percent of NPOs from developing countries agreed to some extent with this idea, whereas only 68 percent of NPOs from developed countries felt this way. This variance was important in that it indicated that developed countries in general likely have already had fairly accessible web connectivity in most areas, versus in developing countries. Graph 5.87 presents these projections.

GRAPH 5.87: GEOGRAPHICAL AREA OF NPO WILL SEE GREATER LEVELS OF WEB CONNECTIVITY IN THE FUTURE



Respondents reported on the degree to which web technologies will continue to have a strong influence on organisational sustainability. Based on the findings, it was evident that there was a strong linkage between web technology usage and organisational sustainability. Ninety one percent of respondents either strongly agreed or agreed with this notion, thus making it a meaningful global finding. The data on NPO director predictions are displayed in Graph 5.88.

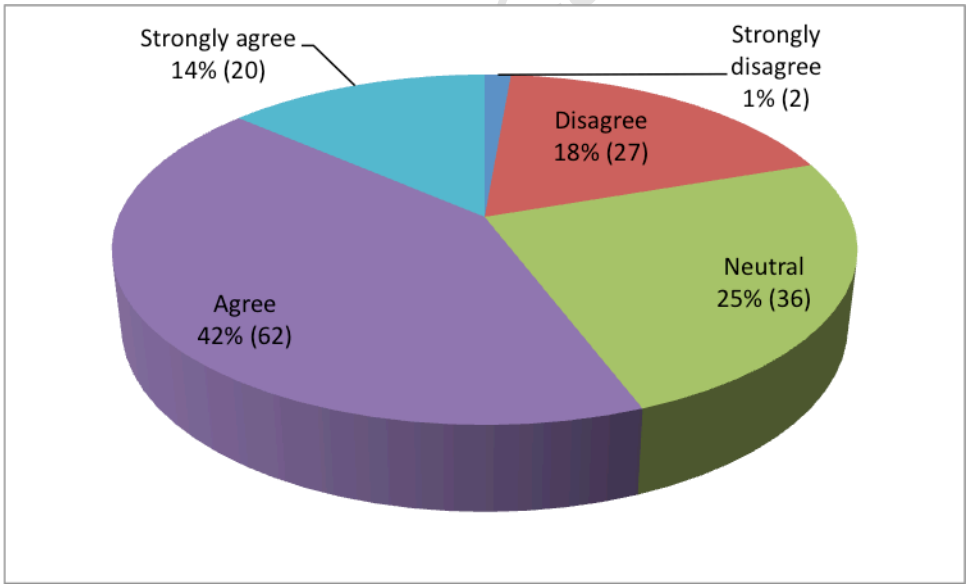
GRAPH 5.88: WEB TECHNOLOGIES AS CONTINUING TO HAVE A STRONG INFLUENCE ON ORGANISATIONAL SUSTAINABILITY



5.8.3 Evolution of Technology

Respondents reported on how the evolution of technology will affect the organisation in the future. Firstly, participants stated the degree to which the evolution of technology would reduce face-to-face interactivity amongst staff members for operational purposes. Slightly more than half of NPO directors (56%) either strongly agreed or agreed with this notion. This finding infers that technology by nature tends to minimise the level of face-to-face interaction needed between individuals to perform tasks. An example of this could be the advent of email communication. As emailing became more popular, there was less of a need for individuals to discuss topics face-to-face. Prior data found that 92 percent of respondents felt that email communication was necessary for internal dialogue amongst staff members, which coincided with these findings. Graph 5.89 portrays these views.

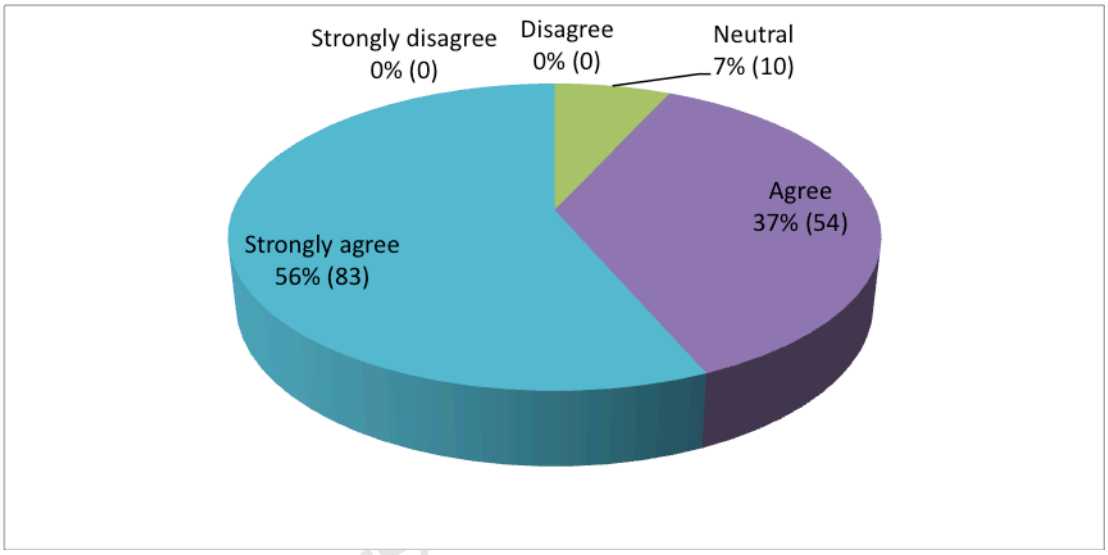
GRAPH 5.89: EVOLUTION OF TECHNOLOGY AS REDUCING FACE-TO-FACE INTERACTIVITY AMONGST STAFF



Respondents were asked to report on the degree to which the evolution of web technologies will allow organisations to reach international audiences more easily. A substantial majority (93%) of NPO directors either strongly agreed or agreed that web technologies have the power to extend the global reach of the organisation. It is fascinating that not a single respondent disagreed with this notion to any

degree. This provided further evidence that a key characteristic of web technologies were their ability to connect people from all corners of the earth. The implications for this finding are numerous. Essentially, the use of web technologies in the future potentially will allow organisations to tap into a wider funder base, advocate for issues on a larger scale and to network with other global NPOs or agencies to share best practices, amongst many other valuable possible outcomes. Respondent viewpoints are presented in Graph 5.90.

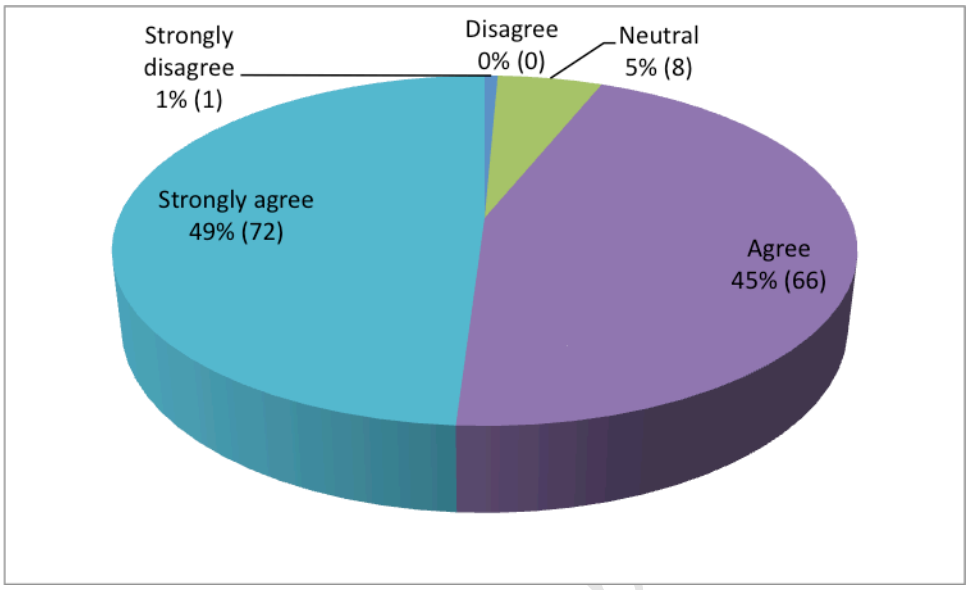
GRAPH 5.90: EVOLUTION OF WEB TECHNOLOGIES AS ENABLING ORGANISATION TO REACH INTERNATIONAL AUDIENCES MORE EASILY



NPO directors reported on the degree to which they felt that the evolution of technology will provide new opportunities for growth for the organisation. The results are striking, with a significant majority (94%) of respondents who either strongly agreed or agreed with this idea. This finding was crucial in that it solidified the hypothesis that web technologies are useful tools for NPOs to grow as an organisation. This growth can be interpreted as the ability to provide higher quality services to more beneficiaries, to explore for funding sources, to manage available resources more efficiently and effectively, and to educate and disseminate information to wider audiences, amongst several other growth indicators. Interestingly, a substantial 97 percent of NPOs from developing countries agreed to some extent with this idea, versus 91 percent amongst NPOs from developed countries. Though both figures are considerably high, it appears that optimism levels are slightly higher in the developing world. NPO director projections are displayed in Graph 5.91.

GRAPH 5.91: EVOLUTION OF TECHNOLOGY TO PROVIDE NEW GROWTH

OPPORTUNITIES FOR THE ORGANISATION



The topics associated with the evolution of technology and the effect this will have on organisational operations and sustainability were interesting to explore. The findings of this research parallel affirmations by Yourdon (2002) in his description of how technology has evolved over the years, and what this means in terms of managing high-intensity internet projects.

