

Religious Communication and Internet Usage: How Do Muslims Fare on the Web?

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Abstract: This study investigated the use of the Internet as a medium for communicating Islamic propagations by Muslims. The main unit of analysis was the front-page frame layouts of each Muslim Websites containing links, which lead to either “informative” articles, “educative” articles and “other” information. The findings in this study reveal that the level of “education” and “informative” articles on Islamic propagation displayed on Muslim home pages was still very low. These homepages were found to contain more “informative” type of articles, a type that concentrated on news about Muslims affairs around the world rather than on propagating Islam. The outcome of the study reveals that 48% of information on Muslim homepages was “informative” and just 37% of the sites were on Islamic doctrinal issues. And “other” information amounts to 15%. In accession to this, a considerable amount of misinformation about Islam was found to be present in some Christian sites. This study concludes that a concerted effort is needed to ensure that Muslims contribute in disseminating information about Islam on the Internet. Muslim individuals, both in private organisations and governmental institutions should be encouraged to utilise the Internet for the promulgation of Islam. Likewise, scholars in various Islamic institutions, government or private, should spend valuable time in establishing homepages that are dedicated to Islam.

Key words: Islam and Internet • Muslim Websites • Online Religious Dissemination • Religious Propagation
• Islamic Websites • Muslim Online

INTRODUCTION

The Internet is the newest mass media, with influences far more pervasive than any mass medium in the history of human expression. As with any mass media, it is both a double-edged sword and an ideological weapon. Islam, already trampled and mauled by a coalition of western-controlled conventional media, stands to be further pushed to the ground in the new game, but this was not to be.

Obviously, the Internet has become an essential tool of everyday life. As a matter of fact, one can easily look-up any contents that one seeks on the Net. Using an Internet search machine (especially “*google search engine*”), which has even become a generally accepted new term and a self-evident social and cultural practice in the postmodern world of today. The Web has penetrated almost every facet of our social and cultural life. Thus, it is no surprise, that in the domain of religions, the innovative digital communication technology is on the

rise. For instance, for the academic study of religion, looking at religious websites has become a normal and widely accepted practice of research even within the scientific community. However, some scholars claimed that it is still impressive to state that when searching for religious information on the web, one is confronted with an overwhelming amount of information on the topic, even though it serves no analytical goal on its own. The sources for research on religions and religious practices online are as manifold as the Internet itself. Especially during the last few years with its rapid technological development applications like online social networks or virtual 3D [1].

When analysing religions on the Internet many researchers have raised concerns about what one actually sees and how one interprets such information in terms of whether to focus or limit analysis and interpretation to the textual components, graphics, pictures, music and video clips. Also, whether one should focus on the background colour, navigation tools, interactivity, browsability and

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friendliness of the website. In an effort to rethink these issues, a great deal has been written from different academic perspectives during the past few years.

Meanwhile, from the early ages of religious online contents, especially before the advent of Web 2.0 applications which simplified the implementation of multimedia, these discussions have impressed the practitioners of various forms of religious backgrounds and associations. As early as 1997, the Christian Orthodox priest, Father John Missing posted an "Online ritual invitation and instruction" to the English Usenet, propagating the establishment of a ritual space of "ALL spiritual traditions" merely by written language. And since the rituals took place in a chat room and were not recorded, it is not transmitted [1]. The primary purpose of various Islamic-awareness websites is to inform and educate Muslims about the questions and issues frequently raised by most.

The Internet is also a substance through which Muslims can network with each other and galvanise debate and exchange data on matters of shared care. For example, the French TV news clip showing the shooting in September 2000 of Mohammad al-Durrah was quickly published and publicised on the Internet by diverse websites, including the Muslim Directory, such as MDNet which can be found at: http://www.mdnet.co.uk/hr_postcards/hr.shtml and Hamas which can be found at: <http://www.palestine-info.net>. A number of on-line discussions and responses ensued and readers were encouraged to disseminate information and began campaigning against Israel. Muslim dialogue and activism on a broad range of other issues take place online. New 'communities' of Muslims with shared interests are developing on the Internet [2].