5.9 Conclusion

This chapter presented a detailed report of the findings of the study, in addition to a discussion of the implication and meaning of the data. Key distinctions between NPOs from developed and developing countries were elucidated. Furthermore, important relationships were drawn between variables. Previous findings were integrated into the discussion, which either confirmed or refuted past research. In sum, the findings have a valuable capacity to contribute to the body of knowledge in this field.

Meaningful conclusions and recommendations based on the study's findings will be presented in the following chapter.

Chapter 6

Conclusions and Recommendations

Contents:

6.1 Introduction

This study revealed a number of fascinating findings. Based on those findings, important conclusions were derived. This chapter will systematically present key conclusions. Furthermore, specific recommendations will be offered to relevant stakeholder groups. It is aimed that this study will enable all stakeholders to benefit from greater knowledge and understanding of the topic of inquiry, and can move forward in a focused and beneficial way.

Conclusions and recommendations are presented thematically under the following headings: *biographical information, organisational information, IT usage and analysis, web usage and analysis, sustainability* and *future outlook.*

6.2 Biographical Information

With regards to biographical information, perhaps the most noteworthy finding was that NPOs in the developed world had a more balanced distribution of males to females serving as directors of NPOs. It is recommended that NPOs in the developing world attempt to integrate more female NPO directors. Though gender is not a determinant of management acumen, based on the disparity found in this study, it would behove NPOs especially in Pakistan and India to address this imbalance. One way of approaching this topic is by specifically recruiting high functioning female students into NPO management courses. Additionally, forums and networks designed for female NPO directors may help to share best practices and brainstorm ways to increase the number of qualified female NPO directors. Focused training initiatives for young women can also be instated at the secondary school level to further develop key leadership skills. Mentoring programmes could also serve to benefit many young women leaders, specifically in developing countries.

The absence of strict formal educational requirements for NPO directors is positive as it allows for inclusivity in the nonprofit management sector. Nevertheless, it is recommended that more educational institutions develop coursework designed specifically in the field of NPO management. This seems to be a growing trend in several parts of the world, though in the developing world where educational systems are more based on rote memorisation, learning creative management techniques and the other range of issues involved with starting and/or running an NPO could be helpful. Traditional management

and economics-based courses focus on maximising profit and efficiency and minimising costs. This is not always applicable to the nonprofit world. Rather, profit must be viewed as human or social profit.

6.3 Organisational Information

In terms of response rates, NPOs from the developing world demonstrated higher rates of return than NPOs from the developed world, despite the developed world having a larger listing of NPOs on *Idealist.org*. This signified that the general level of enthusiasm amongst NPOs from developing countries was higher with regards to embracing the study and wanting to participate. Interestingly, NPO directors from India and South Africa had communicated via email to the researcher in greater numbers than did other countries with nearly 20 contacts having been made collectively between the two. Emails consisted typically of praise for attempting to tackle this subject and reflected a genuine interest in the topic. Overall, however, it was found that NPOs from all countries had on some level communicated to the researcher that there was a need for this type of research and were keen to learn about the findings. It is evident that there is a desire to learn more about these topics and to implement findings towards strengthening NPOs. It is recommended that this level of enthusiasm be fostered and nurtured and that new banks of data in this regard be made available to NPO directors. An online service that could provide key reports and other such information should be established. This study found that web technologies were viewed as useful as a means to share information. Further, the vision for the future seems to be that web technologies will only continue to evolve and grow. Based on this information, it is advised that new and creative ways to share information be brainstormed, designed and implemented. As it pertains here, an outlet for new and cutting edge research in the nonprofit field could be potentially useful for thousands of NPOs globally. As Web 2.0 technologies are characterised by their collaborative nature, it is predicted that these types of endeavours will be prevalent in the future, as well as highly valued.

There has been a substantial surge of new NPOs being formed, primarily in the past decade. This growing trend of the sector has serious implications. First, it potentially means that more communities and beneficiaries can be served. In this regard, it is recommended that a global survey of NPO function and reach be conducted as a type of census of what the status of the NPO world truly is. This would bring to light crucial information about what areas are in further need around the globe and NPOs can work to develop solutions in these areas. Secondly, it potentially means that resources available to NPOs will be scarcer. The nonprofit world, unlike the for-profit one, need not be dominated by a sense

of competition, however. It is recommended that systems and networks that foster a sharing of available resources be implemented whenever possible. This can translate, for example, into mutually shared office space and inventories. Furthermore, partnership development amongst NPOs could be extremely helpful in extending the organisational reach to communities. Web technologies are critical tools that can help in this area.

It was concluded that NPOs on average do utilise the work of volunteers, often in large numbers. As it was revealed that overall, web technologies are valuable tools to manage volunteers, it is recommended that NPOs work to develop these capacities further. This can be achieved through the development of web resources designed specifically for volunteers. It may be useful to use web technologies to link volunteers together as well. This can be achieved through message boards and other web related initiatives.

NPO work covers a wide variety of individual service areas, often overlapping in areas. It is recommended that networks be created between the developed and developing world NPOs to share best practices in similar service areas, as well as provide information about service needs that are not being met. *Idealist.org* is one such network that has the capacity to do this as it has been doing for years. Specific networks of service areas such as "global health" in the case with *Medicins Sans Frontiers* have also proven to be effective. It is recommended that the underserved service areas be given more focus in all parts of the world. This can be attained through developing specific networks which would also allow for a greater flow of ideas and information.

6.4 IT Usage and Analysis

It was noteworthy to recognise that the vast majority of NPOs use *Microsoft* as their operating system. This trend is even more pronounced in the developing world. As financial constraints are typically high amongst NPOs, it is recommended that open source technologies be integrated where possible. An open source operating system such as *Linux*, for example, would enable NPOs to cut costs. However, the knowledge needed to operate such systems is likely to be lacking amongst many in the NPO world. Therefore, it is recommended that organisations that are interested in utilising open source operating systems find avenues to receive training and assistance in this regard. The implications for open source technologies are substantial and include lower or no costs, less or unrestrictive sharing potential and the ability to create products with more ease. In terms of education, it would be useful for colleges and

universities to offer workshops and specific courses in open source technologies for students of all subject majors. NPO managers in particular could stand to benefit greatly from such knowledge. It is also advised that IT professionals who are fluent in open source technologies conduct trainings and workshops for any interested NPO employees who are looking to gain new skills in the area.

Microsoft is the dominant application software provider in the NPO world via their *MS Office Suite*. The vast majority of NPOs that utilise this package indicated that it is ingrained in the operations of most NPOs. *Word*, *Excel* and *PowerPoint* are the most commonly used and the former two are used for the most functions. Furthermore, they were substantially the most valued. As *PowerPoint* and *Access* were much less valued, it is recommended to *Microsoft* to focus on strengthening these applications for NPO purposes. It is also advised that products be designed specifically for NPOs. Database software in particular demands a higher focus. It is recommended that *Microsoft* develop templates in *Access* designed particularly for fundraising as databases are particularly well suited to this application. Focus should also be spent on developing easy to use tutorials in this regard.

Though a majority of paying customers of *MS Office Suite* found it to be cost effective, there was also a significant minority that was neutral. At a relatively high average cost of US $420, it is recommended that *Microsoft* make their products available at no or low costs for NPOs. It is believed that the overall satisfaction levels for *Microsoft* would rise if this were the case. The *Bill and Melinda Gates* foundation is arguably one of the largest contributors of resources to the nonprofit world. An initiative on behalf of the foundation to offer custom-tailored *MS Office Suite* packages for NPOs would be expected to have a strong and meaningful impact. Despite having a stranglehold on the market, such attempts as these could keep *Microsoft's* footing stable, especially in an ever-changing technological world.

The research revealed that data backup measures were implemented by most NPOs and that external hard drives were the most popular. This is likely due to their relatively low costs and ability to transport easily. It is recommended that NPOs looking to further market or brand themselves utilise this information and if resources are available, invest in flash stick external hard drives with an organisational logo and contact information printed directly on them. As these items are so widely used, this may be a great way for organisations to extend their presence in the world. It is common for NPOs to put logos on items such as pens, t-shirts and other items. Branching out into external drives may be a unique way to brand and market organisational services.

Data loss was a significant concern, particularly through electronic viruses in the form of emails that were unknowingly opened. It is recommended that NPOs implement a training workshop for employees or others using organisational computers on how to safely use information and web technologies, and specifically how to protect systems from contracting electronic viruses. As data loss can be very costly to organisations, a brief lesson in awareness can go a long way. *Idealist.org*, or other online networks for NPO resources, could simply design a brief downloadable presentation that directors could present to staff. This topic of safety, along with a range of other topics could be addressed. Virtual libraries of downloadable presentations in a variety of areas could prove to be valuable to organisations.

IT had dramatically improved organisational operations by improving performance output, minimising costs and revolutionising the way organisations operate. IT has become central to organisational output. It is thus recommended that new ways of utilising IT for organisational benefit be introduced. Furthermore, training in various IT elements should also be an area of focus for NPO directors and their staff. By elevating knowledge and expertise IT can make organisational operations even more effective. As IT literacy was of great importance when hiring staff, investing in IT training for current staff will increase human capital.

IT is being taught in schools in greater numbers in the developed world compared to the developing world. As the link between IT and human capital has been proven, it is recommended that developing countries invest more on developing IT skills, specifically starting at younger ages. This would require a greater integration of computers and other IT tools into classrooms, in addition to competent teachers to instruct on the varied uses of these technologies.

6.5 Web Usage and Analysis

The research revealed that rural areas have far less access to internet facilities than do urban areas. This finding is important in that there is a link between web access and sustainability. Therefore, it is recommended that governments open access to the web and other forms of ICT in rural areas as a high priority. However, simply making the access available is insufficient. Proper training and education must also be provided in order to maximise potential. It is important that this process of integrating web connectivity into remote areas be a collaborative effort, involving community members at all levels of design, implementation and follow-up.

Idealist.org has been instrumental in providing opportunities for the marketing and promotion of NPOs and most respondents deemed that joining *Idealist.org* was worthwhile. Nevertheless, a substantial minority of the *Idealist.org* user population indicated that benefits were not significant to warrant their continued membership. This in part may be caused by a lack of knowing the extent of what the network is capable of providing. Therefore it is recommended that *Idealist.org* find ways to promote their many features to current member NPOs. This can come in the form of brief reports on statistics regarding employment and volunteer recruitment trends via the site, in addition to other ways of promoting the various resources *Idealist.org* can offer organisations. It is recommended for *Idealist.org* to research and invest in more ways to make current members more active users of the site. This is based on the finding that higher activity on the site was positively correlated with greater satisfaction of the site. One such idea would be for *Idealist.org* to create a chat room feature on their site. This can have a huge impact on the ability of the site to further connect individuals and organisations. In addition, the number of members and daily users is quite large, thus increasing the likelihood of active chat rooms throughout the day. For example, one particular chat room could be designed to link current NPO employees with students who are looking to learn more about the field. Other chat rooms could be themed around particular countries or service areas. As many users utilise the site for common purposes, the idea of themed rooms could prove to be beneficial. Ultimately this would allow users from across the globe to interact in a purposeful manner to a greater degree. It is believed that *Idealist.org* is the perfect organisation to host such activity for the nonprofit world.

NPOs had multiple reasons for creating an organisational website while also expressing that there were various limitations to consider. They also indicated that a number of audiences were intended to be the main users of the website and that websites had both common and unique features. It is recommended that NPOs examine the various audiences that could be reached, beyond the ones they were intended for.

Virtually all respondents expressed that they were motivated to increase their presence and visibility on the web by integrating more useful features. Additionally, as lack of knowledge was a major limitation expressed by respondents in creating their website, investments should be made in training one or more staff members on basic website topics. These can range from technical issues to more design and appearance oriented elements. There is a wealth of information both online and in print form that is available at relatively little or no cost to an organisation. It is also recommended that consultancies be

set up by experts in the field to offer individualised guidance in this regard. Based on the study, there certainly seems to be a market for such services.

For those organisations that did pay to create a website, most found that it was worth the cost. It is recommended for NPOs with very limited finances to research free web software applications to create their organisational websites. Though the free software may be more limited in functionality, for basic purposes it is a great way to start to have a web presence in the world. Also available are low cost website hosting companies that provide templates and "click and drag" functions to enable users with minimal skill to create and maintain a website. The features and freedom to design may be slightly limited but the effect can still be powerful.

Web analytics tools are utilised by only about half of NPOs. Those that do use them typically find them to be valuable. It is believed that there is a general lack of awareness in the power of these tools and how to implement findings that may arise from their usage. It is recommended that all NPOs engage in some form of web analytics assessment. NPOs that are not performing any web analytics assessments and do not have or want to spend finances towards these efforts should highly consider using *Google Analytics*. This tool is free and relatively easy to use. It is recommended to *Google* and the *Google Analytics* team that a web analytics tool be designed specifically for NPOs. It was found that NPO websites are similar in terms of intent overall, and thus specialised reports, based on common data to help NPOs further their website abilities, would be of great help. For example, reports can be created on hit ratios compared to certain common functions such as making online donations, finding contact information or other such tasks. Based on these reports, steps can be taken to develop the website further to maximise results. This is would be another area a NPO web technology consultant could focus.

Based on the study, it was found that web development and maintenance, though handled internally by many, is also outsourced to a fair degree either entirely or partially to an external agency. It is recommended that an investment in training for internal staff members be made to develop more of these skills. As an investment in human capital, this would enable organisations to not only cut costs in the long run, but could also save time, as having an in-house specialist would potentially minimise the time and effort required to perform these tasks.

It was revealed that NPOs typically are satisfied with how their websites rank within the same service field in the same geographic location, but were somewhat more modest when it came to the global picture. Coupled with a significant majority that felt their website could be improved upon, it is recommended that organisations engage in comparative research to better understand exactly how their website could be maximised further. One method would be a case-by-case analysis of other organisations in a similar field both locally and globally. It is advised that a systematic examination of various features, styles, layouts, etc of other websites be conducted. Upon compiling these lists or databases, a concerted effort can be made to integrate best practices in one's own site. This is common practice by international agencies such as *UNICEF*.

The areas of marketing, promotions, branding and information dissemination were all dramatically improved through the use of web technologies. This has powerful implications for the potential of the web with regards to these areas. Essentially they are all involved with communication and it is recommended that NPOs continue to explore ways in which the web can provide new outlets to communicate for these various purposes. It is advised that NPOs embrace web 2.0 marketing strategies, such as the use of social networking sites. Similar to comparing other organisational websites, NPOs should examine NPO pages on SNSs. Next, NPOs should integrate best practices into the creation and maintenance of their own page on an SNS. It was also concluded that fundraising is not the primary reason for engaging with these tools, but rather to connect with stakeholders and others who may want to get involved with the organisation on some level. The desire to learn more about these types of technologies indicates that there is still substantial growth potential in this area. It is important to stay current and make regular updates to SNS pages. Unlike websites where information can remain posted for weeks, months and even years, SNS pages require much more rapid updates. Instating a blog can be an effective way of continually making updates and providing users with new information. It is advised that NPO directors and staff read blogs from various NPOs, including the comments left by those users reading the blogs. A blog with many comments is generally indicative of regular and possibly wide readership. Techniques such as writing style and visual layout should be examined in addition to the nature of content being presented. Integrating best practices into an organisational blog could prove to be very useful.

It is also advised that appropriate and focused marketing techniques be employed to spread the message about the SNS page and/or website. Viral strategies could work especially well for SNS pages.

With a simple click, users across the globe can be reached. The web is particularly fascinating in the minimised cost and time it takes to spread a message or idea. Further, making use of convenient links, such as a *Facebook* logo attached to a signature on an email message may result in email recipients clicking the logo to the SNS page. It is also advised that future research be conducted on NPO SNS usage in greater depth. This minimally chartered area is in need of greater exploration and understanding.

By becoming more aware of these Web 2.0 technologies such as SNSs, blogs and other interactive platforms, NPOs can integrate them into their marketing, communication and fundraising strategies to render these more effective.

The findings showed that though email systems vary amongst organisations, nearly all respondents felt that email was necessary for both internal and external communication. This implies a heavy reliance on this tool as a form of communication and thus is ingrained in organisational operations. It is recommended that other tools be explored for communication purposes such as real-time instant messaging or video conferencing, as these too can add to an organisation's ability to communicate both internally and externally.

It was concluded that the vast majority of NPO directors valued the use of web technologies in a constellation of capacities. Performance output, the ability to organise and mobilise individuals, the ability to reach audiences that were previously hard or impossible to reach, and the revolutionising effect that web technologies have had on operations, were amongst the benefits reaped from engaging with these tools. It is recommended in this regard that NPOs continue to embrace new forms of web technologies and ultimately learn as much as possible about their potential uses and how to best integrate them into their operations. The value is further pronounced by the desire shared by the vast majority of NPO directors to invest more in web technologies.

6.6 Sustainability

Interestingly, it was discovered that a lack of funding was undoubtedly the most common threat to organisational sustainability for the vast majority of NPOs. It is recommended that NPOs explore all available options for funding in order to ameliorate this obstacle. Research is fundamental in this regard and an analysis of the various funding methods that well healed NPOs are employing would be of great help.

Furthermore, it was concluded that though many threats are shared, there are distinctive differences in perceived threats to sustainability between the developing and developed world. It is recommended that appropriate steps be taken to minimise or combat each of these threats. A thorough assessment should be undertaken by NPOs to determine the nature of each threat, the degree to which it affects the organisation, possible solutions and a plan of action on how to minimise and combat the threat.

It was discovered that the recent global recession has in fact affected many NPOs, mostly negatively, with less available funding, the retrenching of employees and the need to cut down on programmes and services. Nevertheless, the level of optimism both in the short term and more pronounced in the long term, was significant. It is recommended that organisations use these setbacks as opportunities to grow in terms of being more creative about how to obtain resources and allocate them more efficiently.

Based on the study, income and expenditure levels overall were higher in the developed world, yet the ratio of earning to spending was more balanced amongst NPOs in the developing world. It was realised, however, that simple income and expenditure analyses do not reveal the whole truth about sustainability. It is recommended that NPOs develop or borrow a systematic measure of sustainability pertinent to their organisation from existing sources. Financial measurements should be coupled with human resource measurements and programmes/services impact calculations. Through a set framework, organisations will be better prepared to measure their sustainability over time and understand areas that need improvement.