Yahoo operates a service called Groups, in which individuals as small as two to as many as over ten thousands can get together and exchange information, opinions, news and perspectives on any aspect of their lives. The Islamic communities on Yahoo is a really thriving community. 'Islamic' issue-centred Internet content should not distract from the fact that many aspects of Islamic pillars or core values are well represented on-line. Numerous versions of the translation of the meaning of the Quran can be found, linked into diverse commentaries and other materials, utilizing state-of-the-art technology. A serious exemplar is the site produced by *Harf Information Technology*, which draws on the multimedia aspects of the Internet to allow recitations to be played alongside Arabic texts, English translations and high-quality readings. Considerable

investment is being made by different organisations to establish their worldview on-line, in order to be well placed as use of the Internet continues to expand in the Muslim marketplace.

The matter of accessibility is a central one. Whilst the number of people able to access the web begins to rise globally. Internet Service Providers in several Muslim countries have attempted to apply filtering technology to restrict the type of material their users visit. Technically, there are ways around these controls, but in real terms one result is that Internet users are not capable to access the diversity of worldviews relating to Islam. Controls may be introduced for political reasons. It should be mentioned that these filtering technologies work both ways; 'western' contexts to filter out as 'unacceptable' all references to 'Islam' and 'Muslims', thus placing Islam in the same 'dangerous' bracket as pornography [2].

Likewise, Muslim gender studies tend to draw a great deal of attention from non-Muslim scholars. It is not surprising, thus, to find many Islamic sites devoted to informing the entire world around the status of women in Islam. Sites range from Sisters Net: <http://www.msanatl.org/SISTERS/articles/> which provides a series of articles on Islam and Women; to Status of Women in Islam: <http://www.iad.org/books/S-women.html> which takes a more direct approach in dealing with the issue. Specifically, the website encourages women to seek job, even if staying at home since they can "telecommute".

Naturally enough, most of the women sites have considerable focus on health, beauty and family. A good example of a family focus is that given by "*Muslim Moms*". Angelfire sites are free web spaces given by large web directories, in return, you have to put up with lots of advertisements. Nevertheless, Muslim Moms have embraced the free technology and use it to dish out advice on raising children in non-Muslim environments. *Muslim Moms*, of course, is based in the United States [3].

One indicator of the potential transformational qualities of the Internet on Muslims is the presence of a broad range of 'sermons' on-line. For example: <http://www.tanzeem.org.pk> in Pakistan represent a choice of recorded sermons for downloading. Other platforms, creating on-line sermons for consumption by an international audience. The future potential for such material is tremendous, when technology (including bandwidth) improves to allow a surfer to rapidly listen to and view sermons and other information 'on demand', not just through a computer, but by digital television or WAP phone. The Internet has already facilitated the propagation of Islam, with Dawah organisations

publishing materials in a variety of languages onto the web. For instance, Ahmed Deedat had stored his talks on Christianity and Islam on-line [2].

Similar lists were passed on by the "Mama List" of Islamic sites, which lists 1,940 Islamic web-links. Perhaps it should be pointed out that on each web page are likely to be a series of other web links exploring various aspects of Islam[4].

The presence of Islam on the internet is truly impressive and reflects one area where Muslims are keen to adopt a new technology in order to spread the message of their religion. This study examines the economic consumption of the Internet for religious communication.

The survey looked into the extent to which the Internet has bestowed in the diffusion of Islamic values. Likewise, the survey examined the participation of Muslims in using the Internet for the proclamation of Islamic precepts and the discourse of fundamental issues of the faith. To qualify and evaluate the Muslims' use of the Internet for religious purposes, the study attempted to analyse how Muslim sites fare in relation to the contents displayed in them in terms of informative, educative, browsability, connectivity and user-friendliness. Finally, the study scrutinised the contents of selected non-muslim sites to identify the level of misinformation in the articles that were published on sites about Islam and Muslims.

Just as the news media experimented and utilised the new medium for delivering news, individuals and organisations belonging to various world religions are also exploring the Internet to spread their views, ideas and practices as revealed to the researcher during the pre-research investigation. Islam is not excepted from this trend, but the questions that remain to be answered are about the level of adequacy of Muslims in using this new interactive medium of mass communication and the extent to which the contents of Muslim sites are measured up and adequate when compared to sites of other religions. Also of importance is to highlight the ways in which researchers could be encouraged to faithfully use this medium for Islamic propagation. Until these questions are answered convincingly, the conception of the Internet medium as a new trend in propagating Islam will remain vague and ambiguous among Muslims.