It was concluded that NPOs are typically integrating both offline and online methods for fundraising. In addition, online fundraising methods have been proven to be effective. Online fundraising will continue to grow and therefore it is recommended that NPOs stay current with technologies that will enable them to sustain themselves in the future. It was also evident that though many organisations are receiving online donations via their website or an external site, overall the amounts received are not, on average, high. This suggests an area of improvement for NPOs. It is recommended that coupled with an attractive and easy to use online donation form, NPOs communicate to donors on how the money is being spent. Web 2.0 methods such as blogging information and links to an online donation site, may prove to be helpful in this regard.

The research showed that an astounding majority of NPO directors felt that IT had enhanced sustainability by improving internal and external communication, organisational efficiency, time

management, management controls, the creation and management of programmes, and the monitoring and evaluation of programmes. All of these sustainability indicators reflect the value IT brings to organisations. It is recommended that NPO managers continue to embrace information technologies and stay current with the evolving field. Furthermore, training in these technologies is helpful for staff at all levels. It enables them to perform duties faster and with more precision, in addition to increasing their human capital.

Web technologies play a significant role regarding organisational sustainability. Particularly, they have helped organisations to develop new partnerships and to sustain them. This connectivity issue is substantial in its implications. The web truly does connect people and groups from all pockets of the world and it is recommended that NPOs continue to use these tools to develop more partnerships of mutual benefit. In order to excel in this regard, NPOs should branch out to new online networks they previously have not engaged with, or add depth to their current online networks. There is a wealth of these on the web including the SNSs discussed, *Wiser Earth* – a sustainability based SNS, in addition to country or continent-wide online networks. It is recommended that if resources are available, a designated position be designed to handle all of these areas.

6.7 Future Outlook

NPOs intend to use the web to increase marketing efforts and to seek new opportunities for funding. This reflects the strong linkages between web technologies and these fundamental areas for organisational sustainability. Most NPO directors were desirous of receiving further assistance and training on how to improve their website and to learn about other web technologies for themselves and their staff. It is thus recommended that consultancies focus on this area and make services available to NPOs in this regard. Furthermore, it would be useful for online networks such as *Idealist.org* to provide more online resources directed at these topics.

NPO directors overall felt that the geographic areas they are based in will continue to see greater levels of web connectivity in the future. This is a reflection of the evolution of technology and how it has and will continue to permeate all of society. It is recommended that NPO directors make use of this development in the best possible way for their organisations. This could entail a greater presence on the web in addition to focusing more on developing web capacities. As it appears that the web is one of, if not the most dominant forms of global connectivity, it is essential for NPOs to engage deeply with

these technologies and support local communities in their efforts to increase web connectivity. In turn, the capital of communities increases in terms of knowledge and expertise that could translate into greater levels of economic and social security. Community-wide events and initiatives to promote technology usage would be helpful, and would offer an opportunity for shared learning and growth. As governments invest more in ICT development, particularly in rural areas, NPOs are in a unique position to offer services in the implementation of these plans, namely in terms of education and training.

It was concluded that NPO directors look ahead positively to the idea that web technologies can offer new opportunities for organisational growth. It is recommended that NPOs take every opportunity to learn more about new technologies and their capabilities, strategise ways to engage with these technologies, implement plans in relation to these technologies and monitor the effectiveness for the organisation. The adoption and proper usage of these resources will enhance sustainability and open new doors for the future.

6.8 Conclusion

This chapter systematically presented key conclusions based on the findings, in addition to specific recommendations directed at relevant stakeholder groups. The emphasis was most notably on promoting a deeper awareness and understanding of the power of these technologies, as well as their multiple uses as it pertains to organisational sustainability and future growth.

As a whole, this study explored the level and nature of information and web technology usage by NPOs around the globe and how these related to the operations, sustainability and future growth of these organisations. Utilising a quantitative methodology proved to be extremely useful and enabled the discovery of a range of unique findings. It is ultimately aimed that future research continue to explore these dynamic areas in order to deepen understanding and contribute knowledge to the field. In sum, it is truly remarkable to witness and experience the global changes occurring in the present day. Interaction and collaboration are at levels they have never been before, and they shall continue to evolve. Technology, with its many uses, is a primary driver of these changes. The impact that this has on the service world is truly remarkable. It is hoped that this study has provided some insight into the fascinating world of nonprofit organisations and technology.

Works Cited

Al-Qirim, N. 2007. The Adoption and Diffusion of E-Commerce in Developing Countries: The Case of an NGO in Jordan. *Information Technology for Development,* 13(2): 107-131.

AntivirusWorld 2009, 'How Does Anti-Virus Software Work?', viewed 3 May 2010, <http://www.antivirusworld.com/articles/antivirus.php>

Babbie, E. & Mouton, J. 2001. *The Practice of Social Research.* Cape Town: Oxford University Press Southern Africa (Pty) Ltd.

Barton, N. & Wallace, N. 2010, 'Online Giving Continues to Grow but at a Slower Pace, Chronicle Survey Finds', *The Chronicle of Philanthropy,* viewed 5 May 2010, <http://philanthropy.com/article/Online-Giving-Grows-but-at-a/65089/>

Baumbach, D.J. 2009. Web 2.0 & You. *Knowledge Quest,* 37(4): 12-19.

Business Dictionary.com, 2010, 'Feedback Definition', viewed 30 May 2010, <http://www.businessdictionary.com/definition/feedback.html>

Business Dictionary.com, 2010, 'Non Profit Organisation Definition', viewed 11 May 2010, <http://www.businessdictionary.com/definition/non-profit-organization-NPO.html>

Business Dictionary.com, 2010, 'Recession Definition', viewed 11 May 2010, <http://www.businessdictionary.com/definition/recession.html>

Charities Aid Foundation, 2009, 'Philanthropy in the Context of the Economic Crisis – 2009 Survey Results', viewed 14 July 2010, <http://www.cafonline.org/pdf/Philanthropy%20in%20the%20con text%20of%20economic%20crisis% 20Russia%202009.pdf>

Custard, H.A. 2008. The Internet and Global Civil Society: Communication & Representation within Transnational Advocacy Networks. *GMJ,* 3(2): 1-11.

Crutchfield, L.R. & Grant, H.M. 2008. *Forces for Good.* San Francisco: John Wiley & Sons, Inc.

Desouza, R. & Dutta, M.J. 2008. Global and Local Networking for HIV/AIDS Prevention: The Case of the *Saathii* E-Forum. *Journal of Health Communication,* 13: 326-344.

Di Mento, M. 2010, 'More Than a Quarter of Wealthy Americans Say Recession Led to Cuts in Charitable Giving, Survey Finds', *The Chronicle of Philanthropy,* viewed 22 April 2010, <http://philanthropy.com/article/More-Than-a-Quarter-of/64424>

Donston, D. 2008. Web 2.0. *EWeek,* May 2008: 39-45.

Dyrli, O.E. 2006. Online Fundraising: Districts are Turning to the Internet for Creative Fundraising. *District Administration,* October 2006: 72.

Egan, A.H. 2009, 'Key Financial Ratios', *Non Profits Online,* 2009, viewed 25 April 2010, <http://www.nonprofitsonline.net/finance/finance-key-financial-ratios/>

Ellis, B. 2010, 'Haiti Donations Exceed $305 Million', *CNNMoney.com,* viewed 13 May 2010, <http://money.cnn.com/2010/01/21/news/international/haiti_donations/>

Enterprise Blogs Info, 2010. 'Definition of Blogging', viewed 19 May 2010, <http://www.enterpriseblogs.info/definition-blogging>

Entrepreneur, 2010. 'Branding', viewed 18 May 2010, <http://www.entrepreneur.com/encyclopedia/term/82248.html>

Fitz-enz, J. 2009. *The ROI of Human Capital.* New York: AMACOM.

Gaiser, T.J. & Schreiner, A.E. 2009. *A Guide to Conducting Online Research.* London: SAGE Publications.

Gauntlett, D. (ed) 2000. *web.studies*. London: Arnold Publishers.

Granof, M.H. 2001. *Government and Not-for-Profit Accounting.* New York: John Wiley & Sons, Inc.

Hall-Jones, P. 2006, 'The Rise and Rise of NGOs', *Public Services International,* viewed 11 March 2010, <http://www.worldpsi.org/TemplateEn.cfm?Section=Home&CONTENTID=11738&TEMPLATE=/ContentManagement/ContentDisplay.cfm>

Harkins, S. 2008, '10+ Reasons Why IT Pros Hate Microsoft Access (But Really Shouldn't)', *TechRepublic,* viewed 13 April 2010, < http://blogs.techrepublic.com.com/10things/?p=386>

Hartley, C., Firer, C. & Ford, J. 2000. *Business Accounting and Finance for Managers.* Johannesburg: Witwatersrand University Press.

Heck, M. 2006. Get Site Stats Without the Stress. *InfoWorld,* 17 April 2006: 40-43.

Hill, S. 2010, 'Definition of Information Technology', *Ezine Articles,* viewed 14 March 2010, <http://ezinearticles.com/?Definition-of-Information-Technology&id=1109986>

Hunt, S.R. 2009, 'Exactly How Cheap Can Computers Get?', *APCMAG.COM,* viewed 25 March 2010, <http://apcmag.com/exactky-how-cheap-can-computers-get.htm>

Idealist.org 2010. Entire site, viewed 29 May 2010 <www.idealist.org>

Ingenhoff, D. & Koelling, A.M. 2008. The Potential of Web Sites as a Relationship Building Tool for Charitable Fundraising NPOs. *Public Relations Review,* 35(2009): 66-73.

Internet World Stats, 2010. Entire Site. Viewed 12 May 2010. <http://www.internetworldstats.com>

James, T. (ed) 2004. *Information and Communication Technologies for Development in Africa – Volume 3: Networking Institutions of Learning – SchoolNet.* Ottawa & Dakar: The International Development Research Centre & the Council for the Development of Social Science Research in Africa.

Kaushik, A. 2007. *Web Analytics – An Hour a Day*. Indianapolis: Wiley Publishing Inc.

Kenix, L.J. 2007. In Search of Utopia: An Analysis of Non-profit Web Pages. *Information, Communication & Society,* 10(1): 69-94.

Kinkade S. & Verclas K. 2008. 'Wireless Technology for Social Change.' *UN Foundation – Vodafone Group Foundation Partnership - Access to Communication Publications Series,* (2): 1-59.

Kinuthia, W. 2008. Another Spotlight on the Continent: *TechTrends* in Africa. *ICT International*, 52(4): 21-23.

Laituri, M. & Kodrich, K. 2008. The On-line Disaster Response Community: Multiple High Magnitude Disasters and Geospatial Technologies. *Sensors,* 8: 3,037-3,055.

Li, G. 2001. An Analysis: The Impact of Non-Governmental Organizations on the Practice of Public Relations. *Public Relations Quarterly,* Winter 2001: 11-14.

Makoba, J.W. 2002, 'Nongovermental Organizations (NGOs) and Third World Development: An Alternative Approach to Development', *Journal of Third World Studies,* Spring 2002, viewed 12 March 2010, < http://findarticles.com/p/articles/mi_qa3821/is_200204/ai_n9071891/?tag=content;col1>

Marcussen, C.H. 2001, 'Response Rates in Internet Surveys – Experiences from an Online Expert Survey into WAP for Business Travellers', *Innovations in Online Market Research – IIR Conference Presentation,* viewed 12 March 2010, <http://www.crt.dk/uk/staff/chm/wap/survey/response.pdf>

Mathews, B. 2009. Web Design Matters. *Library Journal,* 15 February 2009: 24-25.

McClure, A. 2009. E-mail Fundraising Still Works. *University Business*, June 2009: 18.

Meckin, D. 2009. *Naked Finance*. London: Nicholas Brealey Publishing.

M.H. 2000. The Facts (and Figures) about Fundraising. *University Business.* January 2008: 18.

Monson, K. 2009, 'The Top 100 Websites of 2009', *PC Magazine.com,* viewed 12 April 2010, <http://www.pcmag.com/article2/0,2817,2350553,00.asp>

Nardi, P.M. 2006. *Doing Survey Research- A Guide to Quantitative Methods.* Cape Town: Pearson Education.

Paterson, C. & Domingo, D. (ed) 2008. *Making Online News – The Ethnography of New Media Production.* New York: Peter Lang Publishing.

PC Magazine.com, 2010, 'Bandwidth Definition', viewed 30 May 2010, <http://www.pcmag.com/encyclopedia_term/0,2542,t=bandwidth&i=38401,00.asp>

PC Magazine.com, 2010, 'Chat Room Definition', viewed 30 May 2010, <http://www.pcmag.com/encyclopedia_term/0%2C2542%2Ct%3Dchat+room&i%3D39614%2C00.asp>

PC Magazine.com, 2010, 'Facebook Definition', viewed 30 May 2010, <http://www.pcmag.com/encyclopedia_term/0%2C2542%2Ct%3DFacebook&i%3D57226%2C00.asp>

PC Magazine.com, 2010, 'Internet Forum Definition', viewed 30 May 2010, <http://www.pcmag.com/encyclopedia_term/0,2542,t=message+board&i=57794,00.asp>

PC Magazine.com, 2010, 'LinkedIn Definition', viewed 30 May 2010, <http://www.pcmag.com/encyclopedia_term/0%2C2542%2Ct%3DLinkedIn&i%3D60336%2C00.asp>

PC Magazine.com, 2010. 'MySpace Definition', viewed 30 May 2010, <http://www.pcmag.com/encyclopedia_term/0,2542,t=MySpace&i=56830,00.asp>

PC Magazine.com, 2010, 'Operating System Definition', viewed 30 May 2010, <http://www.pcmag.com/encyclopedia_term/0%2C2542%2Ct%3Doperating+system&i%3D48510%2C00.asp>

PC Magazine.com, 2010, 'Twitter Definition', viewed 30 May 2010, <http://www.pcmag.com/encyclopedia_term/0,2542,t=Twitter&i=57880,00.asp>

PC Magazine.com, 2010, 'Web Browser Definition', viewed 30 May 2010, <http://www.pcmag.com/encyclopedia_term/0,2542,t=Web+browser&i=54278,00.asp>

PC Magazine.com, 2010, 'Web Site Definition', viewed 30 May 2010, <http://www.pcmag.com/encyclopedia_term/0,2542,t=website&i=54346,00.asp>

PeoplePulse 2010, 'Survey Response Rates – Tips on How to Increase Your Online Survey Response Rates' *Australian Developed Online Survey Software.* viewed 24 May 2010. <http://www.peoplepulse.com.au/Survey-Response-Rates.htm>

Perlmutter, D.D. 2008. *Blog Wars.* Oxford: Oxford University Press.

Pillsbury, B. & Mayer, D. 2005. T-Shirts to Web Links: *Women Connect!* Building Communications Capacity with Women's NGOs. *Journal of Health Communication,* 10(4): 361-371.

Rebbapragada, R. 2006, 'Top Antivirus Software', *PC World,* 26 January 2006, viewed 11 November 2009, < http://www.pcworld.com/article/124475/top_antivirus_software.html>

Reynolds, E. 2008. Web Design: Cheap, Easy, and Powerful Usability Techniques. *Computers in Libraries,* June 2008: 7-47.

Shapiro, J. 2003, 'The Inevitable Future of Our Operating Systems', *thetechlounge,* viewed 12 March 2010, <http://www.thetechlounge.com/articles.php?id=74>

Sheehan, K. 2001, 'E-mail Survey Response Rates: A Review', *Journal of Computer-MediatedCommunication,* 6(2), viewed 22 April 2010. <http://jcmc.indiana.edu/vol6/issue2/sheehan.html>

Shiller, R.J. 2010, 'Fear of a Double Dip Could Cause One', *The New York Times,* 14 May 2010, viewed 11 July 2010. < http://www.nytimes.com/2010/05/16/business/16view.html>

Smit, A.V. 2005. Funding Strategies: Surviving Imperial Intentions, Protean Policies and Ruthless Reality. *Social Work/Maatskaplike Werk,* 41(4): 349-360.

Stokes, R. 2009. *eMarketing – the Essential Guide to Online Marketing*. South Africa: Quirk eMarketing (Pty) Ltd.

Survey Gizmo 2010. Entire site, viewed 4 June 2010 <www.surveygizmo.org>

Talbot, M. 2003. *Make Your Mission Statement Work.* Oxford: How To Books, Ltd.

Thirumal, P. & Robins, M. 2008. Charting the New Media: Reformulating "the Dalit Question". Paper presented at the annual meeting of the *International Communication Association,* viewed 12 November 2009, <http://www.allacademic.com/meta/p230125_index.html>

United Nations Development Programme, 2010, 'Human Development Reports', viewed 14 April 2010, <http://hdr.undp.org/en/statistics/>

Vella, M. 2008, 'The 10 Commandments of Web Design', *Businessweek Online*, viewed 15 March 2009, <http://www.businesweek.com/innovate/content/jun2008/id2008060623_750025.htm>

Vestergaard, A. 2008. Humanitarian Branding and the Media – The Case of Amnesty International. *Journal of Language and Politics,* 7(3): 471-493.

Visser, W. & Sunter, C. 2002. *Beyond Reasonable Greed: Why Sustainable Business is a Much Better Idea!* Cape Town: Human & Rousseau Tafelberg.

Wasley, P. 2009. More Charities Are on Social Networks – But Few Have Raised Much. *Chronicle of Philanthropy,* 21(14): 13.

Waters, R.D. 2008. Applying Relationship Management Theory to the Fundraising Process for Individual Donors. *Journal of Communication Management,* 12(1): 73-78.

Webopedia, 2010. 'What is a Social Networking Site?', viewed 13 January 2010, <http://www.webopedia.com/TERM/S/social_networking_site.html>

Whitcomb, D. 2010. Will Facebook Last Forever? *Cape Times*, 9 February 2010, "Techno Insert": 1.

XE, 2010. Entire Site. Viewed 14 May 2010. <http://www.xe.com/ict/>

Yourdon, E. 2002. *Managing High-Intensity Internet Projects*. New Jersey: Prentice Hall PTR

Appendix I – Initial Email Request

Dear Director of "*NPO Name"*,

Hello, my name is Naveen Kanithi. I am registered for the Masters degree in Social Planning and Administration at the University of Cape Town, South Africa. Your nonprofit organisation has been chosen to take part in this research based on your membership with the Idealist.org network. The primary objectives of this global study are to explore the current status of information and web technology usage as it pertains to organisational sustainability, and to determine the perceptions that Directors of nonprofit organisations have of the current and future efficacy of these technologies.