This research seeks to provide preliminary answers to these queries. Though, it does not claim to have provided a comprehensive survey of all Muslim Websites on the Internet, it has attempted to supply information that may be helpful in reaching solutions to the aforementioned questions.

The Aims of the Study: The aim of this work is to look into the role of the Internet for the propagation of Islamic doctrines among Muslims, both in the private and government establishments. The study proves the adequacy and quality of the information published in some major Muslim Websites. It named the owners / patrons of these Websites and the type of information, in terms of educative, informative and other information, that were displayed on them. Likewise, the survey probed the accessibility, workability and interactivity of these websites to various Internet users.

Research Questions: This study attempts to answer the following research questions:

- What are the most identifiable Muslim sites on the Internet and in what ways can they be characterised in terms of (a) Number of links to other resources in the first page (b) Origins of information in these sites; (c) Currency of information in these sites?
- Who are the owners / sponsoring institutions of Muslim Websites and what is the aggregate number of sites that each sponsoring institution has made?
- Which of the three categories of information is most emphasised in Muslim sites ("educative" articles, "informative" articles, "other" information)?
- How do Muslim sites fare in their workability which includes (a) User friendliness; (b) Browsability; (c) Interactivity; (d) Connectivity; (e) Graphic availability?
- What graphic features (audio clips, video clips, graphic illustrations and photographs) are available on Muslim Websites?
- What misinformation is identifiable in selected non-Muslim Websites (e.g. Christian and Jewish) which includes sarcastic information, defamatory information and denigrating information about Islam.

MATERIALS AND METHODS

The sample of this survey was drawn from the "Top 100 Islamic" home pages as rated by [5], an advertiser-based rating system, that helps Muslim surfers locate sites of interest and offers connections to excellent sites with data relevant to the demands of the surfer. It also rates some home pages as to the number of visitors and the content of data.

Sampling: This study used two samples drawn purposively from both Muslim Websites and non-Muslim

Websites (Christian sites). The first samples of the study were purposively chosen from the “Top 100” Islamic home pages [5]. And the second samples (Christian sites) were drawn selectively for the function of locating misinformation published on them. A purposive sample, says [6], is a sampling method (also called judgement sampling) which is selected based on someone’s judgement. It also includes subjects selected on the basis of specific characteristics or qualities and eliminates those who fail to meet the criteria.

This researcher has selected Muslim home pages that were rated by [5] based on specific criteria, which include the number of visitors to these sites and the resources published on the websites. This inquiry has taken this “Top 100 Islamic sites” as the population size and this population was matched on Krejcie and Morgan’s “Table For Determining Sample Size”.

This table is applicable to any defined population [7]. The result produced 85 Islamic Websites which were content analysed by the researcher in the field. But due to the fact that one or two of these sites which were not accessible for analysis, the researcher increased the sample size to 85 to eliminate discrepancies and make up for any losses in the sites. Also, 55 non-Muslim Websites were purposively selected for the presence of misinformation they published. Therefore the entire sample was equal to 140 Websites. These sites were content-analysed in accordance with the categories previously established by the researcher in the coding guides. The information capacity of the Websites was categorised into three mutually exclusive information types: “informative”, “educative” and “other” information.

However, these decisions on population and how samples were drawn from this study were arrived at during several discussions with lecturers from various disciplines, who are well-versed in research on Muslim Websites. Invaluable help in deciding on how to get the sample size were rendered by these individuals and on which particular rating organisation is suitable for consideration regarding Islamic sites. Therefore, *MUSALMAN.COM*’s an Islamic webs site rating organization were chosen and samples were drawn from these “Top 100 Islamic sites” as rated by [5].