I would like to applaud the valuable work that your organisation does in serving your community. As Director, I understand that your time is valuable, but sincerely hope you will take part in this study to further knowledge in this unexplored field, believing that it may help your own organisation as well as the nonprofit sector as a whole. Following the survey you will have the opportunity to receive a summary of the research findings if you so choose.

I am passionate about how nonprofit organisations can employ web and information technologies to better serve their communities. In this regard, I have worked for various organisations including the US Fund for UNICEF and World Bank development projects, as well as grassroots level nonprofit organisations in South Africa, the United States and India.

Below you will find a link that will direct you to the survey online. Please click on the link or copy and paste it into a separate browser.

http://www.surveygizmo.com/s/237267/global-nonprofit-research

As the survey wishes to determine your current views, please complete by no later than the 31st of March.

Thank you very much for your time and effort. Your responses are greatly appreciated!

If you have any questions, please do not hesitate to contact me at global.nonprofit.research@gmail.com

Kind Regards,

Naveen Kanithi

Appendix II – First follow-up Email

Dear Directors,

Firstly, I would like to thank the numerous organisations in Australia, Canada, India, Pakistan, South Africa and the UK who have submitted completed surveys for this research study. Examining the data thus far, some very interesting trends are emerging regarding usage and sophistication levels of information and web technologies in relationship to organisational sustainability. In an attempt to maximize the power of this study, I am extending the deadline for submissions to 15 April 2010, and would love to have your organisation participate!

The following link will direct you to the survey online:

http://www.surveygizmo.com/s/237267/global-nonprofit-research

Based on the responses received thus far, the average time for completion is around 30-45 minutes. if you have any questions or comments, feel free to contact me at global.nonprofit.research@gmail.com . The following is the invitation email in its original form:

Dear Director of *NPO XYZ*,

Hello, my name is Naveen Kanithi. I am registered for the Masters degree in Social Planning and Administration at the University of Cape Town, South Africa. Your nonprofit organisation has been chosen to take part in this research based on your membership with the Idealist.org network. The primary objectives of this global study are to explore the current status of information and web technology usage as it pertains to organisational sustainability, and to determine the perceptions that Directors of nonprofit organisations have of the current and future efficacy of these technologies.

I would like to applaud the valuable work that your organisation does in serving your community. As Director, I understand that your time is valuable, but sincerely hope you will take part in this study to further knowledge in this unexplored field, believing that it may help your own organisation as well as the nonprofit sector as a whole. Following the survey you will have the opportunity to receive a summary of the research findings if you so choose.

I am passionate about how nonprofit organisations can employ web and information technologies to better serve their communities. In this regard, I have worked for various organisations including the US Fund for UNICEF and World Bank development projects, as well as grassroots level nonprofit organisations in South Africa, the United States and India.

Below you will find a link that will direct you to the survey online. Please click on the link or copy and paste it into a separate browser.

http://www.surveygizmo.com/s/237267/global-nonprofit-research

As the survey wishes to determine your current views, please complete by no later than the 31st of March.

Thank you very much for your time and effort. Your responses are greatly appreciated!

If you have any questions, please do not hesitate to contact me at global.nonprofit.research@gmail.com

Kind Regards,

Naveen Kanithi

Appendix III – Second Follow-up Email

Dear Directors,

Firstly, I would like to thank again all of the numerous organisations in Australia, Canada, India, Pakistan, South Africa and the UK who have submitted completed surveys for this research study. Examining the data thus far, some very interesting trends are emerging regarding usage and sophistication levels of information and web technologies in relationship to organisational sustainability. In an attempt to further maximize the power of this study, I am extending the deadline for submissions to 1 May 2010, and would love to have your organisation participate!

The following link will direct you to the survey online:

http://www.surveygizmo.com/s/237267/global-nonprofit-research

Based on the responses received thus far, the average time for completion is around 30-45 minutes. if you have any questions or comments, feel free to contact me at global.nonprofit.research@gmail.com . The following is the invitation email in its original form:

Dear Director of *NPO XYZ*,

Hello, my name is Naveen Kanithi. I am registered for the Masters degree in Social Planning and Administration at the University of Cape Town, South Africa. Your nonprofit organisation has been chosen to take part in this research based on your membership with the Idealist.org network. The primary objectives of this global study are to explore the current status of information and web technology usage as it pertains to organisational sustainability, and to determine the perceptions that Directors of nonprofit organisations have of the current and future efficacy of these technologies.

I would like to applaud the valuable work that your organisation does in serving your community. As Director, I understand that your time is valuable, but sincerely hope you will take part in this study to further knowledge in this unexplored field, believing that it may help your own organisation as well as the nonprofit sector as a whole. Following the survey you will have the opportunity to receive a summary of the research findings if you so choose.

I am passionate about how nonprofit organisations can employ web and information technologies to better serve their communities. In this regard, I have worked for various organisations including the US Fund for UNICEF and World Bank development projects, as well as grassroots level nonprofit organisations in South Africa, the United States and India.

Below you will find a link that will direct you to the survey online. Please click on the link or copy and paste it into a separate browser.

http://www.surveygizmo.com/s/237267/global-nonprofit-research

As the survey wishes to determine your current views, please complete by no later than the 31st of March.

Thank you very much for your time and effort. Your responses are greatly appreciated!

If you have any questions, please do not hesitate to contact me at global.nonprofit.research@gmail.com

Kind Regards,

Naveen Kanithi

Appendix IV – Survey

- Please Note: This is the survey in uni-code format, and thus is far less dynamic than the online version which can be found by going to the site:

  http://www.surveygizmo.com/s/237267/global-nonprofit-research

- All questions are listed in this text, but respondents only view and answer questions that are pertinent to them, based on responses to previous questions. Furthermore, there are accompanying images at several places through the survey that do not appear in this uni-code version.

==========
==========
IT/Web Technology NPO Usage Survey
==========
==========

==========
Introduction
==========

Dear Director,

Hello and thank you for taking part in this exciting research! All your responses are very valuable for this study and therefore please answer all questions as honestly as possible.

The primary objective of this study is to explore the current status of information and web technology usage as it pertains to organisational sustainability.

The survey consists of a number of questions and statements and is estimated to take around 30 minutes to complete. The survey is divided into the following sections: Respondent Information, Organisation Information, IT Usage and Analysis, Web Connectivity and Analysis, Sustainability and Future Outlook.

At the end of the survey, you will have the opportunity to provide your email address if you elect to receive a summary of the findings once the research project is completed.

Your responses will be treated with strict confidentiality and will remain anonymous.

Definitions:

For the purposes of this survey, the following terms have been defined as follows:

* Information Technologies (IT): the overall subject relating to all aspects of managing and processing information, including but not limited to computer hardware and software.

* Web Technologies: also commonly known as the internet, it is the overall subject relating to all aspects of the internet, web pages, social networking sites and other web-based applications.

Additional Notes:

* Questions related to currency, please use only numeric figures to indicate the amount, without any additional words or currency signs.

* NB: Until completion of the entire survey, should you wish to open any other links, it should be done in another web tab, or in a new browser in order to avoid losing data collected thus far.

* If at any time during the survey you would like to stop, save and continue later, please look to the upper right portion of the screen, and click on "save and continue survey later". You can then enter an email adress and a unique link will be sent to you, thereby allowing you to continue from where you left off.

Thank you again for your time and effort! Now lets get started!

(PICTURE)

Jameson Hall, University of Cape Town, Naveen Kanithi

1. How many years have you been serving as the Director of the organisation?

_____

2. What is your age?

_____

3. What is your gender?
( ) Female
( ) Male

4. Indicate the highest level of education completed:
( ) Schooling only
( ) Post schooling certificate (qualification other than degree)
( ) Bachelors degree
( ) Honours degree
( ) Masters degree
( ) Doctoral degree
( ) Other (indicate briefly)

5. What is the currency you use?
( ) Australian Dollar
( ) Canadian Dollar
( ) Indian Rupee
( ) Pakistani Rupee
( ) South African Rand
( ) British Pound
( ) US Dollar

==========
Organisational Information
==========

6. Which country is the organisation based in?
    ( ) Australia
    ( ) Canada
    ( ) India
    ( ) Pakistan
    ( ) South Africa
    ( ) United Kingdom

7. Which city/town is the organisation based in?

    _____

8. How would you best describe the type of area the organisation is located in?
    ( ) Rural Area
    ( ) Urban Area

9. What one service area best describes the major focus of the organisation's work?
    ( ) Art, Architecture, Music
    ( ) Children and Youth
    ( ) Communications Access and Infrastructure
    ( ) Community Development
    ( ) Community Service and Volunteering
    ( ) Computers and Technology
    ( ) Consumer Protection
    ( ) Crime, Safety and Volunteering
    ( ) Disability Issues
    ( ) Disaster Relief
    ( ) Economic Developent
    ( ) Education and Academia
    ( ) Energy
    ( ) Environment and Ecoology
    ( )Family and Parenting
    ( )Farming and Agriculture
    ( ) Foundations, Fundraising and Philanthropy
    ( ) Gay, Lesbian, Bi and Transgender Issues
    ( ) Government Oversight and Reform
    ( ) Health and Medicine
    ( ) Housing and Homelessness
    ( ) Human Rights and Civil Liberties
    ( ) Immigration
    ( ) International Cooperation & Relations
    ( ) Job Training and Workplace Issues
    ( ) Law and Legal Advices

( ) Library or Resource Centre
( ) Media and Journalism
( ) Mental Health
( ) Men's Issues
( ) Microcredit
( ) Multi-Service Community Agency
( ) Museums and Historical Societies
( ) Network of NPOs
( ) Personal Finance
( ) Politics
( ) Poverty and Hunger
( ) Prison Reform
( ) Professional Association
( ) Race and Ethnicity
( ) Recovery, Addiction and Abuse
( ) Religion, Addiction and Abuse
( ) Religion, Spirituality and Metaphysical Issues
( ) Research and Science
( ) Rural Issues
( ) Senior and Retirement Issues
( ) Social Enterprise and Economic Development
( ) Sports, Recreation and Leisure
( ) Travel and Transportation
( ) Urban Affairs
( ) Veterans Issues
( ) Other

10. What year whas the organisation formed?

_____

11. How many full-time employees are currently employed within the organisation?

_____

12. Have you used the web to recruit staff members?

( ) Yes
( ) No

13. The web has been an effective tool in recruiting staff members.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

14. Currently, how many volunteers are involved in the organisation?

_____

15. Have you used the web to recruit volunteers?

( ) Yes
( ) No

16. The web has been an effective tool in recruiting volunteers.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

17. Have you used the web to manage volunteers?

( ) Yes
( ) No

18. The web has been an effective tool in managing volunteers.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

19. Can you realistically estimate the number of people the organisation currently serves?

( ) Yes
( ) No

==========
IT Usage and Analysis
==========

20. What year did the organisation first get computers?

_____

21. How many desktop computers does the organisation own?

_____

22. How many portable computers (e.g. laptop, notebook, netbook) does the organisation own?

_____

23. What type of operating system do the majority of the organisation’s computers run on?

( ) Microsoft
( ) Apple
( ) Linux
( ) Other

24. Do you use Microsoft Office Suite (i.e. MS Word, Access, Excel, PowerPoint)?

( ) Yes
( ) No

25. Using the following matrix, please click all boxes corresponding to the functions the organisation uses for each of the software applications

	Word	Excel	Powerpoint	Access		
Writing letters	_____	_____	_____	_____		
Finance and budgets		_____	_____	_____	_____	
Fundraising proposals		_____	_____	_____	_____	
Inventory		_____	_____	_____	_____	
Contact lists		_____	_____	_____	_____	
Newsletters		_____	_____	_____	_____	
Donor database		_____	_____	_____	_____	
Client/beneficiary database			_____	_____	_____	_____
General documentation of programme activities		_____	_____	_____	_____	
Creating presentations for internal purposes			_____	_____	_____	_____
Creating presentations for external purposes			_____	_____	_____	_____

26. Based on your responses from the previous question, please indicate the value of each software application. If you indicated above that you do not use a particular software, please click "Not applicable"

	Not valued		Valued	Highly valued	Not applicable
Word	_____	_____	_____	_____	
Excel	_____	_____	_____	_____	
Powerpoint	_____	_____	_____	_____	
Access	_____	_____	_____	_____	

27. The use of MS Office Suite has been cost effective.

( ) Strongly disagree
( ) Disagree
( ) Neutral

( ) Agree
( ) Strongly agree

28. In a few words, why do you use MS Office Suite? (optional)

_____
_____
_____
_____
_____

29. Using your own currency, how much did you pay for the Microsoft Office suite?
( ) None, was given for free
( ) Amount (numerals only)

30. Information technologies have improved the performance output of the organisation.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

31. Information technologies have had a positive cost-saving effect on the organisation’s day-to-day functions.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

32. Electronic data loss is a significant concern to the organisation.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

33. Has the organisation ever experienced the loss of electronic data?
( ) Yes, please describe
( ) No

34. Electronic viruses are a significant concern to the organisation.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

35. Has the organisation ever experienced an electronic virus?
( ) No
( ) Yes (please describe)

36. The organisation uses anti-virus software to prevent potential electronic threats.
( ) Yes
( ) No

37. Which anti-virus software does the organisation primarlily use?
( ) BitDefender
( ) McAfee
( ) Kaspersky
( ) F-Secure
( ) Symantec Norton
( ) Other

38. Anti-virus software is a valuable tool for the organisation.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

39. The organisation backs up data in the following electronic ways (click all that apply)
( ) Physical server at the office
( ) On a web server
( ) Electronic backup offsite
( ) External hard drives (i.e. flash stick or thumb drive)
( ) Other
( ) None

40. The use of information technologies has revolutionized the way the organisation operates.
( ) Strongly disagree
( ) Disagree
( ) Neutral

( ) Agree
( ) Strongly agree

41. If money were no object, the organisation would invest more in IT development.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

42. Are there internet facilities such as internet cafes, internet centres, etc. for public use within 5 kilometres of the office?
( ) Many
( ) Few
( ) None

43. In the communities you serve, at what levels of schooling is IT taught at the local schools? Click all that apply:
( ) Primary/Elementary
( ) Secondary/High School
( ) Tertiary/University/College
( ) None
( ) I don't know

44. IT literacy is an important factor in the appointment of direct service staff.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

==========
Web Connectivity and Analysis
==========

45. What year did you join Idealist.org?

_____

46. Why did the organisation decide to join Idealist.org? Click all that apply:

( ) To keep current in the field
( ) To introduce job opportunities
( ) To introduce volunteer opportunities
( ) To obtain knowledge resources to help with the management and sustainability of our organisation
( ) To increase the organisation's visibility on the web
( ) To seek potential funders
( ) Other
( ) None

47. How often do you update information on Idealist.org?
( ) Once a week
( ) Once a month
( ) Quarterly
( ) Bi-annually
( ) Once a year
( ) None of the above

48. It was worth the time and/or effort to set up an Idealist.org account.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

49. What year did the organisation first create a website?

_____

50. Why was it important for the organisation to create a website? Click all that apply:
( ) To increase the organisation’s visibility on the web
( ) To attract more funders
( ) To educate the public about information around topical issues
( ) To attract potential clients or beneficiaries
( ) To provide information of current news and/or events pertaining to the organisation
( ) To be more accountable to our stakeholders
( ) To keep up with other organisations in the field
( ) No particular reason
( ) Other

51. To what degree were you involved in the conceptualization of the website?
( ) Not involved at all
( ) Somewhat involved

( ) Very involved

52. Who do you believe is the target population for the website? Click all that apply:
( ) Potential funders
( ) Current funders
( ) Potential beneficiaries of services
( ) Current beneficiaries of services
( ) General users looking to become educated and/or more informed
( ) Other
( ) None

53. Using your own currency, approximately how much money was spent to create your website?
( ) Nothing, it was donated by external source
( ) Nothing, we used free web software
( ) Amount (numerals only)

54. It was worth spending this amount of money to create the website.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

55. Who is responsibe for the development of the website?
( ) Internal staff member
( ) External agency/consultant
( ) Combination of both internal and external sources

56. Using your own currency, approximately how much was paid to the external source for web development in the past 12 months?
( ) Nothing
( ) Amount (numerals only)

57. Who is responsible for the maintenance of the website?
( ) Internal staff member
( ) External agency/consultant
( ) Combination of internal and external sources

58. Using your own currency, approximately how much was paid to external sources for website maintenance in the past 12 months?

( ) Amount (numerals only)
( ) Nothing

59. Who is involved in determining content for the website? Click all that apply:
( ) Director
( ) Internal staff members
( ) Volunteers
( ) Clients
( ) External sources
( ) Other
( ) None

60. Who is responsible for responding to emails received via the website?
( ) An administration staff member
( ) A webmaster
( ) Other
( ) I don't know

61. Approximately how often is the website updated?
( ) Weekly
( ) Monthly
( ) Quarterly
( ) Bi-Annually
( ) Once a year
( ) None of the above

62. Who is responsible for making updates to the website?
( ) An internal staff member
( ) An external consultant/agency
( ) Combination of internal and external sources

63. What were the major limitations in creating the website? Click all that apply:
( ) Time
( ) Shortage of suitable staff
( ) Financial costs
( ) Limited availability of technology
( ) Resistance from staff
( ) Lack of knowledge of web technologies
( ) Other
( ) None

64. Which of the following features does the website have? Click all that apply:

( ) Contact information
( ) Mission statement
( ) Link to download or view annual report
( ) Link to download or view financial statements
( ) Employment opportunities
( ) Volunteer opportunities
( ) First person testimonials, such as a clientâ€™s impressions on the services received
( ) Alternative language
( ) Chatroom
( ) Message board
( ) Blogs
( ) Log in requirement
( ) Other
( ) None

65. Do you consider the amount of bandwith the website operates within as being sufficient?

( ) Yes
( ) No
( ) I don't know

66. What is the average number of hits the website receives per month, based on the last 12 months?

( ) I don't know
( ) Number

67. Web analytics tools such as Google Analytics are tools that allow organisations to understand and track their website viewership and other data pertaining to the website. Have you run any form of web analytics analyses on the website?