Unit of Analysis: There are four forms of content analysis units, namely: a single entity unit (a word or a phrase), the theme, the character and “a set of interactions which are grouped as a unit” [8]. Researchers have identified words, statements, sentences, paragraphs and entire articles as

units of analysis. It has been mentioned that, the answer as to which unit a researcher should use lies in the design of the work and the kind of information he is searching. There are six options for unitising: the word, the sense, the sentence, the theme, the paragraph and the whole text. Weber maintained further that if the text being content analysed is relatively short, like newspaper editorials or news reports, researchers could choose the whole text as the unit of analysis and achieve, at the same time, high reliability [9]. Yet, [10] mentioned that there are five types of recording units commonly used for measurements in content analysis, namely: single word or symbol, theme, character, sentence and paragraph.

Nevertheless, for the design of this work, the researchers employed “educative”, “informative” and “other” articles, published on the *WWW* front-page layout of Muslim Websites, beginning at the “frontpage”, which was accessible only through a “homepage”. The researcher has defined “Homepage” as an initial, or opening, the screen on the Web. A religious “home page” provides information both directly and via links to other files of the same religion or to files on other computers located on remote networks. The “front page” can be accessed through the home page or it can serve as the religion’s initial web screen and it is recognised by its similarity in appearance to religious Websites [11].

The links in the front page in this Muslim site, which lead to “informative articles”, “educative articles” and “other information”. The categories of information displayed on the front page of the Websites were counted and tabulated.

Content Categories Format: Social scientists considered content analyses only as good as their content categories. For this cause they called for “appropriate exhaustive and mutually exclusive” content categories [12] and [8] maintained that these categories have to suit both the research questions and the subject matter. Because categories resemble compartments with well-defined boundaries into which the material is grouped, they provide a suitable and proper scheme for analysis of the material. Although the choice of a system of categorisation scheme depends solely on the subject of investigation and on the material being analysed. Students often use categories which previous researchers have produced because such exercise will “facilitate consistency and comparative studies” [9]. Researchers have argued that various content analysis techniques have concerned and were compared by researchers for years [1], while [13] tested four ways of coding editorial

content (sentence, paragraph, three-sentence and article). Reserachers constitute that the different processes for measuring newspaper contents give somewhat different results. Thus, to ensure that the list of categories is exhaustive, the boundaries of each category are clearly defined in the coding guides that guided the researcher and other coders who helped in this respect.

The contents of each Website were categorised based on a previous study as explained [14] and they were coded for the presence and absence of the following content categories: - "General characteristics" were considered in four categories: Number of links on the Site, sponsor of the Site (Owner of the Site), Information origin and currency of the Site. "Information Type" was conceptualized as having three content sub-dimensions: "Educated" articles, "Informative" articles and "Other" information. Website Features (Responsiveness of the Site to Users) was split into four dimensions: Interactivity, Browsability, Connectivity and User Friendliness of the websites. "Graphic Availability" was regarded as the presence of Audio Clips, Video Clips, Graphic Illustrations and photos. Misinformation about Islam and Muslims was divided into the following categories: (a) denigrating (b) sarcasm, (c) defamation.

Data Coding: In order to facilitate the coding exercise, a coding sheet was prepared. The data collected were classified by identifying them in predetermined categories as shown in the coding guides. The researcher has coded each item of the Internet based on the Internet's general characteristics, data type, interactive features and graphic availability. These points were given voice with reference to previous surveys done in the area of [14].

Data Collection: The data for the study hinged on the content analysis of purposive samples of Muslim sites. Data were accumulated according to the information categories ("informative", "educative" and "other") as specified in the coding guides.

All the same, this online religious information was categorised as "educative" articles, "informative articles" and "other" information. These categories were mutually exclusive. The main unit of analysis was the frontpage frame layouts of each Muslim Websites containing links, which lead to either "informative" articles, "educative" articles and "other" information. A quantitative content analysis was conducted on these 85 Websites of Muslim home pages for the information categories they contained, their workability and graphic availability.

According to [15] frames can be defined as encompassing the full webpage. Forms may be fixed or scrollable and each frame contains a number of ties to some other *WWW* page. From the front page contained links guiding and identifying the contents of the site, the researcher used these links to evaluate and count the items on each site. Thus the front pages were scrutinised and the information found on them was used for deciding the category and was counted. Design elements and the content of each page of a program's website were examined.

The data were analysed using the Statistical Package for Social Science (SPSS) version. As the nature of the study demands, the frequency of occurrence, percentages and cross relation of the data were done. The relations between categories were examined by cross relation.

Reliability: There are two basically different approaches to measure reliability in content analysis. One approach deals with category frequencies, with the obvious statistical technique being to correlate frequency distributions of two or more coders on the same material. The other approach is the item analysis, which focuses on the level of agreement on each item. The researcher employed the latter reliability approach due to its ease of application and quickness. Nevertheless, the appropriate thing to report is the percentage agreement between coders and reliability estimate is calculated and reported [9].

Therefore, to establish reliable measurement, the researcher invited three colleagues to use the coding guides and coding sheet developed for identifying the information categories. The researcher prepared distribution tables for the three coders and each of their coding was compared with that of the researcher, based on their agreement and disagreement on the coding sheet and a reliability which test was conducted using William Scott's formula of intercoder reliability [16].

According to [16], the inter-coder reliability index is the "ratio of the actual difference between obtaining and chance agreement to the maximum difference obtained and chance agreement. It can be roughly interpreted as the extent to which the coding reliability exceeds chance. Scott wrote his rule as follows:

$$\pi = \frac{Po - Pe}{1 - Pe}$$

where,

Po = Observed percent agreement

Pe = Percent agreement due to chance

The researcher then compared his own coding of the Websites to those of his fellow workers and intercoder reliability was computed. The result of the calculation is as follows:

Inter-coder Agreement Distribution: Percentage of agreement between coders:

CODER 1: Percentage of agreement between the Researcher and Coder 1

$$= (376 / 450) 100 = 84\%$$

Po = Observed percent agreement =84

Pe = Percent agreement due to chance=16

$$\pi = \frac{Po - Pe}{1 - Pe}$$
$$\frac{.84 - .16}{1 - .16}$$
$$= \underline{.68}$$

$$.84 = .80$$

Reliability = 80%

CODER 2: Percentage of agreement between the Researcher and Coder 2

$$= (383 / 450) 100 = 85\%$$

Po = Observed percent agreement =85

Pe = Percent agreement due to chance=15

$$\pi = \frac{Po - Pe}{1 - Pe}$$
$$\frac{.85 - .15}{1 - .15}$$
$$= \underline{.70}$$

$$.85 = .82$$

Reliability = 82%

However, the differences in the reliability level were due to the varied understanding of the coding sheet by the three coders. The two coders (second and third coders) were taught how to use the coding sheet separately. The results of the reliability showed that the second and third coders demonstrated a high level of reliability which is very close to that of the researcher. The researcher took more time to teach the second and

third coders how to use the coding guides efficiently and every concept was explained to them in detail. This could be the reason for the high percent of reliability which the second and third coders demonstrated.

RESULTS AND DISCUSSION

The coding, measurement and calculations of the content of the Websites yielded the following results.

This survey has identified the major Muslim Websites through the rating done on Islamic Websites by MUSALMAN.COM, an advertisement-based organisation located in the Silicon Valley, USA. This rating organisation has collected a list of 461 members whose Websites were ranked according to the number of visitors and resources displayed on the Websites. Out of these 461 sites, the "Top 100 Islamic" Websites were chosen based on the number of visitors to these situations. Out of this "Top 100" sites, 85 sites were purposively selected and content-analysed for the design of this survey.

However, according to the general characteristics demonstrated by Muslim sites, the followings are the results of the findings:

Number of Links to Other Resources on the First Page:

Table 1 summarises the number of links to other resources on the first page of Muslim sites. According to these findings, in all the 85 Muslim Websites that were content-analysed, all of the sites had more than three links. Thus revealing that Muslim Websites were well-connected to other resources on the Internet.

Origins of Information on the Sites: Table 2 reveals that the majority (99%) of Islamic sites was established in Western countries rather than in Muslim countries (1%). Though the reason for this is not actually known, it could be speculated, however, that the need to foster and support Islamic propagation (Dawah) activities in Western countries prompted Muslims in those countries to create more websites to cater for and respond to the non-Muslim environment in which they are residents. This, in itself, is a positive trend in Islamic propagation (Dawah) that must be commended and consolidated.

Currency of the Sites: According to Table (3), all Muslim sites are very current and were well-updated as to the currency of information displayed on them. The majority of these sites was updated in late 1999 and early 2000.