( ) Yes
( ) No

68. The use of web analytics tools has been helpful for the organisation.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

69. I would like to receive training for myself and/or another staff member(s) on web analytics tools.

( ) Strongly disagree

( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

70. Feedback on the website received by staff members is typically:
( ) Very negative
( ) Negative
( ) Neutral
( ) Positive
( ) Very positive

71. Feedback on the website received by external stakeholders is typically:
( ) Very negative
( ) Negative
( ) Neutral
( ) Positive
( ) Very positive

72. The organisation regularly gives effect to feedback.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

73. Compared with other organisations in the same service field and located in the same geographic area, the website ranks:
( ) Very poorly
( ) Poorly
( ) Fairly
( ) Highly
( ) Very highly

74. Compared with other organisations in the same service field globally, the website ranks:
( ) Very poorly
( ) Poorly
( ) Fairly
( ) Highly
( ) Very highly

75. The organisation’s website can be improved upon.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

76. Web technologies have improved performance output with regards to organisational efficiency.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

77. Web technologies have allowed the organisation to quickly mobilize and/or organize individuals.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

78. Web technologies have allowed the organisation to reach audiences that were previously difficult or impossible to reach.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

79. Web technologies have allowed the organisation to transmit data more quickly and/or more accurately.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

80. The benefits of web technologies outweigh the costs.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree

( ) Strongly agree

81. Web technologies have revolutionized the way the organisation operates.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

82. Our present web based activities are crucial to the organisation's current sustainability.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

83. Does the organisation have pages/profiles on any of the following?
( ) Facebook
( ) Myspace
( ) Twitter
( ) LinkedIn
( ) Other

84. What does the organisation use Facebook for? Click all that apply:
( ) Recruiting volunteers
( ) Posting job opportunities
( ) Creating events
( ) Fundraising
( ) Education dissemination
( ) Marketing purposes
( ) Other
( ) Blogging
( ) None

85. Approximately how many "friends" are members of the organisations' group on Facebook?

_____

86. What does the organisation use Myspace for? Click all that apply:
( ) Recruiting volunteers
( ) Posting job opportunities
( ) Creating events

( ) Education dissemination
( ) Fundraising
( ) Marketing purposes
( ) Other
( ) Blogging
( ) None

87. Approximately how many "friends" are members of the organisation's group on Myspace?

_____

88. What does the organisation use Twitter for? Click all that apply:
( ) Blogging
( ) Recruiting volunteers
( ) Posting job opportunities
( ) Creating events
( ) Education dissemination
( ) Fundraising
( ) Marketing purposes
( ) Other
( ) None

89. Approximately how many "followers" does the organisation have on Twitter?

_____

90. What does the organisation use LinkedIn for? Check all that apply:
( ) Recruiting volunteers
( ) Posting job opportunities
( ) Creating events
( ) Education dissemination
( ) Fundraising
( ) Marketing purposes
( ) Blogging
( ) Other
( ) None

96. Approximately how many "connections" does the organisation have on LinkedIn?

_____

97. Web technologies improve the organisation's ability to market its services.
( ) Strongly disagree
( ) Disagree

( ) Neutral
( ) Agree
( ) Strongly agree

91. Web technologies assist with the promotion of the organisation’s public image.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

92. Web technologies assist with the branding of the organisation.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

93. Web technologies improve the organisation's education and/or information dissemination role.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

94. The web is a useful tool for sharing information about the organisation and the services it provides.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

95. If money were no object, the organisation would invest more in web development.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

96. Utlising web technologies poses a security risk with regards to the organisation.
( ) Strongly disagree

( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

97. Has the organisation's website been hacked into in the past?
( ) Yes, please describe
( ) No

97. What type of email system do you use within the organisation?
( ) Internal email network
( ) External email network (e.g. Gmail, Hotmail, Yahoo, etc.)
( ) I don't know
( ) Other
( ) None

98. Email communication is necessary for internal dialogue amongst staff members.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

99. Email communication is necessary for dialogue amongst various external stakeholders.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

100. What type of browser do you use most?
( ) Internet Explorer
( ) Mozilla Firefox
( ) Netscape Navigator
( ) Google Chrome
( ) Other
( ) I don't know

==========

Sustainability

==========

101. What are the current threats to the organisation's sustainability? Click all that apply:

( ) Lack of funding
( ) Lack of suitable office accommodation
( ) Lack of suitably qualified staff
( ) Lack of infrastructure in community (e.g. roads)
( ) Lack of community support
( ) High staff turnover
( ) Lack of computers
( ) Poor internet connectivity
( ) Unstable infrastructure (e.g. erratic electricity supply, erratic telephone connection)
( ) Competition with other organisations in the same or similar field
( ) Corruption
( ) Financial mismanagement
( ) Political interferences
( ) Lack of transportation
( ) Other
( ) None

101. IT has enhanced sustainability by improving communication within the organisation.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

102. IT has enhanced sustainability by improving communication with stakeholders outside of the organisation.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

103. IT has enhanced sustainability by improving organisational efficiency.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

104. IT has enhanced sustainability by improving time management.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

105. IT has enhanced sustainability by improving management control.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

106. IT has enhanced sustainability by improving the process of planning and/or developing new programmes.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

107. IT has enhanced sustainability by improving the management of current programmes.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

108. IT has enhanced sustainability by improving the monitoring and/or evaluation of programmes.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

109. IT has enhanced our ability to develop and/or sustain a repository of information (e.g. virtual library, collection of e-books, informational brochures and documents).

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree

( ) Strongly agree

110. The use of IT has improved the motivation levels of staff.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

111. It is increasingly important for the organisation to have sophisticated IT systems in place in order to attract competent staff.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

112. Web technologies have enhanced our ability to create new partnerships with various stakeholders.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

113. Web technologies have enhanced our ability to sustain partnerships with various stakeholders.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

114. Web technologies have enhanced our ability to further educate the public and/or generate greater levels of public awareness.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

115. The advent of web technologies has improved the motivation levels of staff.
( ) Strongly disagree

( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

116. It is increasingly important for the organisation to have reliable internet capacities to attract competent staff.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

117. The world is currently going through/emerging from a global recession. What impact has this had on the organisation? Click all that apply:

( ) More beneficiaries to serve
( ) More difficult to obtain funding
( ) Able to receive more funding
( ) Had to seek alternative funding sources
( ) Creation of new programmes and services
( ) Reducing the number and/or scale of programmes and services
( ) Had to retrench/layoff employees
( ) Hired more employees
( ) Other
( ) None

118. For the next six months, what are your impressions of the global recession?

( ) Will worsen substantially
( ) Will worsen
( ) No change
( ) Will improve
( ) Will improve substantially

119. For the next five years, what are your impressions of the global recession?

( ) Will worsen substantially
( ) Will worsen
( ) No change
( ) Will improve
( ) Will improve substantially

120. Web technologies inform me of the global trends which have a direct effect on organisational sustainability.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

121. What forms of offline fundraising do you currently employ? Click all that apply:
( ) Mail
( ) Phone
( ) Text Messaging
( ) Events
( ) Direct requests to corporations
( ) Direct requests to trusts and funds
( ) Government funding
( ) Fees
( ) Sales of goods offline
( ) Other
( ) None

122. What forms of online fundraising do you currently employ? Click all that apply:
( ) Email requests
( ) Online donations
( ) Sale of goods online
( ) Other
( ) None

123. Is there an option on the website for visitors to donate money online?
( ) Yes
( ) No

124. Is this an internal donation form or are users sent to an external online donation site?
( ) Internal donation form
( ) External online donation site

125. Using your own currency, approximately how much fundraising income was received from online donations in the past 12 months?
( ) Amount (numerals only)

126. Approximately what percentage of fundraising income was obtained from offline and online sources during the past 12 months, respectively?
[ ] Offline sources

[ ] Online sources

127. Does the organisation maintain an electronic database of current and/or potential funders?

( ) Yes
( ) No

128. The web is a useful tool for fundraising.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

129. Using your own currency, what was the organisation's annual expenditure for the last audited/accurate financial year? (numerals only)

_____

130. Using your own currency, what was the organisation's annual income (revenue) for the last audited/accurate financial year? (numerals only)

_____

131. How many months can the organisation survive without any further income?

_____

132. Funders prefer money they donate to not be used towards IT and/or web development. (i.e. funders prefer money to be used towards other areas besides IT and/or web development)

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

==========
Future
==========

133. I would like the organisation to receive further assistance in increasing the functionality of the website.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

134. I am in need of further training with regards to web technologies.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

135. My staff is in need of further training with regards to web technologies.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

136. The organisation intends to use web technologies to increase our marketing efforts.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

137. The organisation intends to use web technologies in the future to obtain new sources of funding.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

138. The organisation needs to increase its web presence in order to survive in the future.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

139. It is important for the sustainability of the organisation to stay current with new web technologies and/or new forms of web interactivity.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

140. The geographic area in which the organisation operates will see increasing web connectivity in the near future.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

141. Web technologies will continue to have a strong influence on organisational sustainability.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

142. Organisations which stay current with web technologies will be more successful than organisations that do not.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

143. The evolution of technology will reduce face-to-face interactivity amongst staff for operational purposes.

( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

144. Web technologies will allow the organisation to reach international audiences more easily.

( ) Strongly disagree
( ) Disagree

( ) Neutral
( ) Agree
( ) Strongly agree

145. The evolution of technology will provide new opportunities for the growth of the organisation.
( ) Strongly disagree
( ) Disagree
( ) Neutral
( ) Agree
( ) Strongly agree

146. In 100 words or less, is there anything else you would like to comment on? (optional)

_____
_____
_____
_____
_____

147. Upon completion of this research, would you like to receive a brief report on the findings in PDF format?
( ) Yes, please enter email address
( ) No

==========
Thank You!
==========

Thank you for taking part in this research, your responses are greatly appreciated!

You may now safely close this window.

(PICTURE)

Cecil John Rhodes Statue, University of Cape Town, Naveen Kanithi