Table 1: Number of Links on the First Page

Number of Links	Frequency	Percent
Many	85	100
Few	0	0
None	0	0
Total	85	100

n=85

Table 2: Origins of Information

Information Origin	Frequency	Percent
Western Countries	84	98.82
Muslim Countries	1	1.176
Other	0	0
Total	85	100

n=85

Table 3: Currency of the sites

Currency of site	Frequency	Percent
Updated	85	100
Not updated	0	0
Total	85	100

n=85

Table 4: Owners / Sponsors of Muslim Websites

Sponsors of Sites	Frequency	Percent
Religious Organisations	52	61.17
Individuals	32	37.64
Government	1	1.17
Students	0	0
Total	85	100

n=85

Owners / Sponsoring Institutions of Muslim Sites: This study has revealed that there are four main categories of owners / sponsoring institutions that contribute to the establishment of Websites that are dedicated to Islam. These owners / institutions are the followings: Religious organisations, individuals, governments and students. Table 4 is a summary of owners / sponsorship institutions and the aggregate number of sites that they have sponsored. The findings have revealed that out of 85 analysed websites, religious organisations have sponsored the highest number, 52 Websites. This number is (61%) of the total sites. Individuals sponsored 32 sites, with a percentage of 38%. The data showed that only one site (1%) was sponsored by a Muslim government (Pakistan government homepage). Students' site were not recorded in the sample because they were not chosen as noteworthy by *MUSALMAN.COM*.

These findings do not suggest that students do not establish Websites, but rather that these sites contained no information that could be classified according to the criteria of this research. The students' sites registered the

smallest number of visitors. This is the top priority for inclusion in the *MUSALMAN.COM* rating, they were totally excluded from the sample.

Types of Information in Muslim Websites: According to this study, informative articles, which carry news on the social welfare and political developments of Muslims countries and around the world, were the information type most emphasised in Muslims Websites. This is followed by educative articles, which promulgate Islamic doctrinal issues on the Website which were very close in number to informative articles.

As the researcher has chosen three categories in which to classify the information in the Websites, the percentages of these categories were calculated and analysed as shown in Table 5. According to this Table, the number of "educative" articles was 520, with a percentage of 37%. The number of "informative" articles was 683, with almost half of all the information (48%). The "other" information, which includes all information that does not fit into informative or educative, constituted 15% of the information, with a total of 217 items.

Workability Features: Table 6 summarises some features of the Websites. These features are significant because they reflect the degree to which the Websites are attractive to the audience. The study also found that Muslim websites are highly interactive since they concord with the general notion of interactivity of the Internet. The study has found that Muslim Websites have demonstrated a high level of interactivity, browsability, connectivity and they are generally user friendly to surfers, information seekers and other users. The most proclaimed parameter of the Internet as possessing a high level of interactivity was well supported by this finding.

Graphic Features Available on the Websites: Additionally, Table 10 summarises the graphic availability in Muslim Websites. The study revealed that a considerable amount of the Muslim sites is well supported by appropriate graphics like audio clips, video clips, illustrations and photographs to enhance an understanding of the information published on the websites. These graphic features are very important since they help information seekers and other users to understand better the information displayed on the page. For example, some sites use a lot of audio and video clips to enhance the understanding of information published on them, e.g. a site on the introduction to Islam. Generally, many of the sites uses several photographs to support the information that is published on them.

Table 5: Types of Information in Muslim Websites

Information Type	Frequency	Percent
Informative	683	48.09
Educative	520	36.61
Other Information	217	15.28
Total Links	1420	100

n=85

Table 6: Interactivity

Workability Feature	Frequency	Percent
Interactivity	85	100
Browsability	85	100
Connectivity	85	100
User Friendliness	85	100
Total	85	100

n=85

Table 7: Graphic Features: Audio Clips

Graphic Feature	Frequency	Percent
Audio Clips	85	100
Video Clips	85	100
Photographs	85	100
Graphic Illustrations	85	100
Total	85	100

n=85

Table 8: Sarcasm, Defamation and Denigration

Misinformation	Frequency	Percent
Sarcasm	23	41.8
Defamation	19	34.5
Denigration	13	23.6
Total	55	100

n=55

Misinformation about Islam: Table 8 summarises the amount of negative information published by non-Muslims about Islam and Muslims on their Websites. These non-Muslim Websites were selected based on the misinformation published in them by their owners.

The categorisation and the Websites were chosen after consultation with an expert in the field, Professor Abdul Kabir Atta, a professor in political science, who is well-versed in the field and has done a series of commendable works in Internet research. This professor has compiled lists of articles in non-Muslims Websites which portray Islam and Muslims in an unfavourable manner. There was a considerable amount of negative information displayed on some Christian sites that was denigrating to Islam and Muslims. The negative information ranged from accusation, sarcasm and the

denigration of Islam and Muslims, to sit-in and claiming contradictions in the verses of the Holy Qur'aan. Of all these non-Muslims sites, several Christian sites were found to contain most attacks and blasphemous articles aimed at defaming and denigrating Islam and Muslims.

Misinformation about Islam was analysed and 13 cases were found of denigrating information displayed on 55 Christian-owned websites which were considered as a form of reply to similar attacks on their religion by Muslims. There were 23 cases of sarcastic attacks on Islam and Muslims and 19 cases of defamatory attacks where Islam was tagged as "an empty way of life which cannot save".

DISCUSSION

According to preceding arguments and discussions, the presence of Islam on the Internet is truly impressive and reflective of one area where Muslims are keen to adopt a new technology in order to spread the message of Islam. Website owners among the Muslims should ensure that their websites are both informative and educative in nature to attract visitors to the websites.

In this current research, Muslim Websites that were analysed originated from Western nations. The reason may be due to the fact that many non-Muslim countries are economically and financially backward and are unable to fund an expensive project like establishing powerful communication equipment to support Internet use. In conformity with this finding, [1] claims that out of the 13 domain name root servers on the planet, through which every internet traffic passes through, 10 are located in the United States, one in Japan, England and Sweden.

Most of Muslim sites were well updated as to the currency of information displayed on them and they were highly interactive for users to access. These websites are as well characterised by the accessibility of various features, which include graphic illustrations, audio clips, photos and video clips which enhanced the understanding of the information on them. In agreement with the notion of online audio usage, [1] declares that, there are many who choose to glorify the name of Allah or call to Islam accompanied by a musical instrument. It is a moot point whether this instrument is similar to the one used in the Prophet's time or not.

However, most "informative" articles and "educative" articles were found in those sites sponsored by Muslim organisations and individuals. This finding is congruous with the need to provide knowledge to non-Muslims who lack Islamic knowledge, as highlighted in [2].

Educative links are expected to be more to assist in the propagating and disseminating educative information about Islam. In consonance with the findings of this study, [1] expatiates that there are Islamic Study websites that cover the areas of Islam and Arabic, in comparison with other religions. These sites are particularly intended to be of use for students and teachers at all levels, as well for members of the general public who wish to get a non-political view of Islam.

These findings revealed that Muslim governments and Muslim students shows little interest in utilizing the Internet for distributing information that educates users and promotes Islamic principles. The only site established by a government establishment was found to contain miscellaneous information which was classified as "other" in this study. There were no students' sites analysed for the study. We expect Muslim governments to assist, both organisations and individuals, to finance the establishment of Websites with an Islamic mindset. By making available easy access to the Internet, every individual and organisations in society can be developed to contribute positively to Islamic principles in cyberspace.

CONCLUSION

The researcher content-analysed the homepages of Muslims websites. This research classified the information found in them into three categories, namely, "informative" articles, "educative" articles and "other". The researcher collected data from these home pages, which he calculated and tabulated according to the information type established in the categories.

Equally to the characteristics of the Websites, the study indicated that the bulk of Islamic sites was launched in Western rural areas rather than in Muslim states. These sites were updated in late 1999 and early 2000. The study also found that Muslim websites are highly interactive since they concord with the general notion of interactivity of the Internet by demonstrating a high level of interactivity, browsability, connectivity and they are generally user friendly. In addition to this, the study revealed that Muslim homepages are well supported by the appropriate graphics like audio clips, video clips, graphic illustrations and photographs to enhance an understanding of the information published on the websites.

This study also revealed that a few Muslim homepages were dedicated towards Islamic principles. According to this study, Muslim sites were "informative and "educative" in their outlooks. Religious organisations

have bought at the highest number of these websites, whereas individually sponsored sites were few. Additionally, there were considerable levels of misinformation about Islam and Muslims found in some Christian Websites.

Finally, the researcher notes that eminent Muslim organisations were not building home pages that enhanced and defended the case of Islam. Whilst it is incorrect to claim that all these prominent Muslim organisations are not making contributions towards Islam, they focus on other areas which they think require more attention like Muslim socioeconomic welfare. Though these areas are important, the issue of providing correct information about Islam is too significant. The future of Islamic propagation of the Internet is promising, as the technology proves to be a pervasive means of communication. Therefore, Muslims must develop and equip themselves with the tools of this future medium of communication.

Recommendations:

The following recommendations are made based on the findings of the study. Thus, it is recommended that:

- An effort to be made by ensuring Muslims contribution in disseminating information about Islam on the Internet.
- Muslim students in various Islamic institutions should spend valuable time in establishing homepages that are dedicated to Islam and not ones with secular out-looks.
- Research needs to be conducted to examine whether this systematic categorisation of the variable categories enlisted in the coding guides meets the requirements of empirical testing in this area.
- Subsequent works are needed and the listing should be broadened to include other items in analysing the contents of the Internet and to involve various testing methods for inter-coder reliability.
- Finally, whether certain controversial perspectives outlined about non-Muslim misinformation about Islam and Muslims should be restrained through censorship, or other sorts of filters, should also be an area for further inquiry.

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REFERENCES

1. Al-Enad, A., 1991. Counting Items Versus Measuring Space in Content Analysis. *Journalism Quarterly*, 68(4): 657-662.
2. Adamu, Abdalla Uba, 2002. Islam and the Internet. Department of Education, Bayero University, Kano State, Nigeria. Available at http://www.kanoonline.com/publications/islam_and_the_internet.htm (accessed 25 August 2013).
3. Muslimfamily, 2001. Available at <http://www.angelfire.com/ab3/muslimfamily/MuslimFamily.html> (accessed 5 November 2013).
4. Mamalist, 2010. Available at <http://www.jannah.org/mamalist/> (accessed 5 November 2013).
5. Musalman Top 100, 2012. Available at <http://www.musalman.com/top100/> (accessed 13 October 2012).
6. Hsia, H.J., 1988. *Mass Communication Research Methods: A Step-by-step Approach*. New Jersey, Hillsdale: Lawrence Erlbaum Associates, Inc.
7. Krejcie, R.V. and D.W. Morgan, 1970. Determining Sample size for Research Activities. *Educational and Psychological Measurement*, 30: 607-610.
8. Carney, T.F., 1952. *Content Analysis: A technique for Systematic Inference from Communication*. Canada, Winnipeg: University of Manitoba Press.
9. Stempel III, G.H. and B.H. Wesley, 1989. *Research Methods in Mass Communication*. 2nd ed. New Jersey: Prentice-Hall, Inc.
10. Holsti, O., 1969. *Content Analysis for the Social Sciences and Humanities*. Reading, MA: Addison-Wesley.
11. Li, X., 1998. Web Page Design and Graphic Use of Three U.S. Newspapers. *Journalism and Mass Communication Quarterly*, 75: 350-357.
12. Budd, R.W., R. Thorp and L. Donohew, 1967. *Content Analysis of Communication*. New York: Macmillan Publishing Company.
13. Grey, A., Kaplan, D. and H.D. Lasswell, 1965. "Recording and Content Units: Four Ways of Coding Editorial content", in Lasswell, Leites and Associates, *Language and Politics*. Cambridge, Mass: M.I.T Press.
14. Smith, A.G., 1997. Testing the Surf: Criteria for Evaluation Information Resources. *The Public Access Computer Systems Review*, 8(3). Available at <http://info.lib.uh.edu/pr/v8/n3/smith8n3.html> (accessed 13 March 1997).
15. Lehnert, W.G., 1998. *Internet 101: A Beginner's Guide to the Internet and the World Wide Web*. Massachusetts: Addison-Wesley.
16. Scott, W.A., 1955. "Reliability of Content Analysis: The Case of Nominal Scale Coding". *Public Opinion Quarterly*, 19: 321-375